

## MAY 2020 | NAMC MEMBER SPOTLIGHT

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EOS Defense Systems USA

Steelhead Composites Inc.

University of Dayton Research Institute

Mistral, Inc.

W.S. Darley & Co.

SAAB Defense and Security USA LLC

Independent Rough Terrain Center LLC

# Interested in being showcased? Submit your!

## Note:

NAMC will not alter submitted content.

Please make sure all information is correct and signed off on by your organization.



## ARCHITECTURE, SECURITY, AND MODULARITY



## CURTISS-WRIGHT DEFENSE SOLUTONS | Ashburn, VA

POC: John Ormsby | jormsby@curtisswright.com | www.curtisswrightds.com

#### What do you consider your organization's differentiator?

Curtiss-Wright is certified Non-Traditional Defense Contractor (NTDC) recognized around the world as one of the most innovative designers and manufacturers of rugged and secure mission-critical computing 8 networking solutions for the defense industry.. System integrators trust Curtiss-Wright to provide the expertise, innovation, security, and experience needed for mission success through:

- Secure solutions based on open standards to simplify integration and upgrades, reduce program risk, and lower program costs
- Advanced design and manufacturing for COTS modules, subsystems and fully integrated systems
- Proven ruggedization processes ensure our solutions withstand extreme temperatures, shock and vibration environments.
- Expanded cyber security measures include rigorous supply chain processes that protect the integrity of all components on every module, subsystem, and system.
- Experienced program management teams to ensure program success

## What capability gaps are you able to fill and which industry colleagues would you like to know about them?

Curtiss-Wright supports a wide range of critical computing and networking technologies required by today's most demanding military applications. Through leadership in standards bodies, research and adoption of new technologies, Curtiss-Wright fully supports Open Architecture initiatives including CMOSS, MORA, SOSA<sup>TM</sup>, VICTORY<sup>TM</sup>, OpenVPX, VME, FACE<sup>TM</sup>, FMC, XMC, COM-Express, SMARC, PCIe104, and Mini-PCIe. Curtiss-Wright has the experience and expertise to mitigate challenges in:

- Packaging for ruggedization in ground vehicle applications including compliance to ATPD-2404 standards, thermal management, ruggedization, signal integrity optimization, and structural analysis
- Qualification of electronics and to MIL-STD-810, MIL-STD-461, MIL-STD-1275, MIL-STD-704, DO-160, and other standards.
- Trusted / Secure Computing including cybersecurity data and technology protection anti-tamper, information assurance, trusted processes, and trusted suppliers
- High technology readiness level (TRL) systems with roadmaps for new technology insertion and obsolescence mitigation

#### What are your teaming goals within NAMC?

- To expedite innovation, development, and production of electronic systems solutions for the war fighter
- Aid DoD, prime contractors, and system integrators with rapid development as an NTDC.
- Partner with software companies to reduce system integrator development time and risk.

A-PNT C4ISR/EW Modular Open Suite of Standards (CMOSS)							CMOSS) H	lardware	ardware Command &			Communica	tions Crew D		splay
	Cybersecurity Data Sto		Data Stora	age	e Electronics Encry		ryption	Fire Control Imag		lmagi	e & Display Processing		Mission Computing		ing
I	Open System Architecture		Sit	ituational Awareness Sys		Systen	System Design & Engineering			Turret C	ontrol Aiming l	Stabil	ization		





## **AUTONOMY**



## BOKAM ENGINEERING, INC. | Santa Ana, CA

POC: Jane Kamenster | janek@bokam.com | www.bokam.com

#### What is something unique about your product or service?

Bokam Engineering provides the only wet open cockpit submersible controls rate up to 1,000 foot of crush depth.

## What capability gaps are you able to fill and which industry colleagues would you like to know about them?

Bokam Engineering provides a universal controller with open architecture that is software agnostic, allowing Bokam's controllers to work across all next generation combat vehicles, to steer vehicles, fly and watch live drone footage, and fire mounted weapons. Bokam's one controller can be configured to work with vehicles produced by different primes and teams, allowing more battlefield redundancy.

#### What are your teaming goals within NAMC?

Bokam Engineering wishes to team with NAMC members to get current awarded basket funded, and vital vehicle autonomous steering controls for the next generation of vehicles.

Drive By	Wire	Explosive En	vironment Componer	s Extreme Environment Multi-Axis Force Sensors					
Steering	Systems	Submer	sible Systems & Con	iponents U	AV/UGV/ROV Controls	Universal Controller			
Yokes	Yokes Vehicle		Pedals						





## **EXTERNAL SYSTEMS**



## EOS DEFENSE SYSTEMS USA | Huntsville, AL

POC: Chad Lemond | clemond@eosdsusa.com | www.eosdsusa.com | in

## What is something unique about your product or service?

Highly precise remote weapons stations due to proprietary algorithms that compensate for atmospheric conditions, gun attributes and ammunition characteristics, which deliver unmatched accuracy of less than 1 milliradian dispersion at extended ranges.

## What do you consider your organization's differentiator?

Proven, interoperable capability to fire a 30mm (M230LF / XM914) mounted RWS and Javelin ATGM achieving direct hits from a system that weights less than 1000 lbs. above the roofline. Provides even very light mobility platforms with a credible anti-armor capacity.

#### What capability gaps are you able to fill and which industry colleagues would you like to know about them?

Our demonstrated C-UAS capability, on a system with the direct firepower of a 30x113mm, especially with the potential of the XM914 fused rounds, along with our industry leading Detect (12+km)/Recognize(5+km)/Identify(4+km) ability of the sensor unit, provides both advanced/reconnaissance elements with a counter-recon, self defense and C-UAS asset. SOF, USMC and Army recon and cavalry elements would benefit from this complete package lethality platform.

Anti-Tank Guided Missile	C-UAS	Ele	ctronics	Lethality	Precision	Remote Weapons S	Station (RWS)	Sensors
Surface-To-Air-Missile	Survivabili	ity	Stabilized	l Vehicle	e & Platform S	ystem Integration	30mm	





## MOBILITY



## STEELHEAD COMPOSITES INC. | Golden, CO

POC: Steven C Arzberger | sarzberger@steelheadcomposites.com | www.steelheadcomposites.com | in in 1500



#### What do you consider your organization's differentiator?

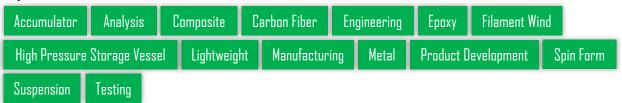
What do you consider your organization's differentiator? Steelhead is a global leader in the product development and manufacture of a wide rance of storage vessel products. Our storage vessel products are the most robust and safest available in the world. We offer gas storage products for a wide range of markets including transportation, marine, aeronautical, oil and gas exploration, medical and space. Our products range from zero-emission, clean energy (hydrogen) to affordable space travel.

## What are you most proud of?

During the COVID-19 pandemic, the Steelhead team demonstrated resilience and humanitarian aid by performing a manufacturing pivot, providing products for medical grade oxygen therapy that is necessary for life support and recovery for approximately 20% of contracted patient. Steelhead is proud of our team response, including a devoted and unified attitude and approach to maintaining operations to help save lives. We continue efforts to establish products that will enhance health care options across the globe and specifically, for developing countries that do not have access to medical grade oxygen and/or consistent power (in medical facilities)

#### What are your teaming goals within NAMC?

Steelhead is seeking partnerships to provide value as a vendor of lightweight, high pressure gas storage, suspension system, fluid power or accumulator products to larger firms specializing in systems integrations; we desire to work together to meet the needs of the U.S. government and military. We are a robust non-traditional, small business comprised of 25 employees. Our "small and mighty" team is responsible for serving the needs of more than 100 customers across 26 countries, since establishment in 2012. Our strengths are in our product development and manufacture (read execution). We consistently offer unique, value added products that operate in challenging environments. Our storage vessel products are the most reliable, consistent and safe ones on the planet.



## MAY 2020 MEMBER SPOTLIGHT



## **MODELING & SIMULATION**

## University of Dayton Research Institute

## UNIVERSITY OF DAYTON RESEARCH INSTITUTE | Dayton, OH

POC: Dave Dunn | David.Dunn@udri.udayton.edu | https://udayton.edu/udri/ | im

#### What do you consider your organization's differentiator?

Over the course of more than 60 years, UDRI has become a globally recognized leader in research, development, and transition of technologies that have not only advanced science, but also benefited mankind. UDRI excels in advanced materials, engineering, aerospace technologies, structural physics, energy, sensors, and much more, growing from \$1 million in research revenue in its first year to over \$100 million in 2016--topping \$2 billion in cumulative sponsored research the same year.

## What do you want other NAMC Members to know about you?

UDRI is a nontraditional defense contractor, as a not-for-profit research institute which is part of a university. However, just because we're part of a university does not mean that we are the typical university-led research group. We have over 600 engineers and scientists on staff at UDRI, with access to SMEs and industry leaders from the University as well. UDRI is ranked first in the nation among all colleges and universities for sponsored materials research, per the National Science Foundation. In Ohio, UDRI is number one among colleges and universities receiving contracts and grants from the Department of Defense. Our major research areas include materials, energy and the environment, aero propulsion, structures, mechanical systems, sensors, and human factors.

#### How did your organization originate?

UDRI originated in 1956, seven years after the University of Dayton (UD) secured its first research contract (translating aircraft flight loads data for Wright-Patterson Air Force Base). The University had some 20 projects underway. John Westerheide, who had been hired to lead the University's first full-time researchers on a classified project, predicted that an organized research environment would be the only way to coordinate quickly growing efforts and position UD to compete with other universities and research organizations. Taking pen to paper, Westerheide crafted a seven-page proposal for the "establishment of a centralized research organization at the University of Dayton." On Sept. 1, 1956, UDRI was born.

Autonomous Navigation 8	Autonomous Navigation & Control			ubricants.	Life Cycle Management	Materials	Mability	
Modeling & Simulation	Modeling & Simulation Safety &		esting Sensors		Situational Awareness	Survivability		
System Design & Enginee	System Design & Engineering		Validation & Verification					





## **PLATFORMS**



MISTRAL, INC. | Bethesda, MD

POC: Ronnen Paytan | rpaytan@mistralgroup.com | Mistralinc.com | iii

## What is something unique about your product or service?

Cost-effective land/riverine/maritime steel/aluminum rust protection; no sandblasting required; non-toxic.

## Which Government Customer would you like to pitch your organization to?

GVSC: PEO GCS: PEO CS&CSS: NGCV CFT

## What capability gaps are you able to fill and which industry colleagues would you like to know about them?

Corrosion maintenance costs DOD about \$20B/yr. and up to 25% of every maintenance man-hour; Mistral is seeking to work with corrosion maintenance service providers and DEMs

Communications Corrosion Protec		ction	tion Electronics		Energy		Modeling & Simulation		Payloads Integration		
Perception & Situat	ional Awareness	Sens	ors	Surviva	bility	PI	atforms				





## PETROLEUM AND WATER SYSTEMS



W.S. DARLEY & Co. | Itasca, IL

POC: George McCullough | georgemccullough@darley.com | www.darley.com | in f

## What are your organizational goals?

TO PASSIONATELY SERVE THE WORLD'S FIRST RESPONDER AND TACTICAL COMMUNITIES BY PROVIDING HIGH QUALITY, SAFE AND INNOVATIVE PRODUCTS WITH UNMATCHED COMMITMENT AND SERVICE.

## What do you want other NAMC Members to know about you?

We are financially stable, manufacturer of pump systems, with low labor rates, ISO Certified. We have CNC Machines, Lathes, Mills, presses, water jet cutters and more. we manufacture pumps, pump systems, and emergency response vehicles. We are prepared to perform system or vehicle assembly as well as subcontract machining capabilities to traditional primes.

## How did your organization originate?

Or organization originated in 1908 as a catalog based distribution company for the fire market. We grew into fire apparatus manufacturing in 1926 and pump manufacturing in 1933. Today we still have divisions that distribute defense tactical and expeditionary equipment and we still build trucks and pumps.

Assembly Line	CNC	ISO 9001-2015	Lathe	Machining	Mill	Press	Pump	Pump System
Small Business	Vehicl	e Manufacturing						





## SURVIVABILITY



## SAAB DEFENSE AND SECURITY USA LLC | Detroit, MI

POC: Steve Simmerer | stephen.simmerer@saabusa.com | www.saabusa.com

#### Which Government Customer would you like to pitch your organization to?

Saab would like to present our organization's capabilities to the Next Generation Combat Vehicle IPT, the Army Futures Command, and the military ground vehicle product managers such as PM Armored Fighting Vehicles (AFV), PM Armored Multi-Purpose Vehicle (AMPV), PM Main Battle Tank Systems (MBTS), PM Stryker Brigade Combat Team (SBCT), PM Mobile Protected Firepower (MPF), PM Next Generation Combat Vehicle (NGCV), PM Joint Light Tactical Vehicle (JLTV), PM Light Armored Vehicle (LAV), PM Armored Reconnaissance Vehicle (ARV), PM Amphibious Combat Vehicle (ACV), and PM Tank.

## What capability gaps are you able to fill and which industry colleagues would you like to know about them?

Saab offers a variety of products and capabilities to meet the survivability and training needs of the military ground vehicle community. This includes a laser warning system; a hostile fire protection capability; camouflage (mobile and static); a chemical, biological, radiological, and nuclear (CBRN) sensor integration capability; a full suite of vehicle electronics; and training & simulation products including embedded training capabilities. Saab would like military ground vehicle OEMs to understand our capabilities.

#### What do you want other NAMC Members to know about you?

Saab would like other NAMC Members to understand that we are a US company, headquartered in East Syracuse, NY with facilities in Ashburn, VA, Washington, DC, Lillington, NC, Orlando, FL, and West Lafayette, IN. Saab supports Land, Sea, and Air domains with a variety of products and capabilities including the Carl Gustav shoulder fired weapon, AT4, ULCANS (Ultra Lightweight Camouflage Net System), and radar systems for DOD and commercial applications.

Active Protecti	Active Protection Camouflage		Communications		CBRN	Electronics		Embedded Training			Hostile Fire Detection	
Laser Warning System Modeling		& Simulation	Simulation Payload		tegration Ra		r Sei	Sensors		ature Management		
Survivability	Survivability System Design & Engineering Services					Training & Simulation			le Electro	onics		
Vehicle Platfor	Vehicle Pri	otection										





## **TESTING & EVALUATION**



## INDEPENDENT ROUGH TERRAIN CENTER LLC. | San Antonin, TX

POC: William Mott | william.mott@irtc-tx.com | https://www.irtc-tx.com/ | iii

#### What is something unique about your product or service?

Our product is the RT240 RTCH, or Rough Terrain Container Handler. It is unique in the world as being the only RTCH that can fly aboard the US Air Force C17, providing expeditionary heavy lift capability for the DoD.

## Which Government Customer would you like to pitch your organization to?

The US Army. The Army has 900+ RTCHs that are moving 80% of the the containerized logistics. This is a key system with a rich history stemming from OIF/OEF and is ready for technology insertion. What started the century as a manned system could very well become the Army's first autonomous system providing logistics expertise through Al insertion.

## How did your organization originate?

Independent Rough Terrain Center LLC began as a US RTCH repair facility but expanded in 2008 to become the OEM. The RTCH has its home in Cibolo, Texas, a small suburb of San Antonio. Offered for sale in 2018, the old Kalmar Rough Terrain Center was reborn as a new, independent small business. The company took that name and self-determining Texas spirit to give birth to IRTC. The company is still the OEM, proudly sustaining a fleet of 1,300+ machines and bringing modern-day technology and ideas to the future of DoD containerized logistics. "Come and Lift It" is our motto; what solution can IRTC provide for you?

#### Capabilities: Prototyping

Electronics Energy Fuels		Fuels & L	ubricants	Human Machine Teaming	Life Cycle	Management	Manip	pulation	Materials
Modeling & Simulation Mobilit			Percept	ion & Situational Awareness	Powertraii	ı Prototyp	ing	Safety & Testing	
Sensors	Survivabilit	Survivability Suspensions		System Design & Engineering	Validation An	d Verific	cation		
Vehicle & P	latform Syste	m Integratio	ın						