

# NCMS Sustainment Accelerator: FRCE

Riverfront Convention Center of Craven County, NC  
July 22-24, 2025



Exhibitor Directory

# 2025 NCMS Sustainment Accelerator—FRCE

## Exhibitor Directory

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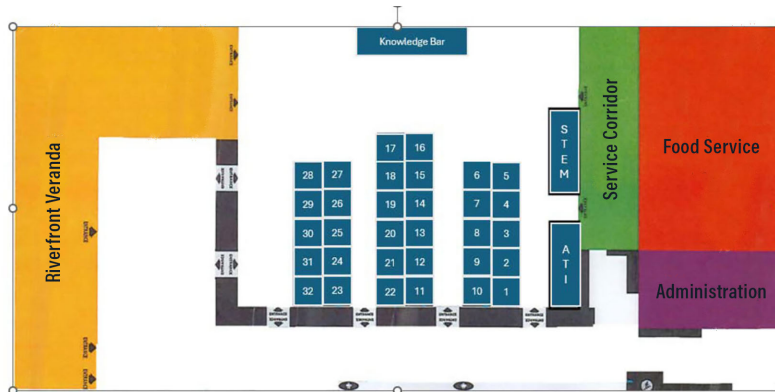
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# Exhibitor Map



Booth Number	Organization/ Company	Focus Area
1	CN-Seamless	Advanced/Additive Manufacturing
2	Atmospheric Plasma Solutions, Inc.	Coatings and Corrosion Prevention
3	LMI	Business IT & Analytics
4	ProDex Labs	Advanced/Additive Manufacturing
5	Andromeda Systems Incorporated	Reliability Improvement (Hardware)
6	8tree	Enhanced Inspection
7	Trident Systems	Advanced/Additive Manufacturing
8	Beast Code	Workforce Development/Visualization
9	Arch Systems LLC	Business IT and Analytics
10	PartWorks LLC	Reliability Improvement (Hardware)
11	NC State University	Workforce Development/Visualization
12	LoneStar NDE Innovations	Enhanced Inspection
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14	RTV Engineering	Business IT and Analytics
15	TowFLEX Miltech, Inc.	Reliability Improvement (Hardware)
16	FARO Technologies, Inc.	Advanced/Additive Manufacturing
17	FTL Labs Corporation	Enhanced Inspection
18	F3 Solutions	Workforce Development/Visualization
19	TurnAround Factor	Advanced/Additive Manufacturing
20	TRI Austin	Enhanced Inspection
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32	Hexagon	Enhanced Inspection



## Knowledge Bar Schedule

Date	Timeslot	Company	Focus Area
7/23/2024	9:15am - 10:00am	Arch Systems LLC	Business IT & Analytics
	10:00am - 10:45am	GOV - Jeremy Bunting	Polymer Additive
	10:45am - 11:30am	BlastOne International	Coatings and Corrosion Prevention
	11:30am - 12:15pm	Atmospheric Plasma Solutions, Inc.	Coatings and Corrosion Prevention
	12:15pm - 1:00pm	Merge Plot	Reliability Improvement (Hardware)
	1:00pm - 1:45pm	GOV - Paul Charron	Metal Additive
	1:45pm - 2:30pm	Defense Engineering Services	Advanced/Additive Manufacturing
	2:30pm - 3:15pm	Cohesive Robotics, Inc.	Advanced/Additive Manufacturing

Date	Timeslot	Company	Focus Area
7/24/2024	9:15am - 10:00am	F3 Solutions	Workforce Development/ Visualization
	10:00am - 10:45am	GOV - Randall Lewis	NavalX Tech Bridge
	10:45am - 11:30am	ProDex Labs	Advanced/Additive Manufacturing
	11:30am - 12:15pm	Beast Code	Workforce Development/ Visualization
	12:15pm - 1:00pm	FTL Labs Corporation	Enhanced Inspection
	1:00pm - 1:45pm	GOV - Jessica Templeton	T2 & Agreements
	1:45pm - 2:30pm	8tree	Enhanced Inspection
	2:30pm - 3:15pm	LoneStar NDE / Baylor	Enhanced Inspection

# CN – Seamless

Focus Area: Advanced/Additive Manufacturing

## Contact

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CN-Seamless is a North Carolina-founded technology company revolutionizing field fabrication and maintenance through compact, deployable automation systems. Our flagship product, the Mach 1, is a portable oxy-fuel and plasma cutting machine designed for use in austere environments by welders, maintainers, and fabricators. It enables precise metal cutting on flat plate, structural steel, and existing equipment—eliminating the need for stationary CNC infrastructure.

## Deployable Automation System

### Problem Statement:

The rapid maintenance and repair of large transportation assets, facilities, and operational support equipment is critical for mission readiness. Unlike commercial manufacturing, every repair within defense contexts is unique, reducing the benefit of automation compared to the time spent programming automated systems. Consequently, most maintenance still relies on the skill and availability of the maintainer. Unpredictable issues including battle damage, terrain hazards, mishaps, corrosion, or specialized mission demands force maintainers to spend time developing extensive maintenance projects, rely on depot repairs, or consider disposal.



### Technology Solution Statement:

The Mach 1 is a portable, semi-automated fabrication platform that delivers powerful oxy-fuel and plasma cutting capabilities to any worksite, empowering maintainers, fabricators, and welders to perform precise cuts in metal with speed and consistency. Designed for rugged environments and rapid field deployment, the Mach 1 simplifies complex cutting tasks by automating manual processes typically reserved for heavy CNC equipment.

Currently under development, new end effectors for plasma blasting, welding, bevel cutting, 3D printing, and more will make the Mach 1 the ultimate automation system built for the field.

### Benefits Statement:

The value of such a low-cost automation system that deploys directly to equipment and facilities being maintained is extremely high. The ability for any team in a base to perform rapid maintenance, fabrication, or repair with robotic precision specific to the tooling needed will drastically improve the decentralization of logistically complicated procedures. Gaining the ability to perform depot-level repairs on any base by bringing the Mach 1 to the equipment will result in millions of dollars saved in transportation costs alone. The portable nature of the Mach 1 means teams can become comfortable with the operation on base and have the ability to perform the same automated repairs while deployed. Furthermore, the end-effectors to be supported by the Mach 1 extend far beyond just maintenance use. Tactical breaching and rapid base construction and reconstruction are among the many additional potential benefits to having such a portable and easy to set up system.

# Cohesive Robotics, Inc.

Focus Area: Advanced/Additive Manufacturing

## Contact

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## Argus OS: Smarter robots for high-mix manufacturing and sustainment

### Problem Statement:

- Current robotics solutions are inflexible and expensive, requiring significant upfront costs along with manual programming for every setup and part.
- Robotics usage in sustainment operations have been severely limited due to setup complexity and processing inflexibility.
- Despite necessary and critical investments for fleet sustainment and readiness, increases in the cost-per-flight-hour metric in recent years have raised concerns, with a 20% between FY21 and FY23.



### Technology Solution Statement:

Our robotic solutions boast unique capabilities tailor-made for high-mix environments, combining advanced algorithms and AI models, to meet the rigorous requirements of demanding factory floors, sustainment depots and shipyards. These game-changing features of our proprietary software, Argus OS™, are included in every custom and turnkey robotic workcell solution we ship, as well as a Pro Kit that can be integrated into other workcells. Our turnkey systems are out-of-the-box ready to support common tasks such as sanding, coating, grinding, and welding.

### Benefits Statement:

- Increased Productivity: Robotic workcells that embed our Argus OS™ supercharge the workforce and boost production, with increases of 30% or more.
- Consistent Quality: Our systems can perform tasks with precision and consistency. Rework and scrap rates are reduced by 80% or more.
- Enhanced Safety: By automating dangerous and repetitive tasks, we help reduce workplace accidents and injuries.
- Greater Flexibility: Our robotic workcells can easily adapt. The same workcell can weld a part, grind it, and polish it.

# Defense Engineering Services

Focus Area: Advanced/Additive Manufacturing

## Contact

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Defense Engineering Services, LLC (DES) provides design and build services, technical solutions, and custom tools/machines for a variety of industries. DES offers mechanical and electrical design solutions combined with the ability to prototype, test, and manufacture hardware. DES' prototype capabilities include metal fabrication, CNC machining, welding, integration, and assembly. With specific experience in design for military applications, automotive, aviation, armor, mission kits, missile defense, submarine systems, and ship systems, DES works across multiple branches of the US Military and other commercial industries.

## Manufacturing

### Problem Statement:

The integrity of spherical bearing liners used in the swashplate/pitch assembly of aircraft is critical to ensuring safe and reliable operation. However, current methods for evaluating bearing liner thickness and radial wear are limited in accuracy, efficiency, standardized tools and processes, and practicality, particularly for on-aircraft inspections. These limitations pose significant challenges to maintenance crews, increasing the risk of undetected wear, premature component failure, and reduced operational readiness.



### Technology Solution Statement:

The technical solution developed during the Spherical Bearing Liner Integrity Evaluation Project was a specialized inspection and measurement tool designed to evaluate the integrity of spherical bearing liners used in the swashplate/pitch assembly of aircraft. The tool was engineered to address the challenges of accurately measuring bearing liner thickness and radial wear, in a controlled consistent manner. The tool can be used to determine "good" and "bad" bearing liners, as well as gather critical information for evaluating lifecycle and maintenance planning.

### Benefits Statement:

The Bearing Liner Measurement Project provides significant benefits to the Navy by addressing critical challenges in maintaining the integrity of spherical bearing liners used in aircraft swashplate/pitch assemblies. By developing a specialized inspection tool capable of accurately measuring bearing liner thickness and radial wear, the project enhances the Navy's ability to perform precise and efficient maintenance, reducing the risk of undetected wear and premature component failure. The tool's off-aircraft design simplifies operational use for maintenance crews, enabling 360-degree measurements and improving accessibility compared to on-aircraft solutions. Additionally, the project supports predictive maintenance efforts by enabling the collection of measured data on bearing liner wear, which can be analyzed to forecast lifecycle trends and optimize maintenance schedules. These advancements contribute to improved aircraft reliability, reduced downtime, and enhanced mission readiness, ultimately strengthening the Navy's operational capabilities.

# Dominion Air & Machinery

Focus Area: Advanced/Additive Manufacturing

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Our mission is to provide quality machine tools and excellent service. Our full-time parts personnel, service technicians, and application engineers are dedicated to delivering immediate and effective solutions to resolve your machine issues and minimize your downtime.

At Dominion Air and Machinery, our service staff is factory-trained and certified, boasting extensive experience in troubleshooting CNC machine tools. We are also factory-trained to diagnose SIEMENS, FANUC, and PROTOTRAK controls.

We stock parts in our 30,000 square foot facility located in Roanoke, VA. Our customer base is in Virginia, North Carolina, South Carolina, West Virginia, Delaware, & Maryland.

Dominion Air & Machinery has been selling and servicing metal cutting equipment since 1983. We have over 100 years of combined service experience and over 200,000 sq ft of machines, parts and accessories.

## Machining Technology & Machine Tools

### Problem Statement:

- Machine downtime / Low productivity
- Skilled labor shortages
- Complicated programming
- Difficult machine set-ups
- Poor dimensional accuracy and surface finishes
- Machine service related issues



### Technology Solution Statement:

- Machine downtime / Low productivity
- Skilled labor shortages
- Complicated programming
- Difficult machine set-ups
- Poor dimensional accuracy and surface finishes
- Machine service related issues

### Benefits Statement:

- Digital Twin Virtual Simulation
- Machine and systems training
- Intuitive conversational programming
- Offline programming systems
- Accurate robust high quality machines
- Machine tool service repair team



# FARO Technologies Inc.

Focus Area: Advanced/Additive Manufacturing

## Contact

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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

# Keyence Corp. of America

Focus Area: Advanced/Additive Manufacturing

## Contact

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Keyence Corporation of America is a leading supplier of automation and inspection equipment, including sensors, machine vision systems, laser markers, and measurement devices. With a direct-sales model and a focus on innovation, Keyence supports over 300,000 customers worldwide across manufacturing and R&D sectors.

## Precision 3D Measurement & Laser Marking Solutions for Additive Manufacturing

### Problem Statement:

Additive manufacturing processes often suffer from inconsistent part quality due to limited in-process inspection, dimensional variability, and post-processing traceability challenges. Many manufacturers lack scalable, high-resolution measurement systems that integrate seamlessly into the production environment.



### Technology Solution Statement:

Keyence provides compact, high-speed 3D measurement systems (such as the LJ-X8000 Series) capable of sub-micron inspection of complex geometries directly on the production floor. Coupled with fiber and UV laser markers, Keyence enables direct part marking of additively manufactured materials without surface damage. These solutions support in-line automation, are easy to program via intuitive software, and ensure consistent quality and traceability at every stage of the AM lifecycle.

### Benefits Statement:

Keyence's advanced 3D measurement and laser marking solutions enable real-time dimensional inspection and high-contrast, permanent part identification. These technologies reduce scrap, support automated QA, and enhance traceability—ultimately accelerating validation and compliance in aerospace and defense additive workflows.

# ProDex Labs

Focus Area: Advanced/Additive Manufacturing

## Contact

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ProDex Labs delivers AI-native software tools that transform how manufacturers and sustainment facilities design, simulate, and plan production systems. Our integrated platform combines an AI-powered discrete event simulation with three core modules—what-if analysis, layout optimization, and production scheduling—enabling organizations to move beyond static spreadsheets and manual processes toward dynamic, data-driven decision-making.

With ProDex, engineers rapidly model factory workflows, optimize layouts within physical constraints, and generate production schedules in minutes. This accelerates job turnaround, reduces overhead, and provides real-time visibility into bottlenecks and inefficiencies. Unlike traditional planning tools, ProDex facilitates virtual iteration and validation before committing capital or labor. Powerful AI agents further dissect, analyze, and continuously improve factories down to every datapoint.

Already deployed at manufacturing sites from Massachusetts to Costa Rica, ProDex demonstrates commercial viability, operational scalability, and dual-use compatibility—particularly benefiting small and mid-sized manufacturers critical to the defense industrial base.

By embedding intelligent simulation and AI-driven scheduling into sustainment operations, ProDex enhances readiness, adaptability, and modernization across applications, from engine overhaul to munitions production. Built securely on flexible platforms like Palantir Foundry, ProDex accelerates planning and decision-making, creating a more resilient and responsive industrial base.

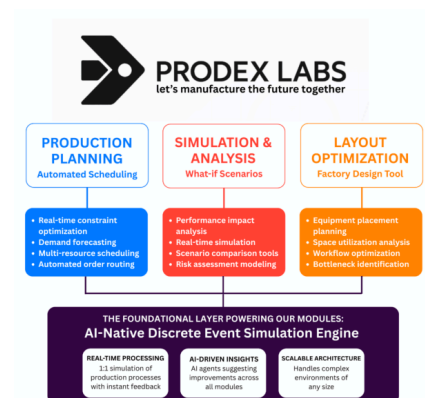
## Smart Factory

### Problem Statement:

Depot and industrial manufacturers face chronic delays, persistent inefficiencies, and resource strain due to reliance on outdated production design and manual planning methods. These challenges are especially acute for smaller factories and facilities integral to defense sustainment operations, where rapid reconfiguration is critical yet prohibitively costly. Static workflows, rigid layouts, and manual scheduling methods severely limit responsiveness to evolving mission requirements. To maintain readiness and competitiveness, manufacturers urgently require digital tools capable of accelerating planning, virtually simulating production changes, and dynamically optimizing floor layouts—significantly improving throughput, agility, and operational efficiency while reducing overall costs.

### Technology Solution Statement:

ProDex is an AI-native, discrete-event simulation platform purpose-built for modern manufacturing and sustainment environments. Leveraging advanced AI and autonomous agents, ProDex rapidly



optimizes workflows, intelligently adjusts layouts within real-world constraints, and generates executable production schedules in minutes. Integrated resimulation and agent-driven feasibility analysis accelerate confident decision-making without costly physical experimentation. Designed for minimal manual data entry and seamless interoperability with legacy or smart-factory systems, ProDex's dual-use architecture directly addresses critical sustainment, readiness, and modernization challenges.

**Benefits Statement:**

ProDex significantly accelerates throughput, cuts planning times, lowers operating costs, and enhances agility across manufacturing and sustainment operations. Integrating simulation, layout optimization, and scheduling, ProDex leverages advanced AI agents to continually analyze, optimize, and refine every step of production workflows—enabling rapid adaptation to changing labor, equipment, material, and spatial constraints. Commercially proven, ProDex reduces weekly planning workflows from over 20 hours to under 30 minutes, ensuring immediate improvements in responsiveness, resource efficiency, and operational readiness.

# RND Automation

Focus Area: Advanced/Additive Manufacturing

## Contact

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RND Automation is a leading provider of custom automation solutions specializing in the design, engineering, and integration of robotic systems, assembly automation, and packaging equipment. While we specialize in robotic automation that's accessible to manufacturers of any size, RND serves a diverse range of industries including consumer products, aerospace, defense, automotive, medical device manufacturing, pharmaceuticals, food and beverage, and personal care. We are a Level IV Authorized System Integrator for FANUC Robotics, a Platinum Level System Integrator for Epson Robotics, and a Certified System Integrator for Universal Robots, as well as cooperation's and expertise with Kuka, Kawasaki, ABB, and others. We bring extensive expertise in implementing robotic solutions across diverse applications.

Our core capabilities include robotic part handling, small-part assembly, precision dispensing, gluing, labeling, welding, vision inspection, automated packaging, modular platforms, and custom machine development. We excel in delivering solutions that increase throughput, improve quality, and reduce labor dependency all while offering scalability. We operate with a consultative, problem-solving mindset. We partner closely with customers to understand their specific challenges and develop tailored systems that align with their goals, timelines, and return-on-investment expectations.

## Advanced Robotic Automation Systems

### Problem Statement:

- Solutions to combat rising labor costs, lack of skilled labor, and workforce shortages.
- Address inconsistent product quality due to manual processes.
- Complex assembly tasks require specialized expertise and consistent execution.
- Increased demand for more flexible automation solutions.
- Having creative approaches to improve ROI on capital equipment.



### Technology Solution Statement:

RND Automation delivers custom engineered robotic, assembly, and packaging systems that streamline production, reduce labor dependency, and improve quality. Our flexible solutions integrate seamlessly with existing operations and are designed for scalability. With advanced technologies like vision systems, robotics, and precision motion control, we enable manufacturers to boost efficiency, ensure consistency, and achieve rapid ROI.

### Benefits Statement:

- Consistent & Improved product quality with precision automation and vision inspection.
- Enhanced workforce utilization allowing labor to focus on more challenging issues.
- Minimized downtime with robust, low-maintenance systems.
- Improved worker safety through automation of hazardous or challenging tasks.
- Increased overall production and throughput.
- Military grade encryption for remote diagnosis and equipment service.



# Trident Systems

Focus Area: Advanced/Additive Manufacturing

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Trident's ICS business unit develops solutions for a wide range of demanding missions and environments, including man-portable communications interoperability systems, tactical health monitoring & prognostics solutions, secure wireless networking and modular, scalable surveillance systems. The ICS team also provides advanced facility engineering utilizing the latest off-the-shelf technologies for next generation command centers, conference rooms and collaboration facilities. ICS holds industry-recognized certifications in many disciplines, understands critical Information Assurance regulations, and routinely works in secure environments.

## Predictive Maintenance & Logistics (PM&L) Family of Systems (FoS)

### Problem Statement:

As all branches of the DoD grapple with the need to sustain both legacy and new platforms in contested environments, the ability to proactively identify and prioritize current and future failures will be a key enabler of future sustainment. The DoD must balance modernizing fleets with maintaining legacy fleets in a flat budgetary constrained environment and reduced operations and maintenance funding. It is likely that in this budget environment the Army will have to rely on legacy fleets well into the future. The challenge is maintaining readiness levels with aging vehicles. The Army must also ensure that as new, more complex, capabilities are fielded, preventive/predictive maintenance tools are available to assist in maintaining operational readiness. Regarding modernized vehicles, the systems are so complex and/or some of the vehicle fault codes are proprietary to the OEM.



### Technology Solution Statement:

Trident's PM&L Family of Systems provide an ability to detect and predict failures, proven over hundreds of thousands of operating hours on 1000+ platforms. They enable the on and off-board analysis of data to assist in prioritizing maintenance efforts and conduct predictive analysis to support CBM+ / Predictive Logistics efforts, effectively reducing maintenance costs, backlog and lost maintenance man hours. The technology also boasts a significant cost savings over competing technologies, allowing DoD to equip more vehicles with the technology.

### Benefits Statement:

Trident's PM&L FoS provide automatic data collection and analysis for tactical platforms, enabling Condition Based Maintenance Plus (CBM+). This allows for a decrease in the time to repair a platform, increased visibility into the health of forward deployed platforms, increased specificity to support maintenance operations, and a reduction of repair cost and down-time, enhancing a platform's operational availability while decreasing total ownership cost. Connecting to on-platform sensors or providing sensors to target problems of interest to platform owners.

# TurnAround Factor

Focus Area: Advanced/Additive Manufacturing

## Contact

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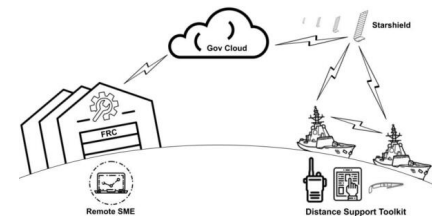


TurnAround Factor (TAF) is a small business based in Richmond, Virginia that provides engineering consulting and R&D services. We are experts at developing new ideas and creating prototypes that can be tested with the user and ultimately transitioned to the field. We have an extensive team of engineers 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. Our team has reverse-engineered and modernized several legacy systems to ensure continuing support for critical Nuclear Enterprise systems. We currently support several DLA and Navy activities including DLA Troop Support Subsistence, DLA BATNET (Battery R&D Network Program), and DLA Disposition Services. Our products have been used worldwide by DLA and support several Navy weapons systems.

## 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 allows sailors and marines shipboard or at remote locations to receive engineering assistance and support from engineers and technical experts at the ESAs and Fleet Readiness Centers. It also improves Maintenance Activity, creating a flexible, extensible framework allowing for deployable hardware and software capability packages.

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. The Toolkit also allows for remote access to specialized tools and diagnostics equipment in use by the field user, with the work instructions and documents that they need. It is perfect for island hopping expeditionary missions in the South Pacific. The Toolkit allows for depot level repair and maintenance tasks to occur in active operations against peer adversaries, saving valuable time and resources to get the equipment back into the fight faster.

SME Connect greatly improves maintenance activity efficiency, getting equipment back into the fight faster. SME Connect improves maintenance activity by bringing remote tools and the virtual presence of a depot level SME to the equipment instead of having to wait to return the equipment back to depot. Navy FRC-East and NAVSEA 05T have tested and are working towards acquiring the Distance Support Toolkit technology. FRC-East has an IATT for non-operational testing and work is actively being carried out to fit this into PHD's existing Azure Gov ATO. COMFRC and NAVAIR have expressed long-term interest in using this product once fielded.

# Arch Systems LLC

Focus Area: Business IT and Analytics

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Arch Systems, LLC is a woman-owned small business that delivers forward-thinking technology solutions to address complex operational challenges across government and industry. Since 2006, we have built a strong track record of enabling digital transformation through expertise in artificial intelligence, data analytics, enterprise architecture, IT modernization, and human-centered design.

Our service offerings include AI/ML-powered decision support, robotic process automation, natural language processing, full-stack development, and advanced cybersecurity. By combining modern methodologies such as Agile, DevSecOps, and MLOps with certified quality systems (CMMI Level 3, ISO 9001, 20000, and 27001), we ensure scalable, secure, and cost-effective technology implementations.

Arch Systems has been recognized with multiple innovation and performance awards—including the 2024 TechConnect Award and the 2025 FXPElev8 Award—for developing impactful solutions that streamline workflows, improve data integrity, and foster operational resilience.

We are currently showcasing TechForgeAI™, an AI-powered tool that automates the generation of digital work instructions from unstructured documentation. Designed to support maintenance operations and workforce enablement, TechForgeAI™ reduces manual effort, enhances knowledge retention, and accelerates procedure updates through intelligent document parsing and generation. This capability is well-suited for organizations looking to modernize legacy documentation processes and improve workforce readiness.

Our team remains committed to building strong collaborations across the sustainment ecosystem, helping partners enhance efficiency, preserve institutional expertise, and scale

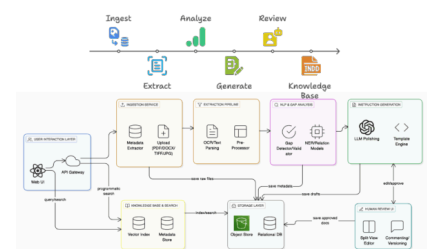
## TechForgeAI™ – AI-Assisted Digital Work Instruction Generator

### Problem Statement:

The creation and management of maintenance work instructions at FRCE remains heavily manual, time-consuming, and prone to inconsistencies. Legacy technical manuals and handwritten documentation present significant challenges for digitization and standardization. Without efficient search, retrieval, and drafting capabilities, depot personnel face delays in procedure development, increased administrative burden, and difficulties in transferring knowledge as experienced workers retire.

### Technology Solution Statement:

TechForgeAI™ automates the extraction, structuring, and drafting of technical work instructions from unstructured legacy documentation using cutting-edge AI and natural language processing. The solution generates consistent, accurate maintenance procedures while significantly reducing manual effort. By creating searchable, editable digital instructions, TechForgeAI™ accelerates document updates, supports compliance with maintenance standards, and preserves institutional knowledge in a usable digital form.



**Benefits Statement:**

TechForgeAI™ reduces the time and cost of creating maintenance documentation by more than 50%, ensuring consistent, standardized, and error-reduced work instructions. It enhances knowledge transfer, improves document accessibility, and supports faster onboarding and training of new personnel. The solution aligns with FRCE's modernization goals by streamlining document workflows and enabling more agile sustainment operations.



## Contact

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At LMI, we're creating innovative solutions to transform emerging needs into extraordinary impacts at The New Speed of Possible™. Combining a legacy of federal expertise with an innovation ecosystem, we minimize time to value and accelerate mission success. With an emphasis on agile development and human-centered design, we enable agencies to experience solutions faster and conquer their toughest challenges sooner.

## NADACS and LIGER for Mx

### Problem Statement:

Millions lost annually due to untracked or unlocatable inventory.

Shipyards and warehouses waste man hours searching for misplaced or moved items.

Operational delays:

- Ship repairs delayed while searching/reordering parts.
- Warehouse fulfillment slowed due to misplaced inventory.

### Technology Solution Statement:

NADACS transforms connected logistics by implementing a flexible, near real-time system that provides asset location and condition details using wireless sensor mesh and pRFID devices to collect data.

### Benefits Statement:

The New Automated Data Acquisition and Control System (NADACS) is designed to revolutionize the efficiency, accuracy, and reliability of data management and control processes. By leveraging cutting-edge technology, NADACS seamlessly integrates advanced data collection methods with real-time processing capabilities to optimize operational performance across various industries.

Our NADACS solution ensures precise data monitoring, robust control mechanisms, and comprehensive analytics, empowering businesses to make informed decisions quickly and confidently. With user-friendly interfaces and customizable features, NADACS adapts to the unique requirements of each operation, providing unparalleled flexibility and scalability.

In essence, NADACS transcends traditional data acquisition and control systems, offering a holistic approach that enhances productivity, minimizes risks, and drives sustained growth. Through innovation and excellence, NADACS is poised to be the cornerstone of modern data-centric operations



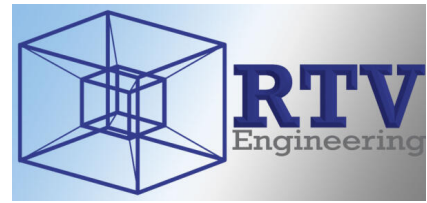
# RTV Engineering

Focus Area: Business IT and Analytics

## Contact

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Robert Veiga  
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831-334-9990



RTV Engineering is a multidisciplinary integration firm delivering agnostic, non-open-source solutions across the Automated Identification Technology (AIT) and Industrial Internet of Things (IIoT) spectrum. We are not a software company. We do not sell AI platforms. RTV delivers engineered systems using the most developed vendor hardware and middleware, applied through electrical, RF, and geospatial engineering disciplines—rooted in physics and validated in the field.

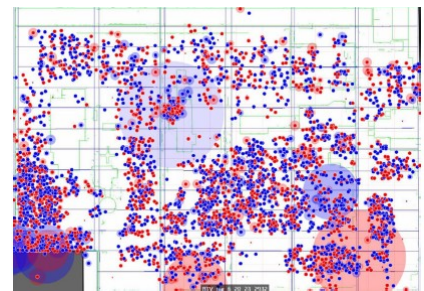
We integrate technologies such as RFID, RTLS, Wi-Fi, and 5G into operational environments where accuracy, traceability, and audit readiness are essential in real time. Our RTV middleware layer harmonizes vendor data, embeds logic for client-specific workflows, and ensures consistency from edge devices to enterprise systems such as MES (Manufacturing Execution Systems), QMS (Quality Management Systems), and ERP (Enterprise Resource Planning) platforms.

RTV supports clients in commercial and government MRO, petrochemical, manufacturing, agriculture, transportation, aviation, and food service—industries where reliable signal intelligence drives both compliance and performance. Unlike software or middleware vendors who promise outcomes via dashboards alone, RTV enables confidence in every digital touchpoint—installing and validating each component to meet the precise requirements of the use case. Our installations are configured for the environment, tuned for reliability, and supported by documentation that meets the most demanding quality and regulatory frameworks.

## AIDC

### Problem Statement:

Industries seeking to modernize operations through AIT and IIoT technologies are often promised rapid results via middleware dashboards and software-only platforms. Yet in practice, return on investment (ROI) remains elusive. Systems deployed without engineering precision frequently yield poor signal quality, unreliable data, and high rates of misreads—leading to a “garbage in, garbage out” scenario that undermines digital confidence from the start.



Despite years of advancement in hardware and sensor technologies, many adopters continue to see little operational gain because the systems were not designed, installed, or validated by engineering professionals who understand the physical layer. There is a clear and present need for integration-led approaches that begin with signal accuracy and end with trusted, actionable data.

### Technology Solution Statement:

Effective AIT and IIoT systems demand more than sensor placement or software dashboards—they require engineering alignment across environment, infrastructure, and intent. In dynamic operational domains like aerospace, petrochemical, or logistics, signal-based technologies often

fail not because the devices are inadequate, but because they're deployed without regard for physics, scale, or workflow integrity.

Real integration begins with modeling the RF environment, understanding infrastructure constraints, and defining how each component—from edge devices to middleware—serves a defined operational purpose. This includes calibrating read zones, ensuring reliable connectivity, and harmonizing outputs across vendor platforms. The result is not just system uptime—it's operational trust.

Our approach delivers right-sized solutions designed for specific facilities, processes, and business goals. By treating hardware, signal behavior, and systems architecture as one, we eliminate common points of failure, reduce long-term support cost, and deliver infrastructure that scales with confidence. Crucially, these deployments generate clean, structured, and trustworthy data—data that can feed client-owned analytics, quality systems, or future AI pipelines without retrofit or remediation. We don't sell the intelligence layer—we ensure the data supporting it is real, reliable, and built from the ground up.

### **Benefits Statement:**

RTV Engineering delivers measurable, engineering-backed outcomes by aligning AIT and IIoT technologies with the environments in which they function. Our integrator methodology ensures that digital traceability is not assumed—it is earned through precision deployment, validation, and discipline-specific design. By combining RF, electrical, and geospatial engineering principles, RTV transforms vendor hardware and middleware into calibrated, operational infrastructure. The result is accurate, environment-tuned data that supports real ROI—reducing manual workflows, eliminating the need for paper tracking, and strengthening compliance with industry and regulatory standards.

Clients benefit from:

- Confidence in Data – RTV ensures signal-level accuracy, eliminating the “garbage in, garbage out” problem common in software-only implementations.
- Accelerated ROI – Deployments perform as intended from the outset, reducing rework and delivering value faster.
- Audit-Ready Infrastructure – Installations include certified read zones, compliance documentation, and system mappings that align with QMS, MES, and ERP requirements.
- Vendor-Agnostic Flexibility – RTV integrates across leading OEM platforms, giving clients optionality without vendor lock-in.
- Sustainable Modernization – RTV enables organizations to move beyond pilots and into durable, scalable operations built on trusted data and field-proven integration.

# Siemens DISW

Focus Area: Business IT and Analytics

## Contact

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Siemens is the technology company for transforming industry, infrastructure and transportation. The expertise underpinning our technologies—electrification, automation, software, and digital twin—is helping customers be more productive, profitable, and sustainable.

## Sustainment Optimization

### Problem Statement:

Today, the world faces unprecedented challenges that threaten both our environment and our way of life.



### Technology Solution Statement:

We create technology with purpose that transforms the everyday and helps shape a more sustainable world. We are committed to:

1. Purposeful innovation
2. Making a meaningful impact on daily life
3. Driving sustainability through technology
4. Creating solutions that address real-world challenges

This guides our technological developments and aligns with Siemens' broader mission of using technology to serve society and create lasting value for all stakeholders.

### Benefits Statement:

By combining the real and digital worlds, we empower our customers to transform their industries and markets, helping them to transform the everyday for billions of people.

# 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.



# Atmospheric Plasma Solutions, Inc.

Focus Area: Coating and Corrosion Prevention

## Contact

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919-931-5622

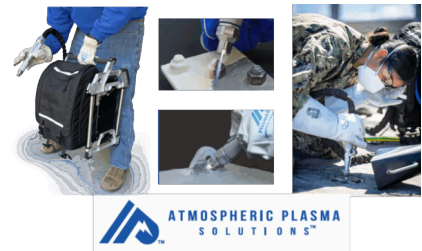


APS provides atmospheric plasma products in manufacturing and maintenance markets with an industry leading combination of power, precision, and portability for surface preparation. APS removes coatings with precision, cleans contaminants with no waste, and prepares the surface for better adhesion while saving time, increasing safety, lowering costs, and eliminating media/solvents.

## 3-in-1 Surface Preparation System

### Problem Statement:

Maintenance and sustainment of DoD combat systems is an annual multi-billion-dollar expense and reduces the readiness rates of critical military combat systems. Removing combat systems for extended periods limits the readiness of all DoD services and compromises the readiness of the warfighter. Combat systems that require precision coating removal around compromised structures require a precision tool that does not impact the structure leading to failure.



### Technology Solution Statement:

The 3-in-1 surface preparation technology, PlasmaBlast, delivers an advanced, environmentally responsible solution for precision coating removal, surface cleaning, and adhesion promotion across a wide range of military and industrial platforms. Unlike conventional abrasive blasting or chemical stripping methods, PlasmaBlast operates without expendable media or hazardous chemicals, eliminating over 90% of the de-painting waste stream. This media-free process dramatically reduces environmental impact, simplifies containment and cleanup, and lowers sustainment costs.

PlasmaBlast safely removes partial or complete coating layers while preserving the integrity of the underlying substrate, making it ideal for sensitive, high-value, and mission-critical assets. The system enables effective debris capture during operation, minimizing contamination risks to adjacent systems and work areas.

Designed with operator safety and environmental compliance as priorities, PlasmaBlast presents no undue occupational hazards and meets stringent environmental and safety standards.

Requiring only electricity and compressed air, PlasmaBlast features rapid setup typically less than five minutes, and is lightweight and highly portable. Its modular design supports both depot-level maintenance and forward-operating deployments where mission readiness, speed, and operational flexibility are essential.

PlasmaBlast significantly enhances the Department of Defense's maintenance and sustainment capabilities by providing a fast, efficient, and safe surface preparation technology that supports

increased readiness, reduces downtime, and aligns with the Department's goals for environmental stewardship, safety, and cost-effective sustainment.

**Benefits Statement:**

PlasmaBlast offers a versatile, 3-in-1 surface preparation solution that removes coatings, cleans surfaces, and promotes adhesion in a single, streamlined process. Operating without abrasive media or hazardous chemicals, it requires only compressed air and electricity, eliminating the need for consumables and significantly reducing environmental impact.

The system is designed with safety and sustainability in mind—creating no harmful waste streams, minimizing containment and cleanup requirements. Its lightweight, portable design enables a rapid five-minute setup, making it ideal for both shop and field environments, including forward-deployed locations.

PlasmaBlast is fast to train, simple to operate, and requires minimal maintenance, lowering operational complexity and sustainment costs. By eliminating the costs associated with media, hazardous waste disposal, and complex containment, it delivers significant job cost reductions and improves overall maintenance efficiency.

This innovative technology provides a safer, cleaner, and more cost-effective alternative to traditional coating removal and surface preparation methods, helping to improve readiness and reduce downtime across a wide range of platforms and applications.

# BlastOne International

Focus Area: Coating and Corrosion Prevention

## Contact

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614-695-5723



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.

## Velocity Systems

### 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 under increasing pressure to deliver higher productivity, greater cost efficiency, and improved 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 specifically 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. When combined, these components act as a force multiplier, delivering exponential gains in productivity, reliability, and environmental performance 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.

## Contact

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8tree makes AR-enabled 3D surface inspection tools that are designed with a thorough and in-depth understanding of the surface inspection challenges facing maintainers. By designing our tools around specific applications (dent-mapping, blend-out, fastener-flushness and panel alignment) we empower maintainers with instantly actionable go/no-go answers (not just data) at the click of a button.

## AR-enabled real-time 3D digital damage-mapping tooling

### Problem Statement:

Airframe damage impacts mission capability and availability rates, thereby delaying warfighting efforts. Traditional inspection methods are subjective, time-consuming and error-prone, and thus risk warfighter safety.



### Technology Solution Statement:

8tree's dentCHECK is the world's only AR-enabled multi-spectral LED, structured light triangulation 3D scanner which is packaged as a real-time 3D damage-mapping tool. This COTS tool is purpose-built to empower the multi-capable maintainer to accelerate warfighter readiness. Hundreds of systems used daily across more than 5-dozen Commercial and Defense aerospace/aviation organizations globally.

### Benefits Statement:

dentCHECK® is the world's only AR-enabled 3D damage-mapping tool purpose-built to empower maintainers to accelerate warfighter readiness --

- 90% faster -- Rapidly and objectively dispositioning airframe & cargo-floor structural damage
- 25x more accurate -- Consistently capturing accurate real-time measurements that shrink Turn-around-Time
- 100% digitalized records -- Digitalizing the entire damage-mapping workflow – from inspection to reporting
- Zero subjectivity & human error -- Replacing traditional inspection methods that are error-prone, subjective and time-consuming
- 1-button operation: Designed for the multi-capable maintainer/airman to operate equally effectively in austere, contested and expeditionary environments, as well as in depot, base and hangar settings.
- ISO 17025 accredited; COTS; EAR99; NSN: 6675-01-686-4978.
- TRL-9 in commercial aviation sector

# FTL Labs Corporation

Focus Area: Enhanced Inspection

## Contact

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FTL Labs Corporation is a small engineering research and development firm in Amherst, Massachusetts. FTL was founded based on a team-building culture that enables us to solve complex multi-disciplinary problems in advanced technology areas with contributions of experts across the globe.

The people at FTL Labs are committed to pushing forward the cutting edge of technology. Working with ingenuity, integrity, and professionalism, we solve our customers' most challenging problems in aerospace, manufacturing, big data, medical, AI, and robotics sectors.

Some of FTL's capabilities include:

- Rapid Prototype Design and Engineering
- Optics, Imaging, and Sensing
- Fuels and Fluids Analysis
- Human Performance Optimization
- Biotechnology
- Big Data and Artificial Intelligence
- VR/AR and Advanced Interfaces
- Custom Software Solutions

The process of transforming enabling-technologies into profitable technology products requires orchestration of a variety of human resources including scientists, engineers, technicians, and business development professionals. FTL personnel have long experience with managing groups of interdisciplinary professionals and staying on-task, on-schedule, and on-budget.

## DADTMA (Distributed Acquisition Digital Twin Maintenance Architecture)

### Problem Statement:

Traditional Maintenance, Repair, and Overhaul (MRO) practices in the DoD are struggling to adapt to increasing complexities in aircraft maintenance and quality assurance processes, including the use of digital tools and automated technologies to capture maintenance data and streamline workflow management. Current processes are inefficient, requiring time-intensive human-performed inspections and data collection before, during, and after maintenance tasks. The process frequently requires tedious and error-prone record keeping with pen and paper before transcription to a computer for access by teams.



### Technology Solution Statement:

DADTMA is a software solution designed to collect, store, and analyze damage and repair data during naval depot maintenance and sustainment activities. DADTMA consists of a tablet app and a



web app working in concert to rapidly collect data and store it in a Digital Twin in a secure GovCloud database. It employs automated USB tool data entry, 2D and 3D imaging, graphical database storage, data mining tools, and graphical data analysis to locate and track maintenance issues that are otherwise difficult to discern. It enables communication of that information across the Navy's current software ecosystem. Ultimately DADTMA will provide a Naval Depot Maintenance and Sustainment tool that will increase the efficiency, repeatability, and accuracy of inspection results, for any asset type.

DADTMA integrates with USB tools used on depot shop floors and helps artisans organize that data by creating customized grids on 2D images of the work area. It then streamlines data sharing across sustainment roles by creating reports and integrating data to DADTMA's web app. DADTMA's website is accessible to anyone with the correct credentials, per our DoD customer's defined roles. Finally, DADTMA's Digital Twin provides predictive maintenance insights by comparing past maintenance events across a single or similar asset(s).

**Benefits Statement:**

Reducing costs and shortening maintenance turn-around times at aircraft depots is a high priority for the Navy. Responding to this need, DADTMA reduces manpower-intensive engineering costs associated with repair and maintenance inspections by accelerating data collection on depot floors and enabling the transfer of that data, along with asset and maintenance process information to the DADTMA Digital Twin. Primes such as Northrop Grumman anticipate a 10% time-reduction in inspections, yielding \$10M in savings in lifecycle cost for a single product.

# Hexagon

Focus Area: Enhanced Inspection

## Contact

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Hexagon is a global leader in digital reality solutions, combining sensor, software and autonomous technologies. We are putting data to work to boost efficiency, productivity, quality and safety across industrial, manufacturing, infrastructure, public sector, and mobility applications. Our technologies are shaping production and people-related ecosystems to become increasingly connected and autonomous – ensuring a scalable, sustainable future. Hexagon's Manufacturing Intelligence division provides solutions that use data from design and engineering, production and metrology to make manufacturing smarter. For more information, visit [hexagon.com/mi](https://hexagon.com/mi).

## Hexagon – Portable Scanning, probing, NDT/NDI, and much more.

### Problem Statement:

When it comes to precision measurement, industry professionals face the challenge of requiring multiple devices to perform a variety of quality assessments, from non-destructive testing (NDT) to laser scanning and probing. This not only complicates the workflow but also escalates costs and training requirements. The need is for a singular, versatile system that can seamlessly transition between NDT, high-resolution laser scanning, and precise probing without sacrificing accuracy, efficiency, or functionality.



### Technology Solution Statement:

A multifunctional tool like Hexagon's Absolute Arm could resolve multi-tool complexities by consolidating quality assessment needs into one integrated solution, thereby optimizing the quality control process.

- 3D scan using the Absolute Scanner on small to large objects with Hexagon's AS1 and AS1-XL made for the Absolute Arm.

### Benefits Statement:

High accuracy measurements, with continual support.

- NDT Sensor
  - For most Metals
    - Capable to resolve volumetric flaws of 0.5mm and smaller
    - Compliant with most codes: ASTM, ASME, etc...
  - For most Welds
    - Capable of resolving through-wall extensions of 5-10%T
    - Compliant with most codes: ASTM, ASME, AWS, EN/ISO, API
  - For most Composites
    - CFRP / GFRP
    - Easy to resolve 2.5mm flaws (and smaller)
  - AS1 / AS1-XL Absolute Laser Scanner
    - Complete digitizing from small to very large parts

# LoneStar NDE Innovations

Focus Area: Enhanced Inspection

## Contact

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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

# TRI Austin

Focus Area: Enhanced Inspection

## Contact

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TRI Austin is a leading research and development organization specializing in advanced materials, nondestructive testing (NDT), and innovative engineering solutions. With a strong focus on cutting-edge technologies, TRI Austin serves industries such as defense, aerospace, energy, and manufacturing, delivering tailored solutions to meet complex technical challenges.

Our multidisciplinary team of mechanical, electrical, and computer science engineers, and software developers collaborates to design, prototype, and implement state-of-the-art systems that enhance operational efficiency, reliability, and safety. TRI Austin is renowned for its expertise in robotics, ultrasonic scanning, automated inspection systems, materials characterization, and leveraging these capabilities to drive innovation in critical applications.

As a trusted partner to government agencies and private sector clients, TRI Austin is committed to advancing the frontiers of technology through rigorous research, precision engineering, and a dedication to quality. Our mission is to provide transformative solutions that empower our clients to achieve their goals while maintaining the highest standards of performance and integrity.

## Cobots for NDI

### Problem Statement:

Inspections are difficult and that difficulty is increase by human factors. Those factors can be keeping track of 1200 fasteners on a wing being inspected or holding an inspection unit over you head to inspect those 1200 fasteners. While inspectors are holding the scanner over their head in a particular spot they also have to watch the inspection unit to verify that data is good and identify any defects.

### Technology Solution Statement:

TRI Austin will leverage previous experience in developing non-destructive inspection methodologies and integrating them with collaborative robots to demonstrate this capability on aircraft. The technology areas of interest defined by the USN include:

1. Advanced Robotic Systems Integration for Aircraft Maintenance and Repair
2. Human-Robot Collaboration and Safety in Aviation MRO
3. Emerging Technologies for Autonomous Aviation Maintenance

TRI has developed a demonstrator collaborative robot (cobot) that optimizes workflow efficiency and further develops Human-Robot Collaboration for use in overhaul maintenance and repair of aircraft.



**Benefits Statement:**

- Utilizing cobots will decrease inspector stress by eliminating manual probe holding and awkward arm positioning during scanning.
- Inspection quality will improve with automated data collection and saving, allowing the inspector to focus entirely on data quality
- Cobots allow documentation of inspection sites to verify 100% inspection has been achieved
- Preliminary demonstrations have indicated a 20% decrease in inspection time
- Cobots allow for significantly improved accuracy during inspections as compared to inspections done by hand



# American GFM Corporation

Focus Area: Reliability Improvement (Hardware)

## Contact

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The GFM organization is a custom machine builder and operates globally in a variety of industries, such as the steel, automotive, aircraft, and defense industries. For over 70 years, we have been developing machines for a wide variety of production technologies. Included are radial forging machines, ultrasonic cutting machines, high speed routers and tape laying machines for composites.

GFM Radial Forging technology provides a leading-edge solution for the production of steel and specialty alloys. Additionally, we can provide turnkey solutions for high volume production of hollow components such as rifled firearm barrels, lightweight components for defense vehicles and turbine blade preforms. Complimentary technologies can be integrated to provide a fully automated manufacturing cell.

Our Ultrasonic Cutting, tape laying, and routing technologies are used extensively in the aviation and defense industry as part of the production process for composite aircraft components in both commercial and military sectors. These technologies can be combined with peripheral technologies to create complete manufacturing solutions for the composites industry.

GFM is developing solutions to automate composite repair to improve and modernize the composites repair process by developing stationary and portable solutions, based on our core machine tool technologies. These systems will allow for enhanced efficiency, accuracy, and will prove to be cost-effective for both commercial and military sectors. NDI, digitizing, laser paint removal and laser projection are among the technologies that can be integrated into the automated repair solution.

GFM is well suited to provide automated manufacturing and maintenance/repair innovations for our nation's defense organizations.

## Composite Repair

### Problem Statement:

- The frequency of minor accidental damage during the service life of composite structures has become high, and the resultant repair work has a significant impact on maintenance costs
- Existing manual repair procedures are outdated, error prone and exhaustive
- The repair method is not suitable for on-site repair because of lack of knowledge, skills or equipment, which is a time, cost or logistical burden
- A validation of the repair to predict the further service life is not possible either simply due to missing data, records or due to quality fluctuations of repair work



**Technology Solution Statement:**

GFM Advanced 5-axis milling/scarfing machine with advanced CNC machining and programming capabilities.

- After machining, the machining path is used to determine the exact geometry of the required repair plies.
- Open control to add all necessary functions (e.g. digitizing, NDI) to the editing and process recording functions.
- Integrated database for repair philosophy and continuous further development of best practice concepts

**Benefits Statement:**

- GFM high-precision CNC technology eliminates the effects of human error
- Complex task, but easy to use, facilitated by automatic repair program and geometry of repair plies generation
- Versatile and robust equipment with flexibility to handle a wide range of repair applications
- Suitable for larger volumes of repeatable part types such as rotor blades, leading edges, etc. that can be removed from vehicle.
- Effective and automatic application of the best practice repair strategies.
- Recording and tracking of the history enables future predictability of the further life cycle.

# Andromeda Systems Incorporated

Focus Area: Reliability Improvement (Hardware)

## Contact

Dennis West

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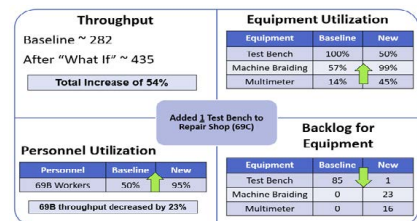
Andromeda Systems Incorporated provides tools and services to assist Physical Asset Owners, Fleet Managers, and Military Program Managers in gaining critical insights into their equipment's performance, identifying system improvements, optimizing operations & support, making better business decisions, and achieving measurable life-cycle cost savings.

As a leading provider of professional and high technology services and solutions, ASI serves the Department of Defense, U.S. civilian agencies and private industry. ASI is a NSAI ISO 9001:2015 Certified company.

## Maintenance Optimization

### Problem Statement:

COMFRC is responsible for the arduous task of managing a complex network of Depots, I-level locations, and field sites to provide maintenance, repairs, overhauls, and parts manufacturing for the NAE. An integrated approach is necessary to optimize business practices and resource allocations in order to maximize weapons systems availability to the Warfighter.



### Technology Solution Statement:

An enterprise wide modeling and simulation application is being developed that takes advantage of:

- Advanced computing capabilities
- Operations Research (OR) techniques
- Near Real-time data collection and processing of current NAE data systems

### Benefits Statement:

- Application provides one integrated solution that considers impact of decisions made at a particular site to the other sites, and the enterprise as a whole
- Ability to run various scenarios to evaluate potential impact of any decisions or improvement initiatives
- Optimization algorithms allow for intelligent resource allocations, routing of workload, personnel scheduling
- Simple user interface allows stakeholders to make near real-time decisions to support enterprise operations in a dynamic environment

# Merge Plot

Focus Area: Reliability Improvement (Hardware)

## Contact

Sean Danowski  
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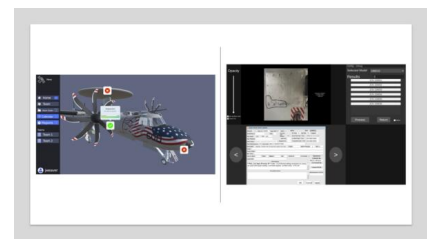


Merge Plot is a veteran-led technology company specializing in aerospace and defense. Established in 2024 as a Veteran-Owned Small Business (VOSB) based in the Greater Philadelphia area, our mission is to support the U.S. government, its allies, and commercial partners with advanced capabilities to address 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.

# PartWorks LLC

Focus Area: Reliability Improvement (Hardware)

## Contact

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PartWorks LLC delivers field-deployable technologies for digital MRO, repair validation, and aircraft structural enhancement. Originally conceived to address the challenges of repairing structural fastener holes in hybrid materials subject to galvanic corrosion, our platform integrates point-of-action data acquisition, geometry capture, and component traceability to enable full repair lifecycle documentation and structural hole repair implementation.

The RepAR™ system generates instantaneous local coordinate systems without external trackers, allowing fast, accurate capture of as-found geometry. The PrecisionFx tool supports high-force, high-speed bushing installation with real-time digital logging of critical process parameters—ensuring traceability and validation at the point of action. TitanLoc bushings emulate shrink-fit performance and have demonstrated superior average push-out resistance, improving long-term durability. StrataX bushings incorporate engineered residual stress profiles that mitigate crack growth and extend service life. EdgeMax repairs corroded or damaged fastener holes using geometry-preserving methods that maximize edge margin retention, enhancing structural reliability. These integrated solutions serve both defense and commercial aerospace customers who require fast, reliable, and digitally traceable repairs across global maintenance operations.

## Field-deployable technologies for digital MRO, repair validation, and aircraft structural enhancement

### Problem Statement:

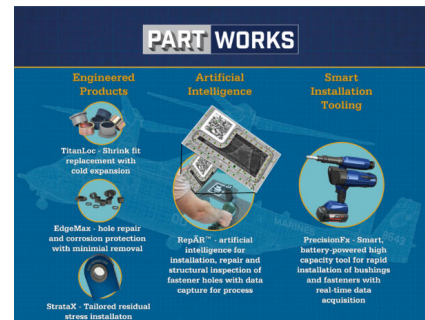
- Geometry loss and overdrilling reduce edge margin during repairs
- Fatigue cracks and corrosion undermine structural joints
- Manual repair records lack consistency and retrievability
- Current tooling lacks integrated digital traceability

### Technology Solution Statement:

- EdgeMax repairs corroded holes while preserving edge geometry
- StrataX mitigates fatigue with compressive stress-engineered bushings
- PrecisionFx enables real-time digital validation of installations
- TitanLoc enhances reliability with high push-out resistance

### Benefits Statement:

- Maintains structural integrity by preserving original margins
- Reduces fatigue risk via engineered stress profiles
- Enables RCM through full-lifecycle repair traceability
- Improves repair speed, accuracy, and data quality
- Avoids need for stationary pumps and attached hydraulic hoses common to traditional high pull-force tools





# TowFLEX Miltech, Inc.

Focus Area: Reliability Improvement (Hardware)

## Contact

Dr. Tobias Strobl (CEO, TowFLEX Miltech)  
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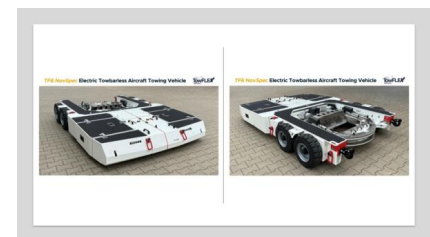
TowFLEX Miltech is a U.S.-based defense and dual-use venture specializing in the development of advanced, electric aircraft towing and ground support solutions for contested logistics environments. Headquartered in New Castle, DE, TowFLEX Miltech designs and delivers towbarless, remote-controlled, and semi-autonomous towing vehicles that meet the evolving needs of the U.S. Navy and U.S. Marine Corps for efficient, secure, and labor-saving aircraft handling during maintenance, repair, and overhaul (MRO) operations.

Our flagship platforms – including the TF5 and TF6 MilSpec series – feature a patented 360° turntable lifting unit, fully electric drivetrains, and a modular eCube as the vehicle's central control unit, enabling single-operator towing of fixed-/rotary-wing aircraft without stressing the nose landing gear (NLG). With over 100 MilSpec units already fielded across the U.S. DoD/Joint Force and NATO allied forces, TowFLEX Miltech combines commercial agility with defense-grade reliability. We are actively collaborating with various components across the U.S. DoD and within the NATO to support the modernization of Naval aviation logistics through advanced electrified GSE.

## Electric, Remote-controlled Solutions for Land-based/Shipboard Aircraft Towing

### Problem Statement:

Naval Aviation maintenance operations face persistent challenges in the safe, efficient, and secure towing of fixed-wing and rotary-wing aircraft within FRCs and flight line environments. Legacy diesel-powered tow tractors rely on manpower-intensive systems based on using towbars which increase the risk of NLG damage, introduce operational delays, and generate hazardous exhaust and noise. These platforms lack precision maneuverability, pose visibility limitations, and are incompatible with the Navy's evolving requirements for reduced manning, data security, and environmental compliance. Current solutions do not support semi-autonomous functionality or secure operation in wireless-denied environments.



### Technology Solution Statement:

TowFLEX Miltech provides a family of electric, towbarless aircraft towing vehicles engineered for precision, safety, and operational efficiency in military aviation environments. Our TF5 and TF6 MilSpec series platforms are built on a patented 360° turntable lifting unit that enables direct NLG engagement without the need for a towbar. This unique capability allows aircraft to be maneuvered omni-directionally without turning the NLG, significantly reducing mechanical stress and the risk of damage during towing and repositioning.

Designed with modularity and maintainability in mind, the vehicles incorporate ruggedized electric drivetrains, swappable eCube vehicle control units, and lithium iron phosphate (LFP) battery systems, enabling rapid turnaround, minimal downtime, and compatibility with both flight line and

hangar operations. The remote-controlled functionality empowers a single operator to execute complex towing tasks with precision, improving crew safety and reducing personnel requirements.

TowFLEXX Miltech's technology is fielded and proven across U.S. DoD/Joint Force and NATO allied installations and is engineered to support a wide range of aircraft, including F/A-18, F-35B/C, V-22, E-2D, and MH-60 platforms. Our systems meet Department of the Navy and U.S. DoD operational needs for streamlined aircraft ground handling, emissions reduction, and mission-ready flexibility, ultimately making our versatile TowFLEXX Miltech aircraft towing solutions a force-multiplying capability for modern sustainment and logistics operations.

**Benefits Statement:**

TowFLEXX Miltech delivers advanced, towbarless electric towing solutions that directly enhance the safety, efficiency, and reliability of Naval aircraft ground handling operations. Our TF5 and TF6 MilSpec platforms reduce manning requirements by enabling single-operator control and eliminate the need for towbars, minimizing NLG stress and the risk of towing-related damage. With zero-emission electric drivetrains, our systems improve hangar and flight line working conditions and support environmental compliance goals.

Backed by proven field deployments across U.S. DoD installations and Government-sponsored development efforts, the TowFLEXX Miltech electric platforms for towing of DoD aircraft accelerate readiness and reduce lifecycle costs. For FRCs and shipboard applications, our scalable, modular systems support a broad range of legacy and next-generation aircraft, improving overall sustainment performance in contested and complex maintenance scenarios.

# Beast Code

Focus Area: Workforce Development/Visualization

## Contact

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**BEAST  
CODE**  
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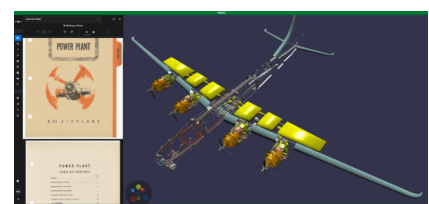
Beast Code, LLC is a software solutions company that specializes in software development, data aggregation, integration, and visualization. We developed Beast Core, a software solution designed to provide users with access to information necessary for informed decision-making through data integration and modern UI/UX. This tool is utilized to support design, training, and sustainment activities by aggregating data from multiple disparate sources and visualizing relevant information in an immersive, 3D environment. Beast Core is containerized and meets approval at Impact Levels 2, 4, 5, and 6. It is authorized to operate across multiple DoD networks, available in DoD's Iron Bank repository, and can be deployed across various environments, including cloud-based, on-premises, and disconnected devices, achieving a TRL of 9. With a focus on performance and reliability, users can access their data from anywhere in the world, including DDIL environments.

Beast Core's immersive 3D environments for physical systems are designed to be compatible with government-furnished equipment. Beast Core can digitally convert an organization's data (i.e., traditional print materials, PDFs, and 2D technical documentation) and transform it into a 3D digital twin, integrating seamlessly with other applications through open architecture. This lightweight representation is easily distributed to end users who are connected with existing logistics systems. Utilizing AI, Beast Core makes documents searchable, parsing text to create hyperlinks to 3D models. Beast Core also integrates with various commercial products, including PLM and MBSE solutions, predictive analytics, AI, and IoT software suites, providing users with real-time updates through a comprehensive digital technology ecosystem.

## Beast Core

### Problem Statement:

1. Make Data Visible – Consumers can locate the needed data.
2. Make Data Accessible – Consumers can retrieve the data.
3. Make Data Understandable – Consumers can recognize the content, context, and applicability.
4. Make Data Linked – Consumers can exploit data elements through innate relationships.
5. Make Data Trustworthy – Consumers can be confident in all aspects of data for decision-making.
6. Make Data Interoperable – Consumers have a common representation/ comprehension of data.
7. Make Data Secure – Consumers know that data is protected from unauthorized use/manipulation.



**Technology Solution Statement:**

Beast Core extracts, relates, and visualizes information from digital silos, linking it back to its authoritative source. This capability enables instantaneous computation of downstream effects in structural, mechanical, electrical, and network systems. The interactive model provides insights used to visualize and manage complex maintenance workflows, using rule sets to simulate equipment behaviors. This facilitates data-driven decisions regarding technology, scheduling, requirements, and costs that evolve with the weapon system throughout its lifecycle.

**Benefits Statement:**

Beast Code delivers advanced data aggregation with an intuitive experience, empowering users to seamlessly navigate 3D models, metadata, and technical documents enabling faster, more informed decision making. Beast Core includes a flexible plug-in architecture, built to integrate with industry leading tools such as Product Lifecycle Management (PLM), Maintenance Repair and Overhaul (MRO), Predictive Analytics, Artificial Intelligence, Model-Based Systems Engineering (MBSE) and Additive Manufacturing. Through a drag-and-drop interface users can manage authoritative data and create interactive learning experiences, while developers can build new customized capabilities.

# BG Workforce Solutions

Focus Area: Workforce Development/Visualization



## Contact

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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.

Our software solutions include:

- Gemini™, a digital training tool and point-of-work aid integrating Extended Reality (XR) experiences, digitized forms, 3D models & simulations, and technical documentation for training, job performance, and troubleshooting support
- SMARTS™, a workforce evaluation system tracking individual skills, capabilities, and credentials within an organization
- CertiFLEX™, an online training delivery platform with individual or collective training modules.
- TAILWIND™, an integrated, customizable Artificial Intelligence (AI) agent built as a technical subject matter expert (SME) for training and job support.

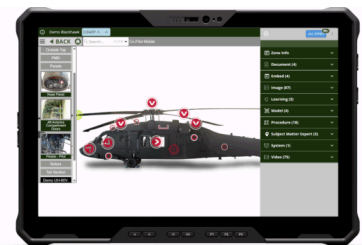
BG Workforce also provides turnkey training labs and classrooms that include all required equipment, materials, curriculum, simulations, and instructors. Our products are designed for rapid scaling across DoD operations, from local bases to global theaters. Currently deployed to support high-velocity training at multiple sites in the Army Organic Industrial Base (AOIB) and advanced manufacturing at the INDOPACOM Advanced Manufacturing Training Suite (AMTS) in Hawai'i, these tools are driving measurable improvements in workforce modernization & readiness initiatives. Early adopters report enhanced training efficiency and workforce preparedness, with detailed case studies available upon request.

Our organization has achieved an Authorization to Operate (ATO) at Impact Level 4 (IL4) in the DoD GovCloud environment for both Gemini™ and SMARTS™.

## 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)

# F3 Solutions

Focus Area: Workforce Development/Visualization

## Contact

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F3 Solutions is a limited liability company located in Warner Robins, GA. We provide a high level of professional engineering, virtual reality training simulations, facilities maintenance and consulting services predominantly for government clients.

## Virtual Reality Paint Trainer

### Problem Statement:

USG has a need to train new and existing painters in proper techniques, in a process order driven environment to improve painter efficiency, reduce flow days and rework due to improper painting/depainting techniques.



### Technology Solution Statement:

The VRPT solution was built to meet the requirements and provide painters with basic skills to create consistency individually and as a team. Current and projected workload requires aircraft painters to possess the ability to prepare surfaces and paint on all shifts, on all military assets, and in all facilities in accordance with safety regulations and T.O.'s 1-1-691 and 1-1-8, respectively.

This system allows users to paint individually and as a team and renders and simulates lifelike Global Hawk, C-5, F-16, A-10, KC-135, KC-46, F-15, C-130, C-17 aircraft, located in the actual hangers they are maintained. (i.e., various painting peripherals like paint carts, manlifts, lighting, etc.). Training modules include primer/topcoat application, depainting (chemical, PMB and hand sanding), small parts painting, and specialized F-15/C-130 radome coating applications. To support training improvements, the solution also integrates a Learning Management System (LMS) that records all user activity/data.

### Benefits Statement:

F3 developed a high accuracy, user friendly virtual reality paint training (VRPT) simulator to a deployment ready state. The VRPT is highly adaptable, mimicking fully-customized painting and coating production environments, and capable of simulating full-size aircraft. The solution has definitive capabilities over existing technologies, resulting in measurable improvements in the skill level of painters, maximized planning of resources, and increased throughput of aircraft and parts.

The VRPT has already proven its efficacy. C-17 PDM for aircraft painting has saved 5 flow days on each C-17 due to drastically reduced paint defects. The VRPT has trained over 350 personnel at Robins AFB has seen an increase in transfer efficiency of over 40%.

# 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). Electrical and mechanical engineering courses, taught by nationally recognized NCSU faculty, are delivered live from the Raleigh campus. Havelock students participate in these courses in dedicated classrooms equipped for interactive, synchronous course delivery.

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. The Havelock Engineering program produces a workforce of residents who want to permanently live and work as professional engineers in Eastern North Carolina.

## 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.

# Vieaura

Focus Area: Workforce Development/Visualization

## Contact

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*vieaura*

What if a young Marine could perform expert-level maintenance on complex military equipment like an expert – with zero prior training? Vieaura Inc. has cracked the code to address this challenge. Its AI-powered technology specializing in No-Code AI & AR platforms that transform complex maintenance, inspection, and training operations across defense and industrial sectors. Our solutions integrate advanced artificial intelligence, augmented reality, and computer vision to deliver context-aware work instructions and automated decision support systems.

Our primary customer base includes Department of Defense agencies (Navy, Marine Corps, Army, Air Force), manufacturing companies, and asset-heavy industries requiring enhanced operational efficiency and reduced training requirements. Through partnerships with Augusta University, the Georgia Tech Adv Manufacturing Inst. and NVIDIA Inception program membership, we combine cutting-edge research capabilities with proven commercial deployment experience.

Key products include MENTOR (Maintenance Enhancement through Neural-assisted Technical Operations and Repair) for AR-guided maintenance, ShipLens for naval vessel inspection in mixed reality, RailSight AR for railroad infrastructure assessment, CommandSense for military decision support, ANDA for AI-enabled NEPA document assistance, and RACE for rapid adaptive course environment development. These solutions address critical challenges in knowledge transfer, operational readiness, and workforce development across the defense enterprise.

Want to see a live demo that will fundamentally change how you think about maintenance operations? Visit our booth. It will be time well spent. We look forward to helping transform your operations.

## The AI That Turns Anyone Into A Maintenance Expert In Minutes

### Problem Statement:

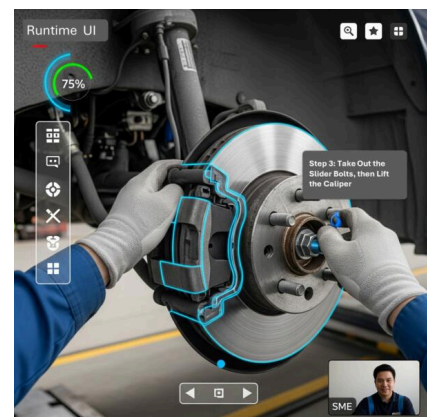
The military has a maintenance expertise crisis that's getting worse:

- Complex equipment demands expertise that takes YEARS to develop
- Critical missions fail because the "one guy who knows how to fix it" isn't available
- Training bottlenecks create operational readiness gaps
- 45% personnel turnover means constant skill drain

Bottom line: Our equipment is getting more complex while our workforce is becoming less experienced. This isn't sustainable. We needed a breakthrough, not an improvement.

### Technology Solution Statement:

We built an AI that downloads 30 years of maintenance expertise directly into anyone's brain through AR:



- Scalable computer vision recognizes any component in real time (95%+ accuracy)
  - AI overlays expert procedures directly onto physical equipment
  - Remote experts appear virtually for complex scenarios
  - One-shot learning adapts to new equipment in real-time
  - Result: Zero-experience operators performing expert-level maintenance in hours, not months
- It's like having the world's best technician standing next to every maintenance task.

**Benefits Statement:**

This isn't incremental improvement - it's operational transformation:

- Training Revolution: Expert maintenance capability in hours vs. months
- Mission Multiplication: Every operator becomes a maintenance specialist instantly
- Crisis Solution: Equipment expertise independent of personnel turnover
- Cost Devastation: Eliminates massive training programs while improving quality
- Process Auditability: End to end data capture powering AI Insights & analytics
- Strategic Advantage: Maintenance operations possible anywhere, anytime, with minimal personnel