NATIONAL CENTER FOR MANUFACTURING SCIENCES

Exhibitor Directory

Elizabeth City, North Carolina

COAST GUARD ALC MODERNIZATION AND SUSTAINMENT ACCELERATOR

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Adams Communication & Engineering Technology

Focus Area: Advanced/Additive Manufacturing

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Adams Communication & Engineering Technology (ACET) Aerospace is a proven provider of aircraft modification, Planned Maintenance Interval (PMI), reset, sustainment, manufacturing, and systems integration solutions for the U.S. Department of Defense and allied military customers. We deliver depot- and organizational-level maintenance to maximize immediate aircraft readiness on the flight line, perform heavy industrial overhauls, and execute comprehensive system upgrades that extend the operational lifespan of multiple rotary- and fixed-wing platforms.

With deep experience supporting the U.S. Navy and Marine Corps, ACET executes complex aircraft modifications and PMI events to improve readiness, extend service life, and integrate emerging mission capabilities. Our teams perform structural, electrical, mechanical, avionics, and system upgrades in both depot and field environments, minimizing aircraft downtime while meeting stringent mission requirements.

Aircraft Reset, Sustainment and Manufacturing

Problem Statement:

Military aviation platforms face growing sustainment challenges as aging fleets require continuous maintenance, repair, and modernization to remain mission capable. During PMI events and depot-level sustainment, maintenance teams routinely encounter obsolete components, diminishing manufacturing sources, long procurement lead times, and supply chain disruptions that extend aircraft downtime and degrade fleet readiness.

Technology Solution Statement:

ACET Aerospace delivers an integrated aircraft sustainment, modification, and modernization solution that unifies advanced program management, digital planning, manufacturing, logistics, quality assurance, and field execution into a single operational framework. This approach reduces aircraft downtime, improves production efficiency, accelerates modification timelines, and enhances overall fleet readiness.

Benefits Statement:

ACET Aerospace provides Government and military customers with a comprehensive, integrated sustainment solution that improves aircraft readiness, increases operational availability, and reduces total lifecycle cost. By unifying aircraft maintenance, PMI execution, modernization, advanced manufacturing, supply chain management, logistics, and field support under a single management framework, ACET eliminates the inefficiencies and handoff risks that arise when multiple contractors perform disconnected functions.

Atlas Copco Tools & Assembly

Focus Area: Advanced/Additive Manufacturing

Contact

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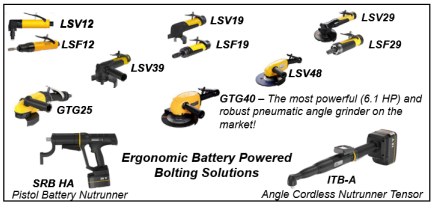
Atlas Copco Tools & Assembly Systems (ACTA) is a global leader in industrial assembly solutions, specializing in smart, connected tools and engineered systems that drive productivity, quality, and sustainability. Our portfolio includes advanced tightening tools, torque and angle analyzers, error-proofing systems, machine vision, and software platforms that support Industry 4.0 transformation.

At our North American Applications Center (APC) in Auburn Hills, Michigan, we design and deliver custom-engineered solutions tailored to the unique needs of defense, aerospace, automotive, and heavy manufacturing sectors. Our high-performance teams collaborate with customers to develop ergonomic, data-driven systems that improve operator safety, reduce rework, and ensure traceable quality.

ACTA serves a wide range of government and defense customers, including U.S. Navy shipyards, depots, and prime contractors. We are ISO 9001, 14001, 45001, and 17025 certified, and our PF8000 controller platform supports advanced analytics, remote diagnostics, and predictive maintenance.

Integrated Assembly Systems for Defense Sustainment

Problem Statement:



- Manual assembly processes lack traceability and repeatability
- High rework rates due to inconsistent torque application
- Limited visibility into tool performance and joint quality
- Ergonomic risks in shipyard maintenance environments
- Need for data-driven maintenance and predictive diagnostics

Technology Solution Statement:

- ACTA's PF8000 platform delivers smart, connected tightening with full traceability
- ACTA 4000 analyzers provide torque/angle validation and SPC analytics
- Custom-engineered solutions from APC improve ergonomics and reduce operator fatigue
- Integrated software enables real-time monitoring, diagnostics, and predictive maintenance

Benefits Statement:

- 30% reduction in rework through validated tightening processes
- 25% improvement in operator efficiency via ergonomic tooling
- 100% traceability of torque and angle data for QA audits
- Supports ISO 17025 calibration and Navy maintenance standards
- Enables predictive maintenance and CBM+ compliance
- Reduces downtime and improves fleet readiness

AMETEK Spectro Scientific

Focus Area: Advanced/Additive Manufacturing

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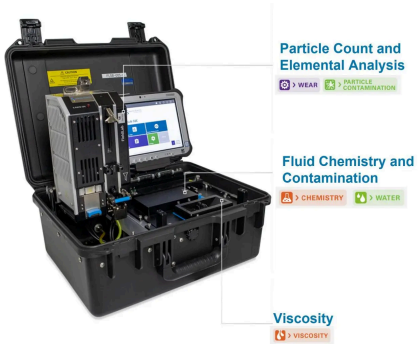
AMETEK Spectro Scientific is one of the largest global suppliers of oil and fuel analysis instruments to industry clients and the military worldwide, specializing in analytical instrumentation and software for machine condition monitoring. Spectro Scientific develops a broad array of fluid analysis instruments for evaluating machine and lubrication condition in on-site and highly mobile field applications. Its extensive product offerings include spectrometers for wear metal analysis, lubricant degradation and contamination analyzers, and particle analysis instruments.

FieldLab 58 Expeditionary Fluid Analysis System (EFAS)

Problem Statement:



Military maintenance teams often face delays and logistical challenges when relying on offsite oil analysis laboratories. Long turnaround times can limit the effectiveness of condition-based maintenance programs, delay maintenance decisions, and reduce equipment availability. In deployed or remote environments, access to lab services may be limited or impractical, increasing reliance on time-based maintenance rather than actual equipment condition.

Technology Solution Statement:

The FieldLab 58 Expeditionary Fluid Analysis System (EFAS) is a portable, rugged oil analysis system that enables onsite evaluation of lubricant condition in minutes. The system measures critical parameters such as viscosity, oil chemistry, particle count, and wear —key indicators of lubricant health and machine condition. Designed for ease of use, FieldLab 58 allows maintainers to perform consistent, repeatable oil condition tests directly at the point of maintenance, supporting faster and more informed decisions.

Benefits Statement:

- Enables faster maintenance decisions by eliminating delays associated with off-site lab analysis
- Supports CBM+ and predictive maintenance initiatives for military assets
- Improves equipment readiness and availability
- Reduces unnecessary oil changes and maintenance actions
- Portable and suitable for depot, field, shipboard, and expeditionary environments
- Simple operation suitable for maintenance personnel, not lab specialists

Fairmount Technologies

Focus Area: Advanced/Additive Manufacturing

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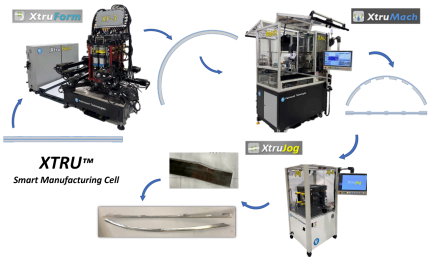
At Fairmount Technologies, we are committed to developing technologies that enable rapid tool-less manufacturing of extruded parts with a focus on the aerospace and defense sectors. We develop, produce and sell CNC machines based on those technologies, so that the organic and industrial bases can produce parts rapidly without needing special tooling.

XTRU

Problem Statement:



Maintainers lack the ability to perform quick-turn airframe structural repairs as it take months to years to produce spare parts.

- Traditional structural spare part manufacturing processes require part-specific tooling to be designed, built and proved-out before spare parts can be produced.
- This leaves warfighter assets rendered mission incapable for months to years awaiting spare parts, diminishing readiness.

Technology Solution Statement:

XTRU is a tooling-free manufacturing cell comprised of XtruForm (XF) for stretch forming, XtruMach (XM) for milling, and XtruJog (XJ) for joggling, for rapid production of structural spare parts for repair. XTRU implements traditional processes to produce spares without tooling, using CNC machine kinematics and digital thread. Avoidance of tooling enables rapid spares, repairs and increases readiness. XTRU's digital thread capability enables forward deployed sustainment and simplified logistics.

Benefits Statement:

- Rapid repairs enabled – lead time for spares reduced to hours or days
- Lead time: 1 day if manufacturing technical data package (TDP) is available, a few weeks for complex parts needing TDP development, custom soft jaws, thinning of extrusion, etc.
- Short lead time for spares will reduce MICAP (Mission Impaired Capability Awaiting Parts)
- Traditional manufacturing process in new tooling-free CNC machines – parts produced meet all specs
- TDP developed once can be used anywhere to produce structural spare parts

FARO-Creaform

Focus Area: Advanced/Additive Manufacturing

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FARO is the leading global source for 3D measurement, imaging and realization technology. For 40 years, FARO has provided industry-leading technology solutions that enable customers to quickly and easily measure their world and then use that data to make smarter decisions faster. FARO continues to be a pioneer in bridging the digital and physical worlds through data-driven reliable accuracy, precision and immediacy. FARO's global headquarters is located in Lake Mary, Florida. The company also has a technology center and manufacturing facility located in Exton, Pennsylvania, containing research and development, manufacturing and service operations.

3D Laser Scanning, Reverse Engineering, Rapid Prototyping

Problem Statement:

- In order to stay competitive, you need to meet increasingly strict quality standards — and do this as cost-effectively as possible. You can't invest in a quality control or inspection solution only to find out that it doesn't perform as you expected, or that it requires significant changes to your team's workflow, skills or software.
- Traditional Bridge style CMMs and other stationary measurement methods do not alone provide the mobility and versatility required by today's manufacturing standards.

Technology Solution Statement:

- Sometimes a part or tool is so large or complex, you can't use stationary CMMs or Arm systems. FARO® VantageS6 Max and VantageE6 Max Laser Trackers enable you to build and inspect products by measuring quickly, simply and precisely with exceptional portability. The Vantage Max Laser Trackers offer comprehensive, large-volume 3D measurement up to 80 meters, significantly streamlining your processes and reducing inspection cycle times while ensuring complete confidence in the results.
- Vantage Max can incorporate our highly accurate 6 degrees of freedom (6DoF) measurement capabilities via the optional 6Probe, which enables precise measurement of hidden areas and small features.

Benefits Statement:

- Quick and simple inspection process
- Easy to use software with no programming required
- Fully portable and wireless, allowing it to be used in the field unlike a traditional CMM
- Can bring the device to your parts.
- Laser Tracker allows detailed measurements of complex geometry across a very large envelope (up to 80 meters)
- Easy to apply coordinate system means little to no prep time per part
- Ready to use right out of the box
- No manual data entry is needed - measurements are automatically stored in the software

ITL Solutions

Focus Area: Advanced/Additive Manufacturing

Contact

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Our subject matter experts and engineers provide comprehensive support with modern software and advanced manufacturing to solve our customers' problems.

From new product design to ensuring legacy equipment and components are available to keep critical systems running, ITL maintains a proven track record of reliable contract execution, delivering on time, and meeting all performance and compliance standards across defense, federal, state, local, and commercial programs all delivered under our AS9100D/ISO 9001:2015 quality system.

ITL, LLC Manufacturing

Problem Statement:

The defense maritime industry faces increasing challenges in maintaining fleet readiness due to long lead times for replacement parts, aging platforms, part obsolescence, supply chain disruptions, and limited availability of legacy components. Traditional manufacturing methods often require expensive tooling, extended procurement timelines, and large inventory storage, resulting in increased maintenance delays, higher sustainment costs, and reduced operational availability for naval vessels and maritime systems.

Technology Solution Statement:

Implement advanced additive manufacturing (AM) technologies, including laser wire direct energy deposition (DED) 3D printing, to produce mission-critical replacement parts, tooling, and prototype components on-demand for defense maritime applications. The solution integrates digital engineering, qualified material processes, and certified manufacturing workflows to rapidly fabricate high-quality components either at shipyards or forward operating locations, reducing dependency on traditional supply chains while improving responsiveness and sustainment capability.

Benefits Statement:

Advanced additive manufacturing improves fleet readiness by significantly reducing part procurement lead times and enabling rapid production of obsolete or hard-to-source components. This lowers inventory and lifecycle sustainment costs, increases supply chain resilience, and enhances operational flexibility for maritime maintenance activities. Additionally, additive manufacturing supports accelerated innovation, reduced material waste, and improved mission availability across defense maritime platforms.

Radian Forge

Focus Area: Advanced/Additive Manufacturing

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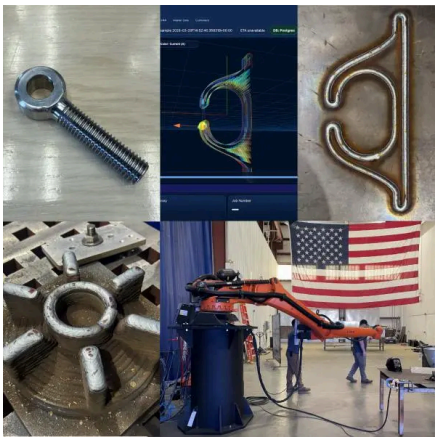
Radian Forge, we build advanced manufacturing capability for the maritime and defense industrial base using Wire Arc Additive Manufacturing (WAAM). Located in Portsmouth, Virginia, in direct proximity to the fleet and shipyards, we produce large-scale, precision-grade metal components designed to accelerate delivery, reduce supply chain risk, and strengthen operational readiness. Our focus is practical, deployable manufacturing that supports sustainment, repair, and next-generation maritime capability.

Advanced Maritime Wire Arc Additive Manufacturing (WAAM)

Problem Statement:



The maritime industrial base faces increasing pressure from aging infrastructure, extended lead times, constrained domestic manufacturing capacity, and fragile global supply chains.

- Long lead times for critical maritime components
- Shrinking domestic heavy manufacturing capacity
- Supply chain fragility is impacting fleet readiness
- Limited surge manufacturing capability for defense needs

Technology Solution Statement:

Radian Forge strengthens maritime readiness by reducing production timelines, increasing manufacturing agility, and supporting resilient domestic supply chains for mission-critical components.

- Reduced lead times for large maritime structures and components
- Increased supply chain resilience through domestic production
- Material properties comparable to forgings and superior to castings
- Scalable manufacturing for sustainment, repair, and modernization
- Improved responsiveness to operational and fleet requirements

Benefits Statement:

Radian Forge utilizes Wire Arc Additive Manufacturing (WAAM) to rapidly produce large-scale, mission-critical metal components for maritime and defense applications. By combining robotic welding, software-driven manufacturing, and qualified commercial wire feedstock, Radian Forge delivers flexible, scalable production capability closer to the fleet.

- Large-scale metal additive manufacturing using WAAM
- Rapid production and repair of maritime components
- Flexible geometries and accelerated iteration cycles

Siemens Digital Industries Software

Focus Area: Advanced/Additive Manufacturing

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As integrators of Siemens' globally trusted products and services, Siemens Government Technologies delivers innovative solutions compliant with rigorous government standards and classification levels, while providing flexible financial solutions that enable agencies to meet project requirements, surpass performance benchmarks, improve acquisition strategies, and save time and money. SGT connects federal agencies to the comprehensive, end-to-end portfolio of solutions from Siemens—one of the most technologically advanced and proficient engineering, industrial and software leaders in the world—to secure and modernize the largest infrastructure in the world, the U.S. Federal Government, so it can keep its citizens safe and economy thriving.

Xcelerator

Problem Statement:

Increase readiness by improving depot throughput.

Technology Solution Statement:

Accelerate digital transformation as a sustainable Digital Enterprise with us! We give organizations like yours the agility, flexibility and adaptability to turn ideas into innovation with greater efficiency and speed. See how we help transform the everyday for everyone.

Benefits Statement:

Embrace the comprehensive digital twin and a digital thread approach to realize the full potential of model-based system engineering (MBSE). Start integrated and stay integrated across the entire product lifecycle to confidently manage complexities. Reduce risk and build the right products faster.

Siemens Government Technologies

Focus Area: Advanced/Additive Manufacturing

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Combining the real and the digital worlds makes it possible to seamlessly integrate the entire value chain from design to realization, while optimizing with a continuous flow of data. A true Digital Enterprise is able to harness the unlimited power of data by gaining valuable insights to make fast and confident decisions – and to create best-in-class products through efficient production.

Digital Simulation of Production

Problem Statement:

Aging infrastructure, inefficient layout and old equipment are contributing to longer maintenance times, increased costs and reduced fleet readiness.

Technology Solution Statement:

Provide a digital model to identify equipment and process solutions that increase throughput through experimentation, and further set the state for equipment procurements and facility designs that enable improved operations.

Benefits Statement:

Digital model of the maintenance process: maximizes allocation of resources, provides framework for data driven optimization, maximizes workforce allocation, targets faster ROI for project investments.

American Data Solutions

Focus Area: Business IT and Analytics

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ADS delivers mission-driven software that measurably improves aircraft sustainment and readiness. ADS developed the Multipurpose Digital Data Viewer (MDDV), a Class 6 Interactive Electronic Technical Manual (IETM) designed to function as an enterprise-authoritative technical data environment aligned with AFLCMC Digital Materiel Management objectives, including Predictive Logistics. MDDV integrates and governs configuration-controlled technical data across the weapon system lifecycle, enabling real-time troubleshooting, improved maintenance decision-making, and fleet-wide analytics.

Interactive Electronic Technical Manual (IETM)

Problem Statement:

- Fleet availability in the AF is low!
- Fleet availability is mostly based on parts availability and some on maintenance effectiveness and efficiency.
- Airmen spend a considerable part of their time (estimated at ~50%) doing paperwork and reporting. Human reporting is usually not very accurate nor granular. Tracking of important parts by serial number is minimal and acutely inaccurate.

Technology Solution Statement:

The number one pain in the U.S. Air Force is low aircraft availability rates across the enterprise. The main reason for low availability is the shortage of crucial parts. Since budgets are always limited, intelligent acquisition is necessary. To make intelligent decisions, they must be based on accurate and timely information. MDDV (with its unique capabilities) enables the automatic, accurate gathering of detailed, granular information on crucial parts using its LOG, BOM Wizard™, and Serial Number Wizard.

Benefits Statement:

MDDV is the certified execution layer. It is a Class 6 IETM approved for direct task execution, meaning maintainers are actually doing the work inside MDDV—not referencing it on the side. It enforces TO compliance, correct sequencing, and all warnings and cautions, and it becomes the system of record while maintenance is being performed.

- Zero Wait Technical Data Access
- Interactive Maintenance Capabilities
- Zero Wait Technical Data Access
- Interactive Maintenance Capabilities
- Execution Level Workflow Enablement

Anantics

Focus Area: Business IT and Analytics

Contact

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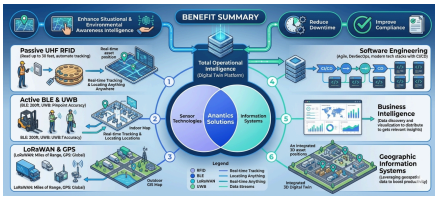
Anantics is a leading technology solutions provider, with expertise in DevSecOps, GIS, and IoT solution custom design, development, and implementation. Our Real-Time Location Systems (RTLS) include options of RFID, BLE, UWB, LoRaWAN, and GPS sensors.

RFID RTLS Solution – Track and Trace Anything Anywhere



Problem Statement:

Any modern business or organization knows that they need to track assets, inventory and personnel to improve efficiency, reduce costs, and respond quickly in case of a safety concern. Manual procedure or barcode-based identification and tracking process needs line-of-sight and is resources intensive, which is still prone to inaccuracies.

Technology Solution Statement:

Anantics bring Internet of Things (IoT) based smart solutions to uniquely identify, track and monitor assets and personnel automatically, and no line of sight is needed. Our solutions embed multiple IoT sensors, such as RFID, BLE, LoRaWAN, UWB and GPS; as per client's requirements. We are an IoT Systems Integrator and Enterprise Software Developer to provide smart Digital Twin solutions.

Benefits Statement:

IoT sensor embedded solutions enhance situational and environmental awareness intelligence. IoT enablement solutions reduce downtime and improve compliance.

IoT solutions enable real-time identifying, tracking & locating anything anywhere, indoor or outdoor.

ASRC Federal

Focus Area: Business IT and Analytics

Contact

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ASRC Federal's Advanced Analytics provide relevant and actionable intelligence to decision makers and help solve complex business and mission challenges. With machine learning, data analytics and specialized data science tools, we have the solution you need. Whether it's customized dashboards for business intelligence, geospatial analytics, space mission anomaly identification or object-detection models, our team can help implement a purpose-built system that reduces your workload, lowers risk of errors and improves the quality of your intelligence data resulting in timely data driven decisions.

Our Artificial Intelligence/Machine Learning (AI/ML) model development pipeline implements industry best practices and state of the art machine learning techniques to research, acquire data and deploy AI/ML tools as embedded systems to a variety of environments using software or hardware acceleration.

Aviation Logistics Support

Problem Statement:

Quick repairs are essential to the combat readiness of today's military weapon systems. Mechanics must have immediate access to spare parts, no matter how seemingly insignificant. A $100,000 component could be useless if it's missing a $3 fastener. That means your engine won't turn, your vehicle won't roll, and your aircraft won't fly.

Technology Solution Statement:

Enabled by our Integrated Logistics Toolkit (ILT), a comprehensive supply chain management platform that processes over 600,000 transactions annually to optimize inventory availability and replenishment actions of critical spare parts and consumables, we allow DoD depots to expedite maintenance and repairs and lower procurement and inventory costs.

Benefits Statement:

ASRC Federal provides performance-based global logistics and supply chain services to create efficient, effective and dynamic supply chains that maximize warfighter capabilities, and support mission readiness and sustainment. Aviation logistics support experience includes over 20 years of Industrial Product-Support (IPV) program performance at Navy FRCs providing line-side bin management, world-wide distribution of packaged POL's and chemicals under the ChemPOL and FSG80 (adhesives, paints, sealants) programs, and global distribution of all aviation and land tires under the Global Tires Program (GTP).

Blue Yonder Defense Solutions

Focus Area: Business IT and Analytics

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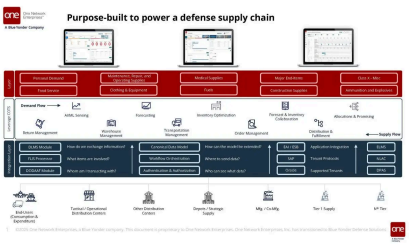
In today's dynamic environment, effective supply chain management is crucial to achieving our nation's strategic objectives. Blue Yonder Defense Solutions (formally known as One Network Enterprises) is leading the way in revolutionizing supply chain operations and the organic industrial base by focusing on a single solution for multi-tier and multi-enterprise collaboration. This includes areas such as supplier inventory, forecast, capacity, schedule, and order collaboration. Our approach leverages seamless integration and a robust foundational supply chain network to enhance efficiency, agility, resilience, and sustainment.

Redefining Outside-In Planning in Defense Supply Chains

Problem Statement:



In today's dynamic environment, the Defense Organic Industrial Base faces significant challenges in achieving efficient and resilient supply chain operations. The lack of a unified solution for multi-tier and multi-enterprise collaboration hampers the ability to maintain optimal stock levels, align supply with demand, and ensure timely order fulfillment to meet mission requirements. This fragmentation leads to inefficiencies, increased costs, and reduced responsiveness to warfighter demands.

Technology Solution Statement:

Blue Yonder Defense Solutions enhances supply chain efficiency and resilience for the Defense Organic Industrial Base. Multi-tier and multi-enterprise collaboration delivers real-time visibility into supplier inventory, collaborative forecasting, capacity planning, and synchronized scheduling. With seamless integration and a flexible foundational supply chain network, the Department of Defense can optimize stock levels, align supply with demand, and ensure timely order fulfillment. End-to-end supply chain visibility and collaboration enhances agility, reduces costs, and improves responsiveness to warfighter demands while improving audit posture.

Benefits Statement:

- "Shared Investment" benefits all Defense organizations
- Solution Never Goes Legacy, reducing sustainment costs while delivering modernizations.
- Rapid Configuration and deployed "your way"
- Flexible integration to current legacy/ERP and DOD systems.
- Fully supported with Deployed Operations for D-DIL/Contested environments as well as garrison warehouse, flightline, magazine, and physical operations otherwise outside of service areas.
- AI Enabled Control Tower provides visibility and actionability on real time data.
- Highest auditability results across DOD.

EY

Focus Area: Business IT and Analytics

Contact

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Shape the future with confidence

Ernst & Young (EY) is a global professional services organization that has evolved from its origins in accounting and assurance into a multidisciplinary firm delivering consulting, tax, strategy, and transaction services. Today, EY provides integrated capabilities across business transformation, technology, risk management, and human capital, enabling organizations to align strategy with execution. Its AI & Data and workforce advisory practices help clients link business objectives to measurable outcomes through enterprise data strategies, advanced analytics, and human-centered transformation approaches.

AI and Data Analytics to Improve Training, Workforce Readiness and Predictive Maintenance

Problem Statement:

ALC faces a compounding workload challenge: the same organization responsible for sustaining training, production operations, inventory decisions, and reliability outcomes must do so under significant operational pressure. ALC's critical processes in technical training, production processing, inventory management, and data-driven logistics support, could be greatly enhanced by AI, machine learning, and AR/VR as priority modernization enablers. With supply chain risk and parts obsolescence remaining top concerns, ALC has an opportunity to apply advanced analytics for forecasting and operational visibility, AI/ML for predictive failure and supply risk detection, generative AI for rapid training-content development, and immersive AR/VR tools for scalable, realistic workforce training.

Technology Solution Statement:

EY is uniquely positioned to help ALC address these challenges through an integrated, data-driven transformation approach. EY brings deep experience in federal aviation sustainment, supply chain analytics, and mission support systems, combined with leading capabilities in advanced analytics, AI/ML, and digital engineering. EY can deploy predictive maintenance models and reliability analytics to identify emerging failure patterns and optimize maintenance scheduling; implement intelligent supply chain solutions that improve demand forecasting, inventory optimization, and vendor risk visibility; and deliver production analytics platforms that provide real-time insights into workload, bottlenecks, and throughput across maintenance and logistics operations.

Benefits Statement:

Implementing these capabilities enables the Coast Guard Aviation Logistics Center to transition from labor-intensive, siloed operations to an intelligent, integrated sustainment model that significantly enhances mission effectiveness. By leveraging predictive maintenance and advanced analytics, ALC can improve aircraft availability and reduce unplanned downtime, directly strengthening mission readiness. At the same time, AI-driven supply chain optimization improves demand forecasting and mitigates risks associated with long lifecycle assets and parts obsolescence, resulting in more reliable and cost-effective inventory management.

Govini

Focus Area: Business IT and Analytics

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Govini is a defense software company that transforms outdated manual processes into a software-driven strategic advantage for the federal government. Our software-as-a-service (SaaS) platform, Ark, integrates structured and unstructured data across logistics, acquisition, maintenance records, engineering documentation, and supply chain systems — transforming fragmented information into decision-ready intelligence.

Ark SaaS Platform

Problem Statement:

ALC's data holds untapped potential — the right AI layer puts it to work.

The problem:

- Maintainers and engineers spend too much time searching for data vs executing repairs and inspections
- Document drafting is a persistent bottleneck — manual and inconsistent across divisions
- Institutional knowledge is concentrated in experienced personnel and lost when they depart

Technology Solution Statement:

Ark connects to ALC's existing systems — ALMIS, logistics databases, maintenance records, engineering repositories — without replacing them. Ace, Govini's agentic AI engine, reasons across that data to execute multi-step workflows autonomously:

- Pull and cross-reference H-60 vibration anomalies against component replacement records — in seconds
- Generate demand forecasts from years of requisition data — with sourced methodology
- Draft compliance-ready policy and acquisition documents from existing source material

Benefits Statement:

Ark reduces the time maintainers, engineers, and logistics professionals spend locating information, drafting documents, and reconciling data across disconnected systems — recovering capacity for mission execution.

- BOD / ISD / MRR: AI-assisted document drafting cuts hours-long tasks to minutes, with compliance built in
- MRR / BOD: Demand forecasting from historical requisition and fleet data improves parts availability and reduces logistics lag
- ESD: Ace analyzes H-60 vibration data at scale, surfacing failure precursors manual review misses

Hexagon US Federal

Focus Area: Business IT and Analytics

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Octave Federal focuses on delivering public safety, geospatial intelligence and mission-critical security solutions to the U.S. Government and partners. With 40 years of experience, we empower agencies and industry partners to operate with speed, precision and greater confidence.

Octave Coda Spatial (formerly LiDAR Vision) LiDAR Scanners

Problem Statement:

Octave Coda – Global crises, trade conflicts, political instability and climate change are intensifying risks for organizations, increasing the need for holistic security solutions to protect people, property and assets. Traditional physical security technology is siloed, costly and complex.

Technology Solution Statement:

Octave Coda - Coda's powerful forensic and real-time investigation tools enable teams to validate incidents and build situational understanding through rich contextual information. Handle incidents in a compliant, standardized manner, minimizing impacts as effectively as possible.

LiDAR Scanners - An unrivaled selection of Leica Geosystems terrestrial and mobile mapping products for a wide range of tasks such as surveying, construction, crime scene analysis and creating exquisitely detailed digital twins of the real world. Octave Coda builds on the digital twin created by the Leica Geosystems survey LiDAR scanners. Coda supports the use of over 50 commercially available LiDAR sensors for the 3D surveillance aspect. Different to survey LiDAR scanners, these LiDAR sensors are lower in cost and typically have longer ranging capabilities.

Benefits Statement:

Octave Coda - The Coda portfolio delivers a broad range of physical security software solutions, including cloud and on-premises video surveillance, PSIM, incident management and LiDAR-based volumetric protection. AI-powered video analytics, mobile apps and centralized, web-based management tools complement the offering, making Octave's portfolio one of the most comprehensive ones in the physical security market.

LiDAR Scanners - Our LiDAR capabilities deliver precise, high-resolution data across air, land, and subsurface environments—equipping federal and defense teams with the actionable insight needed to map, monitor, and manage complex terrain with speed, accuracy, and confidence.

Immersion

Focus Area: Business IT and Analytics

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Immersion, a Service-Disabled Veteran-Owned Small Business (SDVOSB), provides innovative business and advanced technology solutions for its federal government clients. Immersion's technology capabilities focus on Cloud Management, Data Management and IT Support. Immersion's mission is to provide tangible solutions that create long lasting client value.

Data Integrity Drives Empowered Decisions

Problem Statement:

In 2022, USCG's Data Readiness Task Force (DRTF) was established to improve data quality and decision-making at USCG. Immersion anticipates – based on our federal client experience – that a significant amount of USCG's data may reside in legacy PDFs, text reports, and other semi-structured and unstructured formats that are difficult to query at scale making manual extraction slow and error prone. This data environment creates inconsistent datasets that undermine data analytics, and accurate reporting. In addition, insufficient tracking makes it difficult to trust the data and it can compromise downstream decisions.

Technology Solution Statement:

- Provide an automated, multi-source ingestion engine to fuel high-fidelity digital twin simulation with comprehensive historical and real-time context for the USCG at Base Elizabeth City.
- Apply Altair Monarch-based PDF ETL using reusable trapping/models, including Regex-driven pattern recognition, to reliably convert legacy reports into structured rows/columns.
- Extract and normalize data from PDFs/text; cleanse, standardize, transform, and combine disparate datasets for enriched analysis.
- Capture metadata for traceability (e.g., source and context) to support validation and auditability.
- Package outputs for analytics workflows (e.g., data prep/BI/automation).

Benefits Statement:

- Reduces errors and enhances operational efficiency because higher data quality eliminates inconsistencies, identifies missing values and ensures data accuracy before analysis.
- Increases trust through traceability and lineage, supporting validation and defensible analytics.
- Converts legacy PDF/text records rapidly into analytics-ready structured datasets, reducing manual effort and re-keying.
- Provides more consistent, repeatable extraction using Regex pattern-based templates that scale across large document collections and format variation.
- Creates a path toward advanced ecosystem tools like digital twins, digital threads, dashboards, data products and integrated networks.

Naval Systems, Inc.

Focus Area: Business IT and Analytics

Contact

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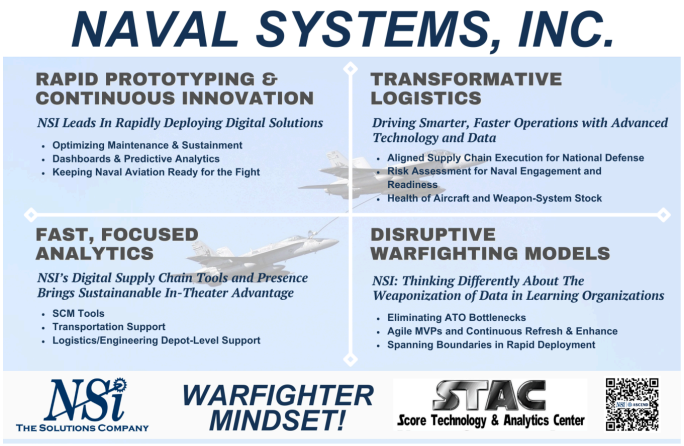
Naval Systems, Inc. (NSI) was founded in 2004 as an technical services company with the Navy's Naval Air Systems Command (NAVAIR) as its primary customer. Since then, NSI has grown to over 300 employees and some 200 subcontractors, with its headquarters near NAS Patuxent River, MD, and personnel and satellite offices located across the U.S. and overseas. NSI supports USN, USMC, USAF, and US Army programs and associated Department of Defense (DoD) agencies responsible for delivering and sustaining advanced defense systems across warfighting domains.

Application of Commercial Off-The-Shelf (COTS) FARO Quantum Laser ScanArm (FQLS)

Problem Statement:

- The current Navy-maintained Aerial Refueling Stores (ARS) are over 20 years old and many components are no longer manufactured.
- Corrosion on mission-critical assets often remains undetected until severe damage occurs.
- Traditional inspections lack continuous, actionable data, hindering maintenance prioritization.
- This gap increases unexpected downtime, repair costs, and reduces overall readiness.



Technology Solution Statement:

- The FQLS enables rapid reverse engineering and reconfiguration of ARS pods by capturing components for redesign
- Supports full structural and material assessments to modernize a 20+ year-old system
- Identifies imperfections during MRO using 3D scanning, digital reproduction, and CAD
- Enhances durability, efficiency, and adaptability through precise analysis and redesign of ARS components
- Analytics- FQLS identifies hidden corrosion patterns and predicts high-risk areas, solving the challenge of unpredictable asset failures and enabling timely, targeted maintenance to prevent costly downtime.

Benefits Statement:

- An upgraded ARS and its components result in increased readiness, greater decision advantage, decreased risk, and cost optimization due to upfront resolution of structural and material issues.
- Quality control and safety go hand in hand as the ARS is revitalized and NSI provides solutions for engineering gaps and damaged or ineffective components.

Panasonic Toughbook Connect

Focus Area: Business IT and Analytics

Contact

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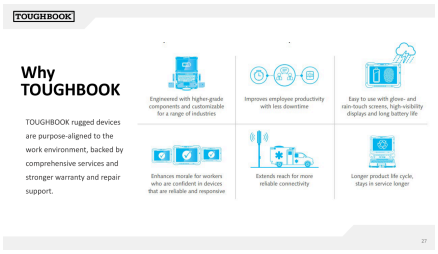
NAVIGATING CRITICAL MISSIONS WITH CONFIDENCE
The U.S. Coast Guard (USCG) is the cornerstone of America's maritime safety and security, operating in some of the most demanding conditions to protect national waters. As administrators of the Aids to Navigation (AToN) system, the USCG ensures the safe navigation of over 25,000 miles of waterways, providing mariners with reliable tools to navigate treacherous environments. From search-and-rescue missions to law enforcement and national security operations, the Coast Guard's ability to adapt and perform depends on rugged and reliable mobile technology.

Panasonic Toughbook

Problem Statement:



Coast Guard aviation maintenance teams operate in environments that consumer and non-ruggedized hardware was never designed to survive.

- Salt water, sand, vibration, and extreme temperatures drive device failure mid-task
- MRO workflows depend on continuous uptime. Screens that go unreadable and devices that go offline stop work
- Consumer devices fail 3x the rate of purpose-built rugged hardware, driving higher long-term costs
- Procurement decisions made on upfront price create total cost of ownership consequences that compound over time.

Technology Solution Statement:

Panasonic TOUGHBOOK® rugged laptops and tablets are purpose-built for Coast Guard aviation maintenance environments. MIL-STD-810H certified and 72% more reliable than other rugged devices, TOUGHBOOK consolidates MRO workflows, digital manuals, and diagnostics onto a single platform, with fleet-wide device visibility and endpoint security managed through TOUGHBOOK Total Defense. Hot-swap batteries sustain continuous operations without access to power. Modular xPAK expansion supports legacy radio compatibility and custom OS imaging. TAA-compliant and available on SEWP and other contract vehicles.

Benefits Statement:

When hardware is purpose-built for the environment, the operational and financial case is clear:

- 72% more reliable than other rugged devices
- Lower long-term repair, replacement, and downtime costs
- 5G connectivity up to 14x faster than 4G
- TOUGHBOOK Total Defense provides device visibility, configuration health, and endpoint security across the fleet.
- TAA compliant components meet federal acquisition requirements

Paradigm Max Q

Focus Area: Workforce Development/Visualization

Contact

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Paradigm Max Q brings together top-tier Subject Matter Experts with decades of frontline experience and empowers them with a full team of data analysts and engineers leveraging cutting-edge tools. The result is a pragmatic, experience-driven approach, rigorously validated through advanced analytics. We don't just solve today's problems; we deliver solutions that are sustainable, scalable, and built to prevent future challenges.

Optimized Sustainment System

Problem Statement:

Aviation sustainment efforts must evolve to meet the demands of modern operations, requiring updated capabilities, improved efficiency, and innovative approaches to maintenance, logistics, and lifecycle support. USCG ALC specifically requires assistance with Medium Range Recovery (H-60), Short Range Recovery (H-65), and Support Equipment Product Line to address:

- Lifecycle management tools
- Make/Buy/Repair Decisions
- Predictive Supply Chain
- DMSM/Obsolescence Management
- Logistics forecasting
- Software with improved forecasting capability

Technology Solution Statement:

PMQ's Optimized Sustainment System (OSS) advances traditional approaches and solves ALC's sustainment challenges by integrating:

- Lifecycle management tools
- Establishes measurable sustainment baselines
- Predictive analytics
- Triggers targeted and defined sustainment solutions
- Enables data-driven make/buy/repair and forecasting decisions
- Provides optimization across supply chain, maintenance, engineering, and workforce domains

Benefits Statement:

OSS improves readiness performance through faster decision cycles, stronger forecasting accuracy, and cross-functional execution. By synchronizing maintenance, supply, engineering, and workforce actions, OSS has reduced downtime, shortened root-cause resolution timelines, improved asset availability, and lowered avoidable sustainment costs. Additional benefits include improved workforce utilization, clearer performance accountability, and increased resilience in degraded logistics environments. This approach supports measurable improvements using existing systems and available data.

Pryon AI

Focus Area: Business IT and Analytics

Contact

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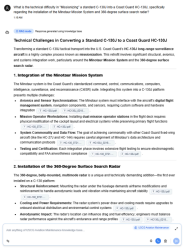
Pryon enables government organizations to operationalize trusted AI securely across enterprise, operational, and mission environments. Pryon combines advanced Retrieval-Augmented Generation (RAG), workflow orchestration, and intelligent chat agents into a deployable platform designed specifically for the realities of federal operations – including IL5, disconnected, and highly secure environments.

Pryon helps organizations rapidly unlock institutional knowledge, accelerate decision-making, reduce operational friction, and improve workforce effectiveness without requiring large-scale custom software development efforts.

Pryon provides the Coast Guard with a secure, deployable, and operationally grounded AI platform capable of transforming how personnel access information, automate workflows, and execute mission operations across complex and high-security environments.

Pryon AI for USCG Aviation Logistics Center Operation Support

Problem Statement:



The USCG Aviation Logistics Center manages large volumes of maintenance, logistics, technical, and policy information across multiple systems and document repositories. Personnel often spend significant time searching for accurate answers to maintenance requests, technical support questions, operational guidance, and staff inquiries, creating inefficiencies and delays.

Technology Solution Statement:

Pryon AI provides a secure, enterprise AI knowledge assistant that enables personnel at the United States Coast Guard Aviation Logistics Center to rapidly access maintenance procedures, technical documentation, policy guidance, logistics information, and operational knowledge through natural language queries. By consolidating trusted information sources into a conversational interface, Pryon helps reduce research time, improve support responsiveness, increase workforce efficiency, and enhance operational readiness.

Benefits Statement:

Benefits of implementing Pryon AI at the USCG Aviation Logistics Center include faster resolution of maintenance and technical support requests, reduced time spent searching across disconnected systems, improved consistency of SOP, policy, and doctrine guidance, and greater workforce efficiency. Pryon can enhance logistics and sustainment workflows, improve cross-system operational search and discovery, support acquisition and program management activities, strengthen investigative and operational support functions, and accelerate workforce onboarding and training. These capabilities help preserve institutional knowledge, improve decision-making speed, and increase overall mission readiness across Coast Guard operations.

SAS Institute

Focus Area: Business IT and Analytics

Contact

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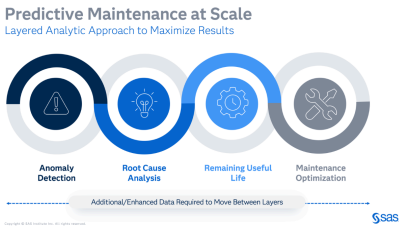
SAS is a U.S. owned and operated analytics leader with over five decades of experience supporting the Federal Government, DoD, and Intelligence Agencies. Since introducing analytics to the federal space in 1976, SAS has expanded across federal, state, local, and global commercial sectors, with over 5,000 Federal Government deployments and 80,000 organizations relying on SAS solutions. Industry analysts consistently recognize SAS as a leader in advanced analytics, AI, and data management across multiple domains.

SAS Advanced Analytics

Problem Statement:



- Supply Chain Optimization: Global disruptions and siloed spreadsheets limit visibility, impact analysis, and redundancy planning, threatening readiness.
- Predictive Maintenance: Scheduled and reactive maintenance drives unnecessary costs, no fault found events, and mission critical asset downtime.
- Procurement Integrity: Retroactive audits and fragmented data leave agencies exposed to fraud, collusion, and conflicts of interest.
- CBM: Schedule based maintenance causes over maintenance, labor waste, and unexpected failures.

Technology Solution Statement:

- Supply Chain Optimization: Integrates data, rules, and ML to optimize inventory, distribution, cost, and service in real time.
- Predictive Maintenance: Uses ML on sensor data to detect failures early and support CBM+ objectives.
- Procurement Integrity: Monitors procuretopay to detect fraud, waste, and abuse across ERP, HR, and banking systems.
- ConditionBased Maintenance: Analyzes asset health to reduce nofaultfound events and maintenance costs.

Benefits Statement:

- Supply Chain Optimization: Delivers endtoend visibility and scenario planning to balance cost, readiness, and disruption response.
- Predictive Maintenance: Enables evidencebased maintenance, reducing downtime, costs, nofaultfound events, and improving safety.
- Procurement Integrity: Continuously detects highrisk activity with configurable analytics and fully auditable workflows.
- RAM: Provides fast, citationbacked answers with governed, auditable AI across secure environments.

Shipcom AI

Focus Area: Business IT and Analytics

Contact

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Shipcom AI is a mission-driven technology company delivering AI-powered logistics, resilient edge computing, and operational decision support for the Department of Defense and allied forces. By combining data from IoT sensors with advanced artificial intelligence, Shipcom transforms raw information into actionable insights that drive real-time decision-making across disconnected and contested environments.

AI-powered Logistics

Problem Statement:

Modern military operations face critical challenges in maintaining asset visibility, logistics readiness, and decision speed across contested, disconnected, and data-denied environments. Traditional systems lack the agility, interoperability, and real-time intelligence needed. Without timely data integration from IoT sensors and adaptive AI, forces operate reactively—leading to increased downtime, delayed resupply, and degraded mission effectiveness.

Technology Solution Statement:

Shipcom AI delivers an integrated suite of platforms—SMART.AIoT, SAMOA, SQC5ISR, and SELO—that combine IoT sensor data

with advanced AI, edge computing, and secure communications. These technologies provide real-time asset tracking, AI-powered analytics, resilient C5ISR, and automated logistics across the full mission lifecycle. Our modular, sovereign solutions are designed to operate in DIL conditions and align with DoD initiatives —ensuring decision dominance at the tactical edge.

Benefits Statement:

Shipcom AI enables warfighters and commanders to act with confidence, speed, and precision. By delivering real-time situational awareness, predictive logistics, and resilient edge intelligence, Shipcom's solutions reduce downtime, increase asset availability, and accelerate kill chain execution. Our platforms optimize sustainment operations, enhance C2 capabilities, and support force projection in dynamic environments—ultimately improving operational tempo, readiness, and mission success.

Synergy Business Innovation & Solutions

Focus Area: Business IT and Analytics

Contact

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Synergy BIS (Synergy) brings over 20 years of experience supporting mission-critical initiatives for U.S. Coast Guard (USCG) and other federal organizations. Synergy employs more than 600 highly credentialed professionals, with 436 certifications across leading technology domains and platforms. Synergy is recognized for its deep expertise in agile software development, enterprise system modernization, secure cloud architecture, DevSecOps, and innovative digital transformation underpinned by rigorous quality standards including ISO 9001:2015, ISO 20000, ISO 27001, and CMMI Level 3. As a trusted partner to the USCG, Synergy delivers scalable, resilient solutions aligned to complex mission needs.

Aviation Sustainment Digital Modernization and Analytics

Problem Statement:

Federal organizations rely on aging systems, manual processes, and disconnected tools to manage maintenance, logistics, and engineering activities. These environments limit visibility across the software development lifecycle and increase the effort required to maintain accuracy, security, and compliance.

As operational demands continue to grow amid siloed data and fragmented workflows, the result is delayed decision-making, increased technical debt, increased costs from rework and inefficient manual processes, as well as reduced agility in responding to evolving priorities.

Technology Solution Statement:

Synergy provides software delivery utilizing modern DevSecOps, integrated CI/CD pipelines, centralized dashboards, and automation that unify data flows across development, security, and operations teams. Federal customers gain real-time, cross-functional visibility into system health, risk, and performance, which reduces blind spots, accelerates delivery, and enables data-driven decisions at mission speed.

Benefits Statement:

Synergy accelerates secure software delivery while reducing risk and costs for federal missions. Federal organizations, such as the USCG, gain modern, secure IT capabilities delivered at lightning speeds while meeting stringent compliance mandates.

VTG

Focus Area: Business IT and Analytics

Contact

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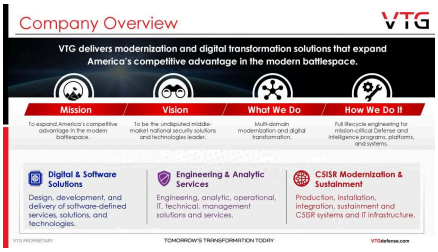
VTG delivers modernization and digital transformation solutions that expand America's competitive advantage in the modern battlespace. A trusted partner to the Defense, Intelligence, and Space communities, VTG provides digital and software solutions, engineering and analytic services, and C5ISR modernization and sustainment for mission-critical programs, platforms, systems, and infrastructure. VTG's digital supply chain and vIOLA™ capabilities connect people, processes, data, and edge technologies to improve transparency, decision-making, supply chain responsiveness, and readiness. Across aerospace and defense platforms, C5ISR systems, and critical infrastructure, VTG brings talent and technology together to help customers modernize operations, increase efficiency, reduce cost, and deliver mission outcomes at the speed of demand.

RFID-Enabled Asset Visibility for Aviation Logistics Sustainment

Problem Statement:



Aviation logistics and sustainment teams need trusted visibility into parts, tools, kits, and mission-critical material as assets move through receipt, storage, issue, maintenance, and shipment workflows. Manual processes and disconnected systems can create data gaps, slow inventory reconciliation, increase search time, and limit leadership's ability to make timely readiness and sustainment decisions.

Technology Solution Statement:

VTG demonstrates an end-to-end RFID-enabled asset visibility workflow that combines tagged assets, fixed and handheld readers, edge gateway connectivity, RFID label printing, and vIOLA™/dashboard interfaces. The workflow captures item movement and status at the point of work, supports inventory reconciliation, and provides clean data integration into the logistics, maintenance, analytics, or enterprise systems designated by the customer.

Benefits Statement:

Improves near-real-time asset visibility and confidence in inventory status. Reduces manual inventory, reconciliation, search time, and data-entry effort. Supports auditability, exception management, readiness reporting, and faster sustainment decisions. Provides a practical modernization path that connects edge data capture and analytics without forcing immediate replacement of existing logistics or enterprise systems.

Avathon Government, Inc.

Focus Area: CBM+/Predictive Maintenance

Contact

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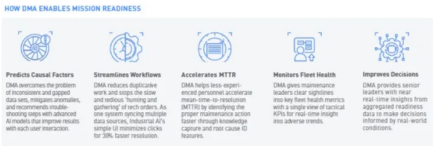
Avathon harnesses proven AI technology to bolster military readiness, improve decision advantage, and optimize defense operations. Backed by a decade of successful commercial deployments, we provide practical, readiness-focused solutions to upskill maintainers and leverage predictive analytics, partner with the armed forces to enhance domain awareness and decision making, and enable modernization of the defense industrial base by optimizing capital equipment uptime, predicting engine failures, and strengthening supplier quality control through advanced technologies like deep learning NLP, generative AI, and computer vision.

Digital Maintenance Advisor (DMA)

Problem Statement:



Declining mission-capable rates, skilled labor shortages, and increasingly complex systems are straining military maintenance operations. Slow workflows, parts delays, and limited supply chain insight degrade readiness and overload personnel – especially those with less experience.

Technology Solution Statement:

DMA applies explainable AI to deliver faster, smarter maintenance. It ingests structured and unstructured data to identify issues early, recommend actions, and surface parts availability – empowering maintainers to resolve problems quickly and accurately while providing leaders with actionable insights into fleet readiness.

Benefits Statement:

DMA enhances asset availability, reduces maintenance delays, and improves decision-making. It cuts resolution time by up to 30%, boosts maintainer confidence, and supports retention by simplifying tasks. Leadership gains near real-time insight into fleet health, enabling proactive, informed readiness decisions.

Design Mill Inc.

Focus Area: CBM+/Predictive Maintenance

Contact

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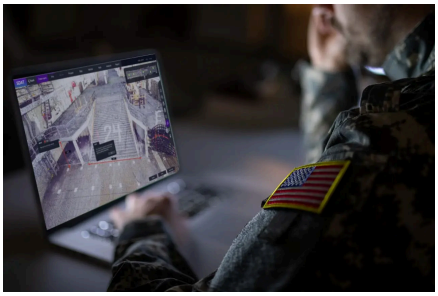
Design Mill is a strategic technology integrator delivering advanced digital twin, visualization, AI analytics, and reality capture solutions for the Department of Defense and leading commercial organizations. With more than 20 years of experience developing innovative hardware, software, and operational technologies, Design Mill helps organizations improve planning, logistics, training, operational efficiency, and asset management through connected digital ecosystems. A three-time recipient of the Intel Software Innovator of the Year award, the company specializes in integrating LiDAR, IoT, 3D analysis, and cloud-based visualization platforms to provide actionable real-time insights for mission-critical environments across defense, manufacturing, utilities, and industrial operations with AI.

Digital Twins with AI

Problem Statement:



Organizations across defense, manufacturing, warehousing, utilities, and industrial operations struggle with outdated, manual, and disconnected processes for planning, visualization, training, transportability assessment, and operational analysis. Current workflows often rely on 2D documentation, physical site visits, trial-and-error analysis, and fragmented data systems, resulting in inefficiencies, increased costs, operational delays, limited situational awareness, and reduced readiness.

Technology Solution Statement:

Design Mill's ViPr platform is a cloud-based digital twin solution that combines reality capture, 3D volumetric analysis, IoT integration, AI-driven analytics, and advanced visualization tools to create accurate digital representations of real-world assets, systems, and facilities. The platform enables users to visualize, analyze, simulate, and optimize operations through capabilities such as fit and collision analysis, path navigation, remote asset management, workflow optimization, geolocation, and real-time operational insights. ViPr integrates with existing systems and supports applications across defense, manufacturing, warehousing, utilities, and smart infrastructure environments.

Benefits Statement:

ViPr delivers engineering-level precision and actionable operational intelligence while reducing costs, travel requirements, and operational risk. The platform improves planning, logistics, readiness, workflow efficiency, transportability assessment, and training by enabling remote visualization and analysis of assets and environments. Benefits include faster decision-making, improved operational efficiency, enhanced asset management, reduced carbon footprint, optimized facility and fleet utilization, scalable digital transformation, and AI-powered analytics for real-time situational awareness.

Edlore

Focus Area: CBM+/Predictive Maintenance

Contact

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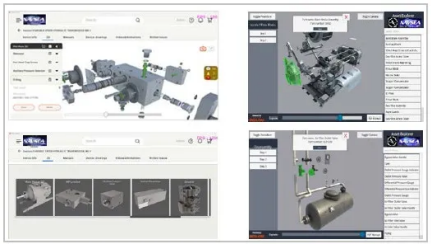
Edlore is a pioneer in AI/ML and 3D technological solutions, reshaping industry standards with its interactive manuals and wearable device integrations. Our patented AI-driven platform transforms complex technical orders into digestible, contextually relevant insights, streamlining operations. With state-of-the-art mobile and wearable technology, professionals achieve access to crucial data, ensuring efficiency and precision. Our platform also encompasses a robust Work Order Management system, enhanced by asset tracking and multimedia attachments, facilitating seamless operations and maintenance processes. At Edlore, we blend innovation and practicality, consistently delivering excellence in an ever-evolving technological landscape.

Edlore AI-On Prremise server with 3D parts identification

Problem Statement:



Despite the rapid advancement in industrial and technical operations, complex equipment service and maintainers often grapple with cumbersome manuals, scattered asset data, and lack of real-time expert assistance. This disjointed information flow increases operational downtime and raises the margin for error.

Technology Solution Statement:

Edlore introduces a unified technology suite designed for the modern maintainer. Leveraging AI's power, we've transformed dense manuals into interactive, 3D-guided insights that intuitively provide the right information at the right time. Our platform, optimized for desktop, mobile and wearable devices, ensures hands-free, on-the-go access to these insights, minimizing downtime. Furthermore, with our real-time Remote Expert Video Chat, professionals are never alone in the field, always having a lifeline to expert assistance. Paired with a comprehensive Work Order Management system and dynamic asset tracking, Edlore's solution streamlines operations. A simple scan of a device will show all manuals, drawings, videos, pictures, LOTO Safety, PM procedures, Remote Expert Video Chat and 3D/AR explosive view with parts metadata that allows you to even send the part to be printed on a 3D printer.

Benefits Statement:

Empowering maintainers with immediate access to AI-enhanced, 3D interactive guidance, reduces operational errors and downtime. By unifying knowledge, expertise, and real-time tracking within a mobile and wearable interface, we ensure every task is executed with precision, speed, and confidence. The benefits of using Edlore are:

1. More efficient on-board service and repair.
2. Never miss regular PM Maintenance.
3. Access to device parts metadata and ability to possibly print the component on board.
4. Gathering field data from service and repair.
5. Mobile and handsfree operation.

GPMS International

Focus Area: CBM+/Predictive Maintenance

Contact

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GPMS develops Foresight MX, a next-generation Health and Usage Monitoring System designed to help operators move from reactive maintenance to predictive, data-driven decision making. The system combines advanced vibration monitoring, flight data monitoring, exceedance tracking, rotor track and balance, and secure cloud-based reporting to give maintenance and operations teams clearer insight into aircraft health.

Predictive HUMS and AI-Driven Vibration Analytics for MH-60 Readiness

Problem Statement:

The U.S. Coast Guard has experienced significant maintenance and readiness challenges across its MH-60 and MH-65 helicopter fleets. While the Coast Guard has collected extensive vibration data, much of that data can be difficult to interpret, prioritize, and turn into timely maintenance action. Without advanced analytics and modern HUMS capability, maintainers may have limited ability to identify early fault signatures, understand fleet-wide trends, or predict component issues before they create downtime, cost, or mission availability impacts.

Technology Solution Statement:

GPMS proposes a two-part solution focused on MH-60 readiness. First, GPMS can apply advanced analytics and AI-supported methods to help evaluate historical Coast Guard vibration data and identify useful fault signatures, trends, and maintenance insights. Second, GPMS can provide Foresight MX as a next-generation HUMS solution for the MH-60, enabling continuous vibration monitoring, flight data monitoring, exceedance alerts, rotor track and balance, and secure cloud-based fleet visibility.

Benefits Statement:

GPMS helps operators turn vibration and usage data into practical maintenance intelligence. For the MH-60, Foresight MX can support earlier detection of drivetrain, bearing, rotor, and balance issues, reduce unscheduled maintenance, improve aircraft availability, and give maintainers clearer insight into developing faults before they affect mission readiness. By combining AI-enabled analysis of historical data with next-generation HUMS data collection going forward, GPMS can help the Coast Guard get more value from the data it already has while building a stronger predictive maintenance capability for the future.

Merge Plot

Focus Area: Reliability Improvement (Hardware)

Contact

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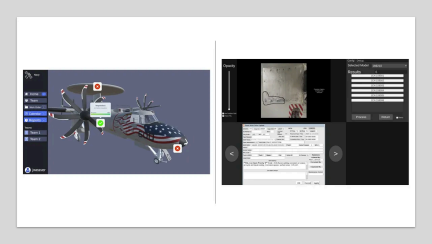
Merge Plot is a veteran-led technology company specializing in aerospace and defense. Established in 2024 as a Veteran-Owned Small Business (VOSB) based in the Greater Philadelphia area, our mission is to support the U.S. government, its allies, and commercial partners with advanced capabilities to address modern system challenges. Our team, shaped by decades of firsthand experience in the public and sectors, understands the critical need for reliability, precision, and adaptability in mission-critical environments. With active federal registration and membership in leading aerospace and defense technology consortiums, we are positioned to deliver cutting-edge solutions that address the evolving dual-use system challenges.

QuickTurn Spatial Maintenance Platform

Problem Statement:

The Navy is currently unable to quantify the scope and cost of serious endemic issues such as corrosion across the fleet. Maintenance data is unstructured and stored in multiple siloed, text-based databases that are subject to input errors.



Technology Solution Statement:

The QuickTurn spatial computing platform enhances naval aircraft maintenance within FRCs by creating digital twins of aircraft to improve efficiency, safety, and productivity. The platform will integrate mixed reality, AI, and ML to streamline maintenance workflows, connect directly with maintenance databases, and enable precise discrepancy reporting, such as corrosion quantification. By providing a robust framework for digital and physical model alignment, QuickTurn seeks to enhance naval aviation maintenance processes and support data-driven decision-making.

Benefits Statement:

The QuickTurn digital twin environment is a new and improved maintenance ecosystem which transitions naval aviation maintenance from legacy, subjective, and paper-based workflows to a digital, objective, data-driven foundation, where aircraft maintenance data is highly structured and stored on a spatially-mapped three-dimensional digital twin of each aircraft.

Southwest Research Institute

Focus Area: CBM+/Predictive Maintenance

Contact

Paul Clark
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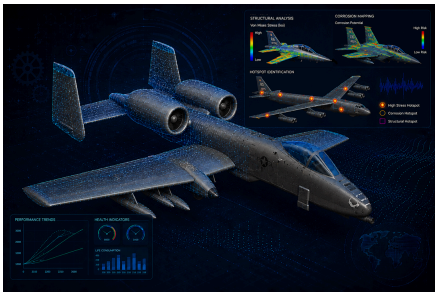
Southwest Research Institute (SwRI) is an independent, nonprofit applied research and development organization supporting government and industry with advanced engineering, sustainment modernization, and digital transformation solutions. SwRI specializes in bridging legacy sustainment environments with modern digital engineering capabilities to improve readiness, lifecycle management, and decision-making across defense platforms.

Leveraging expertise in aircraft structural integrity, damage tolerance analysis, digital thread architectures, predictive sustainment, and enterprise data integration, SwRI helps organizations transform fragmented sustainment data into actionable engineering knowledge.

Digital Sustainment & Engineering Services

Problem Statement:



Modern sustainment organizations face growing challenges caused by fragmented engineering, maintenance, inspection, and operational data distributed across disparate systems, limiting visibility into the true configuration, condition, and structural history of critical assets. These challenges are further compounded by aging fleets operating in harsh environments where corrosion, material degradation, and fatigue damage significantly impact readiness, availability, and lifecycle cost.

Technology Solution Statement:

Deliver integrated digital engineering and sustainment solutions that connect fragmented maintenance, inspection, engineering, and operational data into a unified digital environment. SwRI's capabilities include corrosion tracking and mapping, reverse engineering, predictive maintenance enablement, digital inspection workflows, advanced analytics, and systems integration designed to improve asset visibility, engineering traceability, proactive maintenance planning, and lifecycle decision-making across aging and complex platforms.

Benefits Statement:

Southwest Research Institute (SwRI) helps organizations improve readiness, reduce lifecycle cost, and enhance long-term asset reliability through integrated digital engineering, sustainment modernization, corrosion management, nondestructive evaluation (NDE), reverse engineering, and predictive maintenance enablement. By combining multidisciplinary engineering expertise with advanced analytics and digital workflows, SwRI enables improved fleet visibility, proactive maintenance planning, enhanced engineering traceability, and more informed sustainment decision-making across aging and complex systems.

Systecon North America

Focus Area: CBM+/Predictive Maintenance

Contact

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Systecon North America is a leader in life cycle management and predictive analytics, delivering advanced decision-support solutions that optimize performance, availability, and resource utilization across defense and federal aviation platforms. With proven deployments supporting the U.S. Navy, USMC, and OSD, Systecon brings deep expertise in sustainment modeling to organizations managing complex, multiple type-model-series aviation logistics environments — exactly the mission ALC Elizabeth City executes every day as the Coast Guard's sole industrial aviation complex.

OPUS Suite

Problem Statement:

The Coast Guard ALC faces mounting pressure to modernize sustainment operations across multiple aviation product lines — from MRR and SRR platforms to Long Range Surveillance and Medium Range aircraft — while managing aging supply chains, unpredictable induction schedules, parts availability gaps, and increasing demand for lifecycle forecasting and make/buy/repair decision support. Traditional planning tools fall short when modeling capacity constraints, anticipating readiness impacts, or running scenario-based analyses across the full fleet lifecycle. Without integrated predictive analytics, ALC risks a reactive sustainment posture that undermines mission readiness during a period of unprecedented Coast Guard investment and modernization.

Technology Solution Statement:

The Opus Suite by Systecon is a comprehensive lifecycle management and decision-support platform purpose-built for these challenges. Its integrated tools — OPUS10, SIMLOX, and CATLOC — deliver fast, accurate analyses across system requirements, logistics support design, supply chain optimization, and investment planning. Opus Suite enables ALC to run "What if" scenario drills across capacity constraints, model the impact of induction schedule changes, and simulate readiness outcomes before committing resources. Directly aligned with ALC's desired capabilities in lifecycle management, logistics forecasting, business IT and analytics, reliability improvement, and predictive supply chain and obsolescence management, Opus Suite is an actionable, deployable solution for stakeholders across ISD, MRR, SRR, and BOD.

Benefits Statement:

Deploying Opus Suite and executing the use of the current license gives ALC measurable improvements in logistics forecasting accuracy, parts availability planning, and sustainment cost control across its aviation product lines. The platform supports proactive make/buy/repair decisions, reduces unplanned downtime, and strengthens supply chain resiliency — critical outcomes as ALC scales to meet expanded Coast Guard readiness requirements. With advanced simulation and analytics embedded in the daily workflow, ALC personnel gain the confidence to make decisions that optimize both near-term operations and long-range sustainment investments.

VLinc Corporation

Focus Area: CBM+/Predictive Maintenance

Contact

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VLinc Corporation is a Service-Disabled Veteran-Owned Small Business (SDVOSB) providing aviation sustainment engineering and Integrated Logistics Support (ILS) services for the Department of War and the Department of Homeland Security. VLinc's leadership has direct Coast Guard aviation engineering heritage: our President & CEO served 21 years on active duty as a USCG aviation engineering officer, including assignments as Fleet Engineer for the H-65 fleet at the Aviation Logistics Center and Director of Engineering at Air Station Borinquen.

Continuous Sustainment Intelligence (CSI): An Integrated Predictive Sustainment Architecture for Coast Guard Aviation

Problem Statement:

Coast Guard aviation sustainment — like all complex defense aviation sustainment — runs largely reactively despite the operational and depot data available to make it predictive. The six analytically intensive ILS disciplines (Reliability and Maintainability, Level of Repair Analysis, Provisioning, Maintenance Task Analysis, Configuration Change Impact Analysis, Supportability) are typically executed as separate studies on separate schedules, producing reports that are filed rather than driving continuous engineering decisions.

Technology Solution Statement:

Continuous Sustainment Intelligence (CSI) is a closed-loop sustainment intelligence architecture that integrates structured operational and depot data, continuous engineering analysis across the six analytically intensive ILS disciplines, and scoped analytical capabilities including AI, machine learning, and digital twin applications. CSI converts aviation operational data into integrated engineering intelligence and field-actionable guidance, delivered to maintainers and depot engineers on operational timescales rather than as periodic studies.

Benefits Statement:

For the U.S. Coast Guard Aviation Logistics Center and similar aviation sustainment enterprises, CSI delivers: (1) reduction of the 20–40% reactive sustainment cost burden through earlier failure prediction and integrated change impact analysis; (2) higher mission availability through predictive maintenance grounded in actual fleet operating conditions rather than design-stage assumptions; (3) faster, more defensible configuration change decisions across the full ILS spectrum; (4) more accurate provisioning and supply chain decisions across inventories at the scale of the $1.5B+ ALC parts inventory; (5) force-multiplier effect on existing engineering staff; (6) compatibility with existing ALC information systems and standard DoW and DHS data architectures; (7) institutional knowledge transfer through an integrated operator and engineer training curriculum. The architecture serves both manned and unmanned Coast Guard aviation portfolios.

3M

Focus Area: Coating and Corrosion Prevention

Contact

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3M is a science driven technology company delivering advanced, mission ready solutions that support the United States Government, national security, and defense communities. With a strong commitment to domestic manufacturing, 3M produces critical materials and technologies across U.S.-based facilities to enhance supply chain resilience and operational readiness. The company's portfolio includes high performance surface protection systems, leading bonding and assembly technologies, advanced materials, warfighter safety and communications technologies, electronics solutions, and data enabling components essential for defense platforms and secure infrastructure.

3M Materials and Technology for Corrosion protection, bonding and assembly

Problem Statement:

Government and defense agencies face increasing pressure to strengthen national security while operating in a rapidly evolving threat environment. They require dependable, domestically manufactured technologies that can be deployed quickly, perform reliably in demanding conditions, and meet strict compliance and mission requirements. Many existing solutions rely on complex or vulnerable supply chains, creating risks to readiness, availability, and long-term sustainment.

Technology Solution Statement:

3M provides a technology-driven solution built on advanced materials science, engineered products, and U.S. manufacturing capabilities to help government and defense customers address mission-critical challenges. By combining domestically produced technologies with scalable production, proven performance, and application expertise, 3M delivers solutions that support protection, sustainment, operational efficiency, and infrastructure resilience.

Benefits Statement:

By leveraging U.S.-based manufacturing, advanced science, and proven engineering expertise, 3M delivers reliable, mission critical technologies that enhance performance, readiness, and security for the U.S. Government and defense sectors. Customers benefit from resilient domestic supply chains, rapid production scalability, and solutions designed to meet stringent government and national security requirements. 3M's broad portfolio of surface protection systems, communication technologies, leading bonding and assembly technologies, advanced materials, and technology-enabling components helps improve operational efficiency, reduce risk, and support the successful execution of defense and homeland security missions.

Adapt Laser

For over 20 years, we've been providing state-of-the-art laser cleaning systems to government agencies and customers with high-quality cleaning needs, such as the nuclear, military & defense, welding, automotive, infrastructure, and aerospace industries.

Our technology ranges from 20 to 1,600 watts of laser power to ensure we can provide services to a large scope of clients, including those who need to remove dangerous coatings and nuclear radiation without damaging the product in any way.

We deliver complete and high-end solutions, clean products with no damage, have the highest quality cleaning possible, and enable time, quality, and cost benefits.

Our laser cleaning units can be either handheld or automated, ensuring that we can offer you the best cleaning strategy for your specific application needs. Paired with our top-notch air filtration systems, our lasers safely remove contaminants and capture them at the source where they can be easily disposed of.

Focus Area: Coating and Corrosion Prevention

Contact

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Laser Ablation

NATIONAL CENTER FOR MANUFACTURING SCIENCES

Adapt Laser Systems
Laser Ablation

NCMS Technology Showcase
Pearl Harbor Naval Shipyard

PROBLEM STATEMENT

Traditional methods of surface preparation and coating removal use abrasives and media that harm the environment, pose a health & safety risk to the operator and surrounding workers, and can cause irreversible damage to the substrate.

BENEFITS

Laser ablation technology is fast and efficient and creates no waste and requires no secondary cleanup. It can be handheld or integrated into an existing or new automated process. The only PPE required are laser safety glasses and it's easy to train new operators how to use the lasers. Overall, this technology is better for the environment and operators than traditional blasting methods or using chemicals and doesn't do any damage to the substrate.

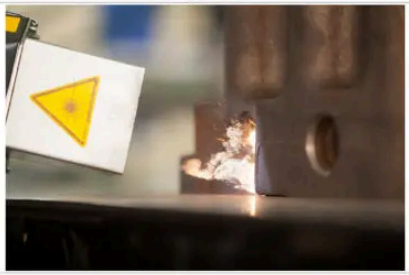
TECHNOLOGY SOLUTION

Laser ablation uses thousands of pulses of light per second to selectively remove coatings without damaging the substrate.

With handheld and automated options available the lasers range in power from 100W all the way up to 1,600W to fit application needs.

A fume extraction system captures contaminants at the source and requires no secondary cleanup.

GRAPHIC



Best-Tec

Focus Area: Coating and Corrosion Prevention

Contact

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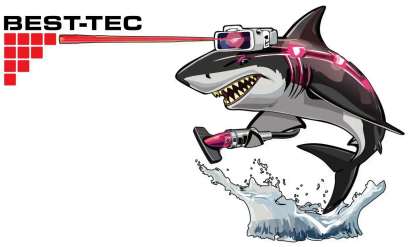
561-719-8012

Best-Tec is redefining the future of surface preparation and corrosion control through the integration of advanced technologies that eliminate the limitations of traditional methods. With over 39 years of experience in environmental contracting, Best-Tec has developed and deployed innovative solutions that significantly reduce hazardous waste, improve worker safety, and increase operational efficiency across industrial, maritime, and infrastructure applications.

Field deployments across shipyards, power generation facilities, and transportation infrastructure have demonstrated substantial reductions in labor requirements, project durations, and total lifecycle costs.

ICRALA (Induction Coating Removal and Laser Ablation)

Problem Statement:



Corrosion poses a significant threat to critical military and industrial infrastructure, leading to operational downtime, safety risks, and costly emergency repairs. Traditional maintenance methods are often reactive, inefficient, and environmentally hazardous, further delaying necessary interventions and exacerbating asset degradation.

Technology Solution Statement:

Best-Tec's ICRALA (Induction Coating Removal and Laser Ablation) process revolutionizes corrosion control by combining precision laser ablation with efficient induction coating removal. This hybrid system targets only corroded areas, preserving intact coatings, minimizing waste, and eliminating the need for harsh chemicals. The ICRALA process ensures faster, safer, and more environmentally friendly maintenance, extending the lifespan of assets while maintaining operational readiness.

Benefits Statement:

- Enhanced Efficiency: Reduces project time by focusing on localized corrosion removal without disrupting surrounding operations.
- Eco-Friendly Approach: Eliminates secondary waste and avoids the use of harmful chemicals, ensuring compliance with environmental regulations.
- Cost Savings: Minimizes labor, equipment, and material costs compared to traditional methods.
- Operational Continuity: Enables maintenance without full shutdowns, ensuring uninterrupted functionality of critical infrastructure.
- Long-Term Asset Protection: Extends the service life of assets by addressing corrosion at its source and preventing future damage.

BlastOne International

Focus Area: Coating and Corrosion Prevention

Contact

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Originally established nearly 50 years ago to provide technical consulting, BlastOne has grown to become a single source supplier of blasting equipment, abrasives and know-how to customers all over the world. BlastOne operates internationally from several offices across Australia, New Zealand, North America and Europe. We stand behind our brand claim of superior performance. It's something we define as 'Performance3'—the result of combining superior know-how with superior abrasives and superior equipment. In short, it delivers greater cost-efficiencies for our customers.

Blast & Coating Equipment

Problem Statement:

The blasting and finishing industry faces critical challenges, including manpower shortages, downtime from faulty equipment, environmental and dust concerns, and significant operator safety and health risks. Facilities are expected to deliver more productivity, cost efficiency, and safety, yet struggle with inconsistent performance and equipment reliability.

Technology Solution Statement:

BlastOne's Velocity™ System is a game-changing advancement that integrates seamlessly into high-pressure production environments. It is engineered to alleviate short-term blast and coat bottlenecks by combining cutting-edge technologies like Intelliblast Blast Pot Controls, Snakebite Blasting Nozzles, and Vortex Airflow Movement. Together these components act as a force multiplier, delivering exponential gains in productivity, reliability, and environmental safety while addressing the industry's most pressing challenges.

Benefits Statement:

BlastOne's integrated solutions, including the innovative Velocity™ System, provide significant benefits by streamlining the blast and paint portion of production. This targeted approach reduces manual labor and enhances throughput in these critical processes. Proactive maintenance via BlastShield™ packages ensures reliable performance and minimizes downtime. Additionally, our solutions improve environmental outcomes and operator safety while supporting facilities in achieving their productivity and cost-efficiency goals.

Elzly Technology Corporation

Focus Area: Coating and Corrosion Prevention

Contact

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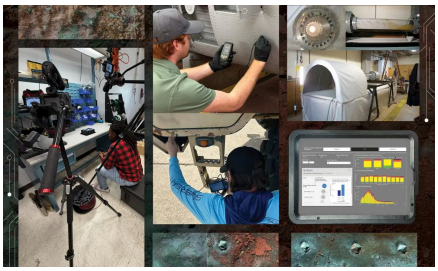
Elzly Technology Corporation (Elzly), a KTA-Tator Company, is an engineering firm dedicated to solving unique and challenging coatings and corrosion issues for our customers. Since the 1980s, our founders and key staff members have worked with various agencies of the Department of War (DoW) as well as Federal, State, and Municipal government organizations and private industry to identify, evaluate, and transition novel solutions to their unique problems. Elzly's role is that of an implementation enabler for our customers where we support fundamental thorough applied research, perform engineering studies of production operations, provide on-site training to maintainers and artisans, and assist in the development of business case analyses supporting leadership in selecting the optimum solution for their operations.

Engineering Approaches to Support Implementation of Coating and Corrosion Solutions

Problem Statement:



Corrosion is a problem facing assets across our nation. In our modern world, aircraft, ships, vehicles, and infrastructure use materials that will eventually revert to their original form. As budgets are reduced and assets age, services need to do more with less, making implementing effective corrosion prevention methods more critical than even.

Technology Solution Statement:

Elzly's engineering approach to coating and corrosion issues includes:

- FIELD DATA COLLECTION – performed using in-house software to collect data that support one-off and long-term monitoring projects.
- CUSTOM TEST APPARATUS – simulates hardware, environments, maintenance, etc. providing a holistic evaluation of the issue.
- DASHBOARDS AND DATA ANALYSIS TOOLS – provides insight into data for leadership decisions and to identify emerging trends for additional focus.
- VIDEO AND ONLINE LEARNING – supporting how workforces learn today using shorter, focused online resources for training and knowledge reinforcement.

Benefits Statement:

Elzly provides independent expertise aligned to the goals of our customers – identifying solutions that fit their business case. Without a vested interest in a specific technology, we consider all approaches equally considering performance and fiscal requirements. Our senior staff has decades of knowledge and capabilities enabling them to identify solutions and ideas from a multitude of sources. Elzly is a "connector" between organizations and industries finding the best approach to solve a customer's unique coating or corrosion challenge.

Grey Gecko, LLC

Focus Area: Coating and Corrosion Prevention

Contact

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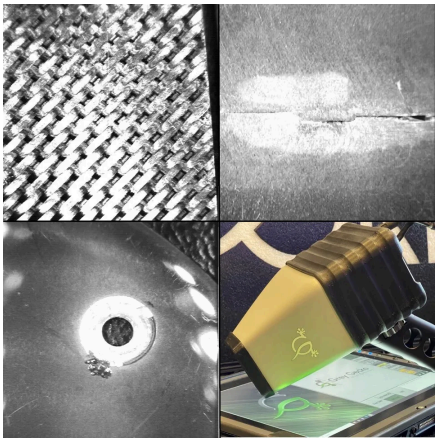
The Grey Gecko Real-Time Inspection Tool (GRIT) 125v2.50 is a patented corrosion detection device that optimizes Non-Destructive Inspections and offers a “first look and early find” capability, saving time and money. Developed and refined with feedback from the U.S. Coast Guard, Navy, Army, and Lockheed Martin, the deployable, lightweight, battery-operated device sees-through paint to the substrate. The GRIT can reduce aircraft downtime by 25% and inspection labor by 50% on commercial, strategic airlift, executive transport, aerial refuelers, C2ISR platforms, and 3rd/4th generation tactical and rotary-wing aircraft.

Grey Gecko Real-Time Inspection Tool (GRIT)

Problem Statement:

Aircraft corrosion costs the DOD $20 billion annually while simultaneously performing critical airframe life extension programs to meet increasing national security requirements. Current NDI inspections are labor intensive, non-targeted, and inconsistent, relying heavily on the technician’s availability and tradecraft. The DOD needs a cost-effective, deployable, intuitive, and consistent inspection device.



Technology Solution Statement:

The GRIT system is a deployable corrosion inspection device that offers live imaging through aircraft coatings to the substrate at a depth of 20mils. It is a field-proven, commercially available device that streamlines existing inspection processes by directing technicians to specific areas of concern. It is equally effective on all materials and works globally at temps between 0-120°F, the GRIT's design and features have been optimized through continuous maintainer and program manager feedback.

Benefits Statement:

The GRIT offers a fast ROI through labor, inspection and mitigation savings. With an ROI of five months at the intermediate level and two months at the MRO level, the GRIT optimizes technicians' "time-on-job," saving a minimum of 50% in labor. Additionally, the GRIT provides early corrosion detection and reporting, enabling fleet managers to proactively address maintenance needs, ensuring operational readiness and fleet resiliency.

Horizon Industries

Focus Area: Coating and Corrosion Prevention

Contact

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Horizon Industries, a division of East Texas Lighthouse for the Blind, is a leading U.S. supplier of industrial wiping solutions and Mil-Spec paracord to federal and military customers. Our BZ line features AMS3819-qualified, low-lint, non-abrasive wipes engineered for precision cleaning across sensitive surfaces—including optics, coatings, and aircraft transparencies. Designed to outperform traditional cellulose-based materials, BZ wipes deliver consistent, residue-free results while reducing solvent use, VOC emissions, and hazardous waste.

Horizon Industries & M2 Innovations

Problem Statement:

- Legacy cellulose-based materials such as shop towels, cheesecloth, and wood-pulp wipes (e.g., WypAll, Scott) shed fibers, scratch sensitive surfaces, and leave residues that degrade coatings, optics, and aircraft transparencies.
- These materials retain excessive solvent, increasing VOC emissions, HAZMAT burden, and wastewater impacts.
- Open-container solvent use creates safety, spill-control, and exposure challenges.
- Coast Guard aviation and depot units lack a standardized, AMS3819-qualified cleaning material aligned with aviation and shipboard technical data.

Technology Solution Statement:

- AMS3819-qualified, low-lint, non-abrasive technical wipes engineered for consistent, residue-free cleaning across metals, composites, acrylic, and polycarbonate.
- Independently tested to AMS3819D and separately authorized by NAVAIR for transparency-safe cleaning.
- Available in dry, sealed pre-saturated sachets and wipe-streaming buckets to reduce solvent exposure, VOCs, and spills.
- Provides uniform solvent release, improved contamination control, and compatibility with Coast Guard aviation, shipboard aviation facilities, and depot-level maintenance workflows.

Benefits Statement:

- Reduces solvent usage through efficient release compared to cellulose-based materials.
- Lowers VOC emissions and hazardous waste via sealed dispensing and controlled saturation.
- Prevents scratching, haze, and residue on transparencies, optics, sensors, and coated surfaces.
- Improves maintenance quality and reduces rework through consistent AMS3819-qualified performance.
- Enhances safety by minimizing solvent handling, spills, and exposure.
- Supports cross-Service standardization and aligns with existing aviation technical manuals.

Luna Labs

Focus Area: Coating and Corrosion Prevention

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Luna Labs USA solves complex technical challenges and translates innovation into real-world impact. The company works with government agencies, defense organizations, and commercial customers to develop high-performance products at the intersection of materials science, systems engineering, and biotechnology.

Guided by a vision to advance healthcare, safeguard the environment, and protect critical infrastructure and personnel, Luna Labs focuses on advanced materials and surface protection, corrosion monitoring and asset integrity, biomedical technologies, and human performance systems. The company brings the agility of a small business and the capabilities of a larger organization to engineer, test, and deploy solutions that perform in customers' most demanding environments.

Acuity Corrosion Monitoring

Problem Statement:

- Operational and safety risks: Corrosion threatens the readiness and safety of aircraft, vessels, infrastructure, and equipment.
- Variable corrosion in moving assets: Ships and aircraft experience corrosion accumulation based on usage, making consistent monitoring essential.
- Need for quantifiable data: Condition-based maintenance requires reliable, measurable corrosion data for both bare and coated alloys.

Technology Solution Statement:

- Continuous corrosion monitoring: Acuity provides real-time corrosion measurements to inform health monitoring and condition-based maintenance systems, enabling timely interventions and reducing asset downtime.
- Asset-specific and fleet-level insights: Onboard monitoring allows for targeted maintenance at the asset level and prioritization across the fleet, improving overall maintenance efficiency.

Benefits Statement:

Maintenance

- Data-driven maintenance: Condition-based maintenance powered by continuous corrosion monitoring data.
- Early detection and cost savings: Continuous monitoring enables early issue detection, reducing maintenance costs.

Materials Selection

- Faster corrosion assessment: Differentiates corrosion behavior of alloys or coatings 10x [44] faster than traditional exposure methods.

Marine Shield Corrosion Control

Focus Area: Coating and Corrosion Prevention

Contact

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Marine Shield Corrosion Control is a veteran-owned corrosion prevention and surface preservation company focused on protecting marine, industrial, and commercial assets from rust, environmental degradation, and structural wear. Founded on military precision, operational discipline, and hands-on maintenance expertise, Marine Shield delivers reliable corrosion mitigation solutions designed to extend asset life, improve safety, and reduce long-term maintenance costs.

Rayco Services

Problem Statement:

Corrosion and environmental degradation continue to threaten the safety, reliability, and operational readiness of marine, industrial, and commercial assets. Constant exposure to saltwater, humidity, UV radiation, and harsh environmental conditions accelerates rust formation and structural deterioration, resulting in costly repairs, reduced equipment lifespan, operational downtime, and increased safety risks.

Technology Solution Statement:

Marine Shield Corrosion Control provides proactive corrosion prevention, surface preservation, and protective coating solutions designed to safeguard marine, industrial, and commercial assets operating in harsh environmental conditions.

Benefits Statement:

Marine Shield Corrosion control delivers cost-effective preservation solutions that help organizations protect valuable assets, reduce maintenance expenses, and improve long term operational performance.

MILSPRAY

Focus Area: Coating and Corrosion Prevention

Contact

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Established in 2003, MILSPRAY® provides products, systems and services to the Department of Defense (DOD) and Government agencies that extend the useful life of vehicles, aircraft, ships, weapons and equipment.

MILSPRAY offers a proven record of performance with highly trained, skilled, and certified corrosion repair personnel, deployable vehicle and equipment wash systems, Chemical Agent Resistant Coating (CARC) systems, specialty coatings, and mil-spec touch-up paint systems.

Mobile Corrosion Repair Facility

Problem Statement:

Transportation to and from maintenance depots is costly.

Technology Solution Statement:

Our Mobile Corrosion Repair Facility (MCRF) eliminates transportation costs associated with corrosion repair. Units maintain control of their equipment throughout the entire repair process.

Benefits Statement:

The cost to send support equipment back to depots for corrosion repair is costly. Our Mobile Corrosion Repair Facility (MCRF) can be set-up on site and intermediate maintenance can be performed without incurring transportation costs.

Shape Waterblast Group

The SWG (Shape Waterblast Group) combines premier waterblasting companies under the Shape Technologies Group, the global leader in ultrahigh-pressure technology solutions. Unifying APS, Aqua-Dyne, RPS, and Flow SP under a single umbrella empowers us to harness over 125 years of collective wealth of expertise, resources, and innovation. This enables us to provide an even more robust and comprehensive solution at an unparalleled value to our customer's needs.

Focus Area: Coating and Corrosion Prevention

Contact

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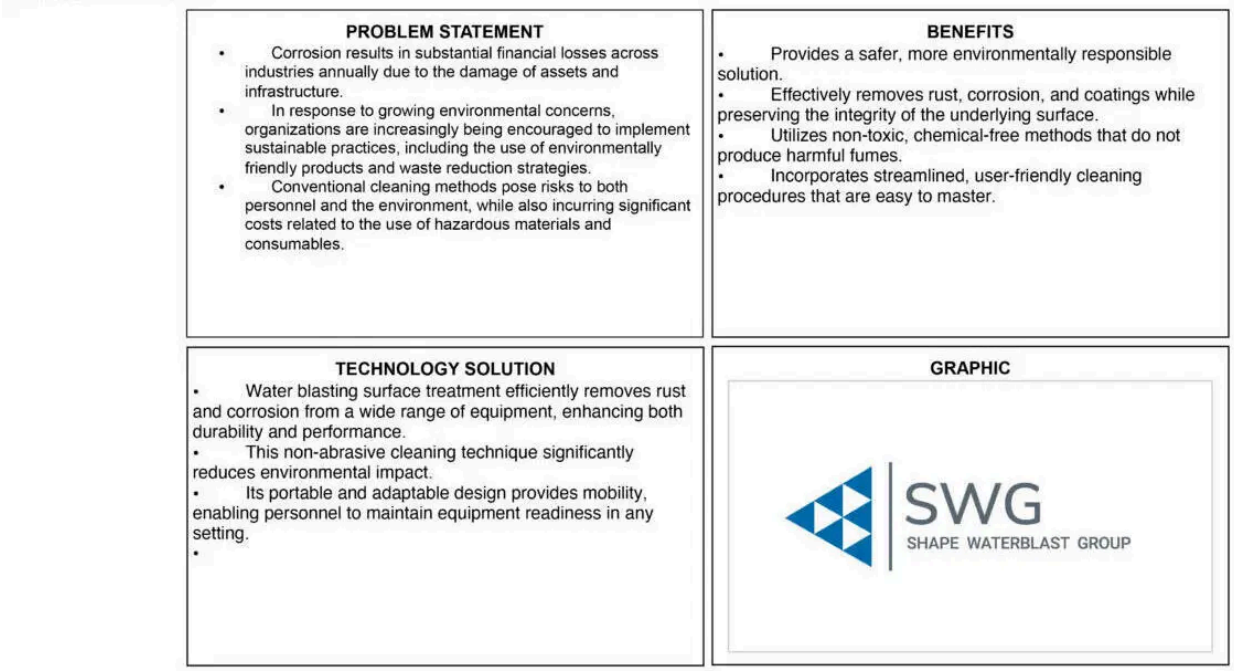
Ultra High Waterblasting Equipment



Sunrez

Focus Area: Coating and Corrosion Prevention

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Sunrez Corp, founded in 1986, specializes in the formulation and application of ultraviolet (UV) cure composite materials. These single component systems- available as resins, putties, or pre-impregnated fiberglass repair patches- remain workable indefinitely and cure only upon exposure to UV light. This enables easy handling across a wide range of temperatures, humidity levels, and field conditions, followed by rapid, on-demand curing.

Sunrez Corp has focused on infrastructure rehabilitation efforts and has led the way in UV cure resin systems in both Cure-In-Place-Pipe (CIPP) and the Wind energy sector. Sunrez has increasingly applied its knowledge of composite materials, coatings, and fabrication technologies to programs in support of the US military that range from increased weather resistance, lightweight armoring materials and down-range. Our formulations are no VOC, no HAP and non-flammable for improved worker safety, easy shipping and reduced emissions.

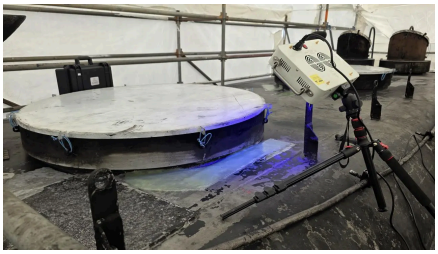
NAVSEA has evaluated Sunrez UV cure materials and issued drawing NAVSEA 630-9014545 “Repair Patch Composite Ultra-Violet Cured, Installation and Details” to guide proper handling and installation under the Phase 1 drawing package. Additional drawing packages and expanded use cases are expected to be released soon.

Sunrez materials provide end users with a versatile solution for repairing corrosion, cosmetic damage, cracks, sealing, pipe wrap, bulkhead repair, and more. They bond effectively to a wide range of substrates including aluminum, steel, copper-nickel, composites, and some plastics.

UV Cure Fiberglass Prepregs

Problem Statement:

Coast guard assets experience damage and corrosion and fast, straightforward repairs not requiring hot work and corrosion protection are needed



Technology Solution Statement:

Coast guard assets experience damage and corrosion and fast, straightforward repairs not requiring hot work and corrosion protection are needed

Benefits Statement:

Fastest, simple method for repair and protection of damaged steel, aluminum and composite structures

VSM Group, LLC

Focus Area: Coating and Corrosion Prevention

Contact

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VSM Group, LLC is a veteran-owned small business (VOSB) that has fought corrosion for the federal government since 2018. We are the U.S. provider and applicator of VSMPS with Oxifree, a thermoplastic encapsulation system already proven across the U.S. Navy fleet, the oil and gas sector, energy, and shipbuilding. Our team brings more than 30 years of combined experience in supply chain, HSE services, training, and project management, with a single mission: stop corrosion before it scraps an asset.

VSMPS with Oxifree TM198; Removable, Long-Term Corrosion Protection for Stored Aviation Components and Airfield Lighting

Problem Statement:

The Aviation Logistics Center operates in a coastal, high-salt environment that drives galvanic and atmospheric corrosion year-round. Two pain points stand out.

Spare and rotable components, including connectors, fittings, valves, bearing housings, and subassemblies, corrode while sitting in depot storage and during shipment. Parts are downgraded or scrapped before they are ever installed, which wastes procurement dollars, lengthens lead times, and drives avoidable aircraft-on-ground (AOG) events.

Technology Solution Statement:

VSMPS with Oxifree is a thermoplastic encapsulation system that seals a component in a single application. A solid, organic resin is melted in our portable unit and applied through a heated gun, flowing around complex geometry to form a pliable barrier loaded with corrosion-inhibiting oils. It eliminates moisture, blocks salt, and dust ingress and protects against galvanic pitting and atmospheric corrosion for up to 10 years. The coating needs minimal surface prep, applies in humid conditions, and requires no shutdown or curing oven. The coating peels away for inspection or NDT and then reapplies, and excess material is remelted and reused, so waste is virtually eliminated.

Benefits Statement:

Extends the storage and service life of spare components and airfield assets, cutting scrap, reorders, and AOG risk.

- Up to 10 years of protection from a single application lowers lifecycle cost and frees maintenance labor.
- Removable and reusable: parts can be inspected or NDT'd, then re-encapsulated, and material is remelted and reused so waste is near zero.

StoneAge, Inc.

StoneAge is an engineering and manufacturing center for high pressure waterblast tools used for industrial cleaning. Our primary focus is to introduce fully automated tooling to remove operators from the dangers of high-pressure water. StoneAge recently acquired Terydon who specializes in heat exchangers and condensers.

Focus Area: Energy, Environmental, Health, and Safety

Contact

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Automated and Portable Waterjet System

NATIONAL CENTER FOR MANUFACTURING SCIENCES

StoneAge, Inc.
Automated and Portable Waterjet Systems

NCMS Technology Showcase:
Pearl Harbor Naval Shipyard

PROBLEM STATEMENT

-Corrosion and coating removal methods can be lengthy

-Processes used can pose a significant safety risk to personnel and equipment

-Removal of corrosion/coatings without affecting the substrate can be challenging

-Surfaces can flash rust after coating removal and before inspection leading to delays

BENEFITS

-Rapidly remove corrosion and coatings

-Significantly reduce safety risks and resource hours

-Coating application immediately follows removal and inspection

-Prevent flash rust from developing prior to inspection or coating application

TECHNOLOGY SOLUTION

-Waterjet/waterblast equipment is highly effective in removing corrosion and coatings

-Automated waterjet/waterblast solutions are developed and deployed

-Removal of coatings without affecting the substrate, restoring the surface to its original profile

-Rust inhibitor can safely be added to the supply water

GRAPHIC

ARCS Aviation

Focus Area: Enhanced Inspection

Contact

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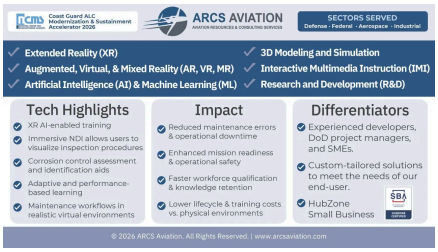
ARCS Aviation develops advanced immersive training and operational technologies designed to improve mission readiness, workforce performance, and decision-making across defense, aerospace, and industrial environments. The company specializes in Extended Reality (VR/AR/MR), Artificial Intelligence and Machine Learning, eLearning technologies, high-fidelity 3D modeling and simulation, Non-Destructive Inspection (NDI), corrosion assessment support, and technical data modernization to create tailored digital solutions for complex operational challenges.

ARCS Aviation's technologies offer significant transition potential across Department of Defense, federal, aerospace, aviation maintenance, shipbuilding, and industrial sectors seeking to modernize sustainment and readiness operations. The company's solutions are designed to reduce lifecycle costs, improve operational safety, strengthen maintenance readiness, and support the next generation of intelligent immersive maintenance and training systems.

NDI/Corrosion/XR/AI

Problem Statement:



Current training, maintenance, and inspection systems across defense and industrial sectors rely heavily on static technical manuals, legacy processes, and costly physical training environments that limit scalability, efficiency, and workforce readiness. Personnel often face challenges in understanding complex procedures, performing consistent Non-Destructive Inspection (NDI), identifying corrosion-related issues, and accessing accurate technical data in operational environments.

Technology Solution Statement:

ARCS Aviation delivers an integrated XR and AI-enabled technology platform that combines Virtual Reality (VR), Augmented Reality (AR), Mixed Reality (MR), machine learning, interactive technical data, and high-fidelity 3D simulation to modernize training, maintenance, and inspection operations. The solution supports immersive Non-Destructive Inspection (NDI), corrosion assessment workflows, adaptive learning, and digital maintenance procedures within realistic operational environments.

Benefits Statement:

ARCS Aviation's XR, AI-enabled training, NDI, corrosion assessment, and technical data solutions improve mission readiness, workforce performance, and maintenance effectiveness across defense and industrial environments. The technology enhances procedural accuracy, accelerates training, and reduces operational downtime through immersive, data-driven learning and maintenance support tools.

FLX Solutions

Focus Area: Enhanced Inspection

Contact

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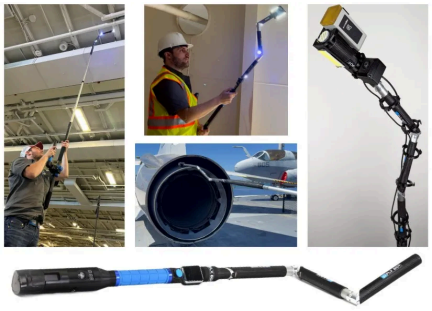
FLX Solutions develops advanced robotic systems that enhance mission readiness and safety by minimizing maintenance disruptions across defense operations with expanding applications in industrial, transit, and construction sectors.

The FLX BOT is a compact, articulating snake-like robot that transforms inspection and maintenance for defense and industrial environments. It is 1″ in diameter and can navigate confined or hazardous spaces on ships, bases, and aircraft. Operated by a single technician via handheld control or extension pole, it reduces labor and improves safety.

FLX BOT: Intelligent Robot for Tight Space Inspections & Maintenance

Problem Statement:



Maintenance and DOD technicians face major challenges inspecting and sustaining critical equipment on aircraft, ships, and remote bases. Many areas are confined, hidden, or too dangerous to access safely. Tight turnaround times and unsafe conditions increase risk. Current methods rely on costly teardowns and hazardous scaffolding. There is a need for high-resolution inspection tools that access hard-to-reach spaces efficiently.

Technology Solution Statement:

The FLX BOT is a handheld, snake-like robot that navigates confined spaces in aircraft, ships, and bases with minimal training. Its slim, modular design uses interchangeable links with cameras and sensors for autonomous movement. Swappable end effectors—360°, 3D, thermal cameras, NDT tools, grippers, and more—enable diverse maintenance tasks. Lighter, smaller, and more flexible than robots costing 10x more, it fits in a briefcase. Programs are underway across defense, transit, and industry.

Benefits Statement:

FLX BOT improves inspection quality while reducing maintenance damage, injuries, and costs. Navy pilots showed 90% savings in time and expense for hard-to-reach areas. It decreases downtime through efficient preventative maintenance and faster recovery. Technicians stay safely on the ground when inspecting elevated spaces. The robot collects sensor data for predictive maintenance and documentation—even at the front lines. With strong ROI and lower QA/QC costs, FLX BOT enhances safety, speed, and operational readiness.

LoneStar NDE Innovations

Focus Area: Enhanced Inspection

Contact

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719-209-2671

At LoneStar NDE Innovations, we blend cutting-edge software and hardware to redefine the future of inspection technology. Our story is rooted in a commitment to simplify complexity—providing CAD-free inspection path planning that allows for seamless operations. With minimal setup and no required part specific programming, we've made efficiency our hallmark. Our collaborative robotic (Cobot) inspections are designed to complement human expertise, ensuring that every endeavor is not only productive but also intuitive. LoneStar NDE Innovations offers a variety of products from portable handheld units to scalable robotic systems. We also work on custom solutions specific to our customers. Our products are designed to support the inspection of components through their entire lifecycle, from development to in-service. We serve a variety of industries from aerospace (i.e., aircraft, rotorcraft, launch vehicles) to renewables (i.e., wind energy), and everything in-between.

Cobot Inspection Tool

Problem Statement:

- Difficult interpretation of traditional A-scan data. Wrong decisions can be made. Significant time required for A-scanning of structure.
- Time intensive engineering decisions based on A-scan inspection. Disposition of anomaly is a significant challenge.
- Technician fatigue during inspection, because it is all manual scanning.
- Lack of drawings/CAD for legacy platforms, make automating inspection very difficult. Often require high cost, non-movable, and non-versatile systems.

Technology Solution Statement:

The LSDNE collaborative robot inspection tool (Orion) is rapidly deployable (< 10min set up), fast (up to 40 in/sec), and provides intuitive results (3D C-scans for rapid decision making). Using a 3D depth camera, novel path planning software, and novel sensor end effectors make the setup, process of inspecting. and disposition streamlined. Data is archived in open data HDF5 format that can be analyzed using the LSNDE or with custom algorithms that the user may already have.

Benefits Statement:

- Up to 40in/sec scan speed
- Less than 10min setup time
- No inspector fatigue, because the process is automated.
- Up to 5 times faster decision making

ReLogic 3D

Focus Area: Enhanced Inspection

Contact

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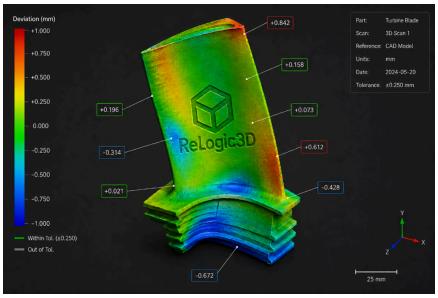
ReLogic3D is a U.S.-based provider of advanced 3D scanning, metrology, and digital engineering solutions focused on helping manufacturers improve inspection accuracy, reverse engineering, and production efficiency. As the exclusive United States distributor for SmartTech3D systems, ReLogic3D delivers metrology-grade optical measurement technology capable of capturing highly accurate, high-resolution scan data for industrial applications. ReLogic3D develops both off-the-shelf and fully customized metrology solutions tailored to each customer's specific requirements. Rather than taking a one-size-fits-all approach, our company works closely with customers to deliver systems and workflows designed around the unique technical, automation, and inspection needs of each project.

Automated 3D Scanning and Inspection Solutions

Problem Statement:

Automated 3D scanning solutions with VDI/VDE 2634 part 3 certifications are often very expensive and are not customizable.



Technology Solution Statement:

Our company specializes in automated and robotic inspection systems, portable and fixed 3D scanning solutions, reverse engineering workflows, and quality control integration for industries including aerospace, automotive, energy, research, and advanced manufacturing. By combining precision hardware with powerful software and automation capabilities, ReLogic3D enables organizations to streamline workflows from prototype development through production validation and inspection.

Benefits Statement:

Traditional inspection methods are no longer enough to keep up with modern manufacturing demands. With advanced 3D scanning, you can capture complete part geometry in minutes—not hours—while gaining deeper insight into quality and performance.

Here are some of our benefits:

- Certified Metrology-Grade Accuracy
- Cost Efficiency and Customization Without Compromise
- Seamless Integration
- Proven Performance
- Compact, Flexible Deployment
- Best-in-Class Resolution
- Ease of Use
- Lower Cost of Ownership
- U.S.-Based Expertise & Support

TurnAround Factor

Focus Area: Enhanced Inspection

Contact

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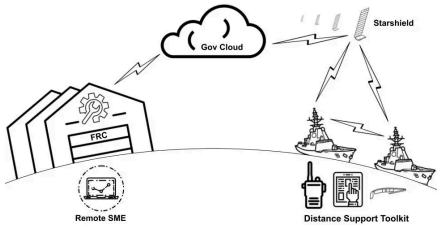
804-404-6756

TurnAround Factor (TAF) is a small business based in Richmond, Virginia that provides engineering consulting and R&D services. We are experts at developing new ideas and creating prototypes that can be tested with the user and ultimately transitioned to the field. We have an extensive team of engineers and developers that support a variety of Federal customers. Our team is evenly split between developers, electrical engineers, and mechanical engineers, allowing us to bring an effective multidisciplinary approach to produce complex systems. Over 80% of our staff are engineers or developers including most of our senior leadership. Our multidisciplinary team allows us to effectively deliver technologies from the lab to the field. We strive to provide robust, practical solutions that can withstand the realities of field operations. TAF also provides manufacturing support services for low-rate initial production and specialized parts at our assembly facility in Ashland, VA.

SME Connect

Problem Statement:

Many battle damage assessments, repair, and maintenance functions require depot maintenance or fly-away teams that might not be possible to provide when a near-peer adversary is denying access to the area that needs the repairs.



Technology Solution Statement:

SME Connect is an all-in-one solution that allows on-site users to interact with remote experts in an AR environment. The system provides remote access to specialized tools and diagnostics by the remote expert(s) while in use by the on-site user. Tasks can be assigned and triaged, documents and workflows are shared, and the flexible framework for the system will greatly speed adoption of moving a growing range of maintenance processes further forward. Work instructions and document review can be carried out and connectivity and custom tool measurement is handled with SME Connect. This approach minimizes initial specialized equipment and allows the Navy to hit the ground running with immediate wins of new capabilities and operational efficiencies.

Benefits Statement:

Against peer adversaries that disrupt our logistical tail and require forces to operate on their own, the Distance Support Toolkit provides the warfighter access to the best engineering resources to undertake complex repairs and create field expedient repairs that meet safety and operational requirements. Expeditionary teams and warfighters will need the ability for organizational personnel to repair mission critical weapons systems and equipment while assisting in battle damage assessments. The Distance Support Toolkit enables the Subject Matter Experts (SMEs) to get closer to the equipment in operation, virtually on a moment's notice, to return it to operation faster. The Distance Support Toolkit saves valuable time repairing and maintaining equipment, along with the costs of sending SMEs to location, returning vital equipment to the fight faster than currently possible. The Toolkit accomplishes this by providing the virtual presence of the most seasoned depot SME anywhere in the world, including in denied environments.

HYTORC

Focus Area: Reliability Improvement (Hardware)

Contact

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HYTORC is the most trusted name in the industry. HYTORC makes industrial bolting safer and simpler. With 50 years of experience focused entirely on developing the highest quality industrial bolting systems and tools, from steel mills and mining equipment to refineries, power plants, and wind turbines; we have developed solutions for every bolting application imaginable. For custom projects, our highly experienced engineering team is at your service to design the most efficient solution for your job with simple, safe, and economical pricing in mind. We are consistently improving upon existing products, and developing new tools, based on feedback from the people that use our tools every day. Our latest product line features patented industry-firsts like hands-free operation to keep tool operators at a safe distance from the application, onboard documentation systems to provide job accountability and assurance, and industry-leading bolt load accuracy to reduce nut loosening and joint failure.

Industrial Bolting Specialists

Problem Statement:

Many companies have Bolting Issues:

- Torquing, Tightening, Specifications to be met.
- Incorrectly tightening or torquing bolts can cause fingers to be severed.
- Over-Torquing bolts can cause substrates to weaken and crack
- Under-Torquing allows bolts to come loose and wreak havoc
- Incorrect maintenance procedures lead to equipment loss,
- Loss of time and manpower.

Technology Solution Statement:

HYTORC Bolting Solutions

- Correct tools for job
- Correct maintenance and calibrations schedules
- Increased Safety
- Training for users

Benefits Statement:

Creating a safer bolting and torquing environment for end users while reporting maintenance to management.

Southern Marketing Associates

Focus Area:

Contact

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919-996-9113

Customer driven manufacturer’s representative organization, providing solutions for world class manufacturers in nearly every aspect of test and measurement.

Test & Design Hardware Representative

Problem Statement:

Aged, legacy, obsoleted test and design hardware.

Technology Solution Statement:

Customer driven manufacturer’s representative organization, providing solutions for world class manufacturers in nearly every aspect of test and measurement.

Benefits Statement:

Customer driven manufacturer’s representative organization, providing solutions for world class manufacturers in nearly every aspect of test and measurement.

Tech Comm

Focus Area: Reliability Improvement (Hardware)

Contact

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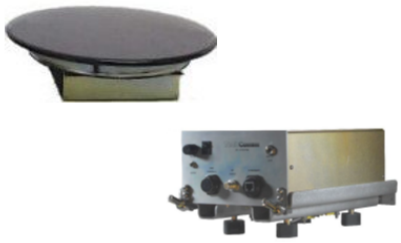
Tech Comm LLC is a U.S.-based, ITAR-registered small business headquartered in Fort Lauderdale, Florida, specializing in radio direction finding (DF), communications intelligence (COMINT), and search-and-rescue (SAR) RF systems for defense and civil platforms. For over 40 years, Tech Comm has designed, manufactured, and sustained DF systems, including for the U.S. Coast Guard, DoW, and allied customers.

Multi-Mission DF/COMINT Systems for Aviation and Maritime Platforms

Problem Statement:



- USCG aviation platforms must simultaneously support SAR, interdiction, law enforcement, and ISR missions while operating within tight SWaP constraints
- Legacy DF systems operate in narrow frequency bands (e.g., 100–500 MHz), lack modern cyber architectures and ease of integration, and cannot process second-generation COSPAS-SARSAT (SGB) emergency beacons now entering requirements

Technology Solution Statement:

- Tech Comm's modular DF/COMINT systems enable operators to monitor spectrum activity, cue DF, and map SAR and known emitters – simultaneously across 30–6000 MHz through a single antenna with an 11.4" platform opening and full-system power draw as low as <3A at 12 VDC
- Second-generation COSPAS-SARSAT beacon detection and decoding (FGB + SGB) is integrated into the same module
- On-edge DF + AIS data fusion to identify potential dark vessels without operator intervention

Benefits Statement:

- Drop-in replacement for legacy DF installations with adjustments available to fill existing openings
- Multi-phase delivery with rapid customization available – developed custom processor hardware and bare-metal firmware for a USCG Cutter program in under six months
- Easy to integrate via customizable API with custom interface development available; bare-metal, no-OS firmware aligned to DoW STIG requirements
- One system delivers simultaneous DF, SAR, COMINT, and dark vessel detection across 30–6000 MHz – consolidating multiple subsystems and reducing logistics burden; no dedicated operator required
- U.S. small business, 40+ years serving USCG; components fielded on CV-22, special mission aircraft, and Cutters

BG Workforce Solutions

Focus Area: Workforce Development/Visualization

Contact

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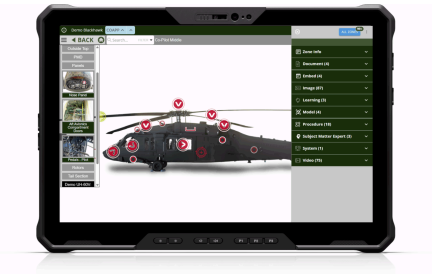
866-276-6457

BG Workforce Solutions is a Lexington, KY based leader in workforce modernization and digital transformation. We provide the Department of Defense and Allied Partner Nations with innovative enterprise software tools and training solutions needed to build and sustain skilled technical workforces.

BG Workforce Enterprise Suite, DoD GovCloud Approved: Gemini™, CertiFLEX ™, SMARTS™, and TAILWIND™



Problem Statement:

- The Defense Industrial Base suffers from a severe shortage of skilled labor across critical trades and disciplines.
- Highly experienced Subject Matter Experts (SMEs) retire or leave, taking their knowledge with them.
- It takes too long to upskill new entrants to the workforce, and legacy training methods are inefficient.
- Workers are challenged to find and access critical information at the point of work – they demand capable knowledge support tools.
- Organizations have difficulty identifying, tracking, and developing skills and capabilities within their workforce.

Technology Solution Statement:

Gemini™, SMARTS™, CertiFLEX™, and TAILWIND™ are designed to bolster the Defense Industrial Base labor force and rapidly reverse knowledge attrition by digitally capturing SME experiences, codifying them against skills and capabilities, and delivering them across a distributed workforce in an innovative XR interface with AI assistance. These tools enable customer organizations to develop and maintain their own content libraries and intellectual property, ensuring real-time access to the latest information for all workers in the organization to ensure compliance in the field.

Benefits Statement:

- Rapid enterprise deployment (standup in weeks)
- Enhanced worker speed to competency (~50% reduction in training time)
- Targeted Skills-first Training & Tracking (develop flexible, agile workforce)
- Automate training program administration (reduce overhead costs)
- Adaptable for any operational environment with cloud and standalone capabilities (technology agnostic)
- Standardize training & maintenance operations across the enterprise (improve quality)

Blackwater Technology Solutions

Focus Area: Workforce Development/Visualization

Contact

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757-651-6321

Blackwater Technology Solutions is a veteran-led technology services company based in Elizabeth City, North Carolina. We provide practical IT operations, communications support, workforce development, and technology implementation for local businesses and mission-driven organizations.

Our approach emphasizes reliability, responsiveness, clear communication, and long-term relationship building. We are not simply providing technology services; we are helping build a stronger local technology foundation.

Integrated IT and Communications Support Solutions

Problem Statement:

Organizations across Northeastern North Carolina continue to face growing challenges related to reliable IT support, communications infrastructure, workforce readiness, and access to responsive technical service providers. Many small and mid-sized organizations lack dependable local technology partners capable of supporting operational continuity, cybersecurity awareness, communications systems, and evolving technology requirements in a practical and scalable way.

At the same time, the region faces ongoing workforce development challenges, including limited access to hands-on technical training pathways that connect local talent with real-world technology opportunities and operational experience. These gaps can lead to operational inefficiencies, delayed technical response, increased cybersecurity risk, communication disruptions, and difficulty sustaining long-term technical capability growth within the region.

Technology Solution Statement:

Blackwater Technology Solutions delivers integrated IT, communications, and workforce-focused technology support solutions designed to improve operational reliability, technical responsiveness, and long-term capability development for organizations throughout Northeastern North Carolina.

In addition to technical support services, Blackwater is actively developing workforce-focused initiatives and partnerships intended to strengthen the regional technology talent pipeline through hands-on exposure, technical education support, and practical implementation opportunities tied to real-world operational environments.

Benefits Statement:

Blackwater Technology Solutions provides a unique combination of operational IT support, communications expertise, workforce development focus, and local responsiveness that directly supports mission continuity and long-term technical capability growth.

Our approach focuses on operational reliability, clear communication, scalable support, and long-term relationship building.

Boston Engineering Corporation

Focus Area: Workforce Development/Visualization

Contact

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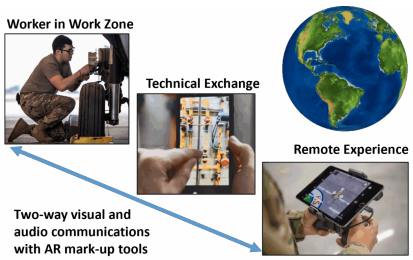
508-259-8686

Boston Engineering is a leader in sustainable digital transformations, implementing innovative technologies, and developing road maps to solve tomorrow's business challenges. Leveraging the latest in emerging technologies, such as Sustainment Robotics (SR), Augmented Reality (AR), Virtual Reality (VR), Internet of Things (IoT), and more, Boston Engineering helps you bring innovation to bear on your mission. Whether leading ideation, developing proofs of concept, building consensus, providing training, or handling post implementation support, simply Image the Possibilities and Boston Engineering will expand your capabilities to innovate.

MREG

Problem Statement:



- Maintenance and sustainment of our weapons systems is being challenged by shrinking experienced workforce and increases in our national retirement rate.
- Nascent workers require training and mentoring before achieving the proficiency of highly skilled workers
- Nascent workers often experience work package execution issues and must leave the work site to seek advice or help with decisions enabling continued work execution
- Many maintenance requirements are discovered only after a weapon system reaches its destination. Knowledge gathering in route to the shipyard is not captured well today.

Technology Solution Statement:

- Mixed Reality Expert Guidance (MREG) is an Augmented Reality (AR) enhanced secure video remote assistance tool connecting experienced workforce to nascent workforce.
- MREG operates on premise, on cloud infrastructure, or in hybrid or mixed connected and unconnected configurations.
- The capability is built using open architecture, open standards, and software licensing to operate not required.
- MREG has been demonstrated on portable 5G communications ship-to-shore in port providing the necessary bandwidth to support video communications.
- MREG is device agnostic.

Benefits Statement:

- Provides experienced guidance to workers in work areas from experienced remotely located high skill or experienced workers and supervisors.
- MREG can record or actively share work assessments in the field in advance of shipyard stationing providing planners advanced information, resulting in reduced schedule.
- Connects nascent workers with retired workers who can work from home or part-time and continue sharing experience.

CDME

Focus Area: Workforce Development/Visualization

Contact

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614-843-9429

THE OHIO STATE UNIVERSITY
CENTER FOR DESIGN AND MANUFACTURING EXCELLENCE

The Ohio State University's Center for Design and Manufacturing Excellence (CDME) works with companies and researchers to translate new technologies into real-world, market-ready manufactured products. These projects give student employees at CDME hands-on experience integrating new technology while providing our customers the workforce advantage necessary to compete in a global marketplace. The center executes this innovative approach to technology translation and workforce development while shaping the national conversation on advanced manufacturing innovation.

AR and VR Workforce Development

Problem Statement:

The US military faces an acute shortage of clearable, technically proficient talent in manufacturing, and must establish a robust pipeline facilitating undergraduate preparation for manufacturing positions in the Defense Industrial Base (DIB). Intensive hands-on industrial mentorship combined with the scalability and versatility of high-fidelity virtual simulations can help address the fundamental disconnect between traditional academic training and the immediate operational needs of the DIB and national security facilities.

Technology Solution Statement:

The Center for Design and Manufacturing Excellence (CDME) at The Ohio State University is a leader in the development of novel workforce development technology and processes. Undergraduate student employees at CDME receive multi-year mentorship from industry-hardened professionals who manage experiential learning projects in collaboration with commercial and government partners. Our staff is experienced in both augmented and virtual reality approaches, including immersive VR headsets and digital twins. With not just a technology focus, but a background in educational techniques, CDME is well-equipped to solve any workforce development challenge.

Benefits Statement:

Digital training tools have a key role to play in high-volume manufacturing workforce training, allowing trainees to explore complex manufacturing processes and systems. Interactive simulations give participants a safe way to develop and practice skills in interactive and dynamic 3D environments, allowing learners to explore manufacturing equipment and processes.

EFCO USA, Inc.

Established in 1978, EFCO has been a world-leading manufacturer of portable and stationary valve repair and testing equipment. Wherever fittings, valves, and pumps are used, EFCO equipment is also needed to maintain, repair, and test sealing surfaces, shut-off bodies, and housings. We are a family-run business with the philosophy of making our customers our partners – working together to create machining and testing solutions. Customer experience from the extensive use of our machines continuously contributes to our product development.

EFCO equipment is used worldwide, certified to DIN EN ISO 9001, and is characterized by our quality, durability, easy handling, and superior results. Our product range for in-shop and in-field service includes portable and stationary grinding and lapping equipment, flange facers, portable lathes, test benches, and workshops for valves, flanges, and pipelines.

Focus Area: Workforce Development/Visualization

Contact

Sales

800.332.6872

sales@efcousa.com

Valve Repair & Testing Equipment

NATIONAL CENTER FOR MANUFACTURING SCIENCES

EFCO USA, Inc.
Valve Repair & Testing Equipment

NCMS Technology Showcase:
Pearl Harbor Naval Shipyard

PROBLEM STATEMENT	BENEFITS
Time and budget-consuming manual processes Inconsistent results Complicated, limited, or dangerous processes Tool and testing reliability issues	Easy to use, durable, and efficient Versatile, easily customizable, and expandable Use systems more effectively Consistent results Keep downtimes to a minimum Increase the quality and productivity of maintenance Use human resources more responsibly
TECHNOLOGY SOLUTION	**GRAPHIC**
Stationary and portable equipment for valve repair and testing Valve grinding and lapping equipment for gate, globe, control, safety, and ball valves ID- and OD-mounted flange facers, with CNC options Portable lathes with manual, automatic, and CNC options Test benches for control and safety valves - body, seat leakage, and set pressure	

Moth+Flame

Focus Area: Workforce Development/Visualization

Contact

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619-228-3395

Readiness Through Immersive Training

Problem Statement:

Experience matters for the DoW. Currently a lack of experience for simple and complex skillsets is limiting factor. Additionally a lack of data to paint a clear picture of capability.

Technology Solution Statement:

Using immersive training war fighters can train anywhere they are in mass to create a baseline of measured experience.

Benefits Statement:

Create sets and reps without risk to make a more capable service member.

NC State University

Focus Area: Workforce Development/Visualization

Contact

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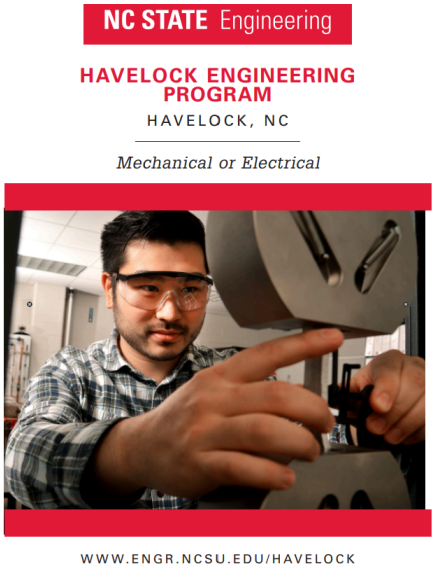
The NC State Havelock Engineering Program in Havelock, NC is a site-based College of Engineering program located on the Havelock campus of Craven Community College. The Havelock program supports NC State's land grant mission by serving the Eastern North Carolina community with a local, transformative experience that creates career-ready engineers. Students in the program earn a Bachelor of Science in Engineering with a concentration in either Electrical Engineering Systems (EES) or Mechanical Engineering Systems (MES).

On-site NC State faculty teach the systems engineering content, conduct all laboratory experiences, and direct students in the two-semester capstone design experience, where they are partnered with an industry sponsor to design a solution to a real-world problem. Hands-on laboratory exercises and design-build projects each semester allow students to explore and experience theoretical concepts learned in their courses and practice important skills such as manual and computerized measurement techniques, data acquisition and analysis, troubleshooting, design of experiments, project management, teamwork, engineering design, and technical communication.

ENC Homegrown Engineers

Problem Statement:

Hiring and retaining engineering talent can be difficult in Eastern North Carolina. Many engineering graduates want the amenities of a larger, metropolitan area and do not want to relocate here. Or they take a position here and stay just long enough to gain valuable experience and move on, leaving employers struggling to maintain full employment in their engineering ranks.



Technology Solution Statement:

The Havelock Engineering site-based program offers ENC residents access to an engineering degree that, in many cases, would not otherwise be possible.

Benefits Statement:

The NC State Havelock Engineering program provides a unique opportunity for ENC residents to complete a Bachelor of Science in Engineering with a concentration in either Electrical Engineering Systems or Mechanical Engineering Systems from NC State without ever leaving Eastern North Carolina.

Students in the Havelock Engineering program are primarily permanent residents of ENC who have no desire to leave this area. Eighty-nine percent of Havelock Engineering graduates remain employed in the ENC area.

Schemata, Inc.

Focus Area: Workforce Development/Visualization

Contact

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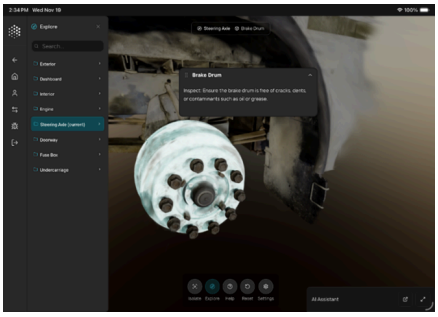
402-594-3503

Schemata delivers AI-native virtual training and simulation solutions that transform real-world equipment, facilities, and environments into photorealistic, interactive 3D training modules. Built to accelerate technician certification and capture expert knowledge before it leaves the floor, the platform is purpose-fit for high-stakes sustainment environments where readiness, throughput, and workforce continuity drive mission outcomes. Deployed across U.S. Air Force, Navy, and Army defense sustainment programs, Schemata is adapting its workforce-readiness toolkit to support the U.S. Coast Guard Aviation Logistics Center in modernizing depot-level training across the platforms, systems, and facilities that maintainers depend on. The platform runs on standard desktop, mobile, and tablet devices with no specialized hardware required, making mission-ready content accessible at the hangar, classroom, or forward location.

AI-Native Virtual Training Platform

Problem Statement:



Coast Guard aviation depot operations face a widening readiness gap. Skilled maintainer attrition, an aging instructor corps, and increasingly complex platforms and systems are outpacing traditional classroom and simulator-based training pipelines. Instructor capacity is constrained, certification timelines are long, and decades of tribal knowledge are leaving the floor faster than they can be transferred to incoming technicians, slowing certification throughput and widening skill gaps across the depot workforce.

Technology Solution Statement:

Schemata's AI-native pipeline transforms real equipment, components, and depot facilities into photorealistic, interactive 3D training modules, delivered 10x faster than traditional 3D providers. The platform combines immersive scenario-based training, AI-driven digital work instructions for maintenance and inspection, role-specific learning pathways, and instructor dashboards with built-in performance tracking. For ALC, that means reality-captured 3D content built around the specific Coast Guard platforms, systems, and facilities that maintainers work on every day.

Benefits Statement:

Schemata reduces training time by up to 75% and instructor workload by up to 40%. In recent defense deployments, students reported saving an average of ~7 hours of study time per certification and instructors saved ~5 hours per trainee. This translates to approximately $613 in recovered labor per trainee before any readiness credit. For ALC, that translates to faster maintainer certifications, lower asset downtime, scalable knowledge capture from senior technicians, and a more confident, mission-ready Coast Guard sustainment workforce.