

OPERATIONS AND MISSION SUPPORT

2020

The Sustainment Market Research Product and the Sustainment Industrial Base Intelligence Product

Sustainment is an online software platform that efficiently connects manufacturing vendors and heavy industry to enable American manufacturing. We built the Sustainment platform to enable small and medium-sized businesses such as machine shops, metalworking companies, engineering services, and manufacturing companies. Our platform gives these businesses the ability to showcase to, and be discovered by, government and large commercial procurement teams. These procurement teams receive the benefit of a radically streamlined effort for market research and vendor discovery for manufacturing services and the broader manufacturing ecosystem

Tether Tech Safety Wheel End Safety System

When bearing failure, lug nut failure or lug stud failure occurs on a semi-trailer axle, the TTS WESS will keep wheel assembly from separating from the trailer. In the event of bearing failure, the TTS WESS will reduce or nullify damage to spindle and provide mobility during a combat situation to reach safe haven for repairs. The TTS WESS will reduce injury, property damage, and fatalities by preventing wheel separation from lug nut and lug stud failures, as well as bearing failures.

BattleDeck Trailer Flooring System

We have truly created an innovative solution to a decades-old problem. VertiPrime has developed the BattleDeck® Trailer Floor System. With BattleDeck® we propose not just a replacement of traditional flooring materials; but also, a complete redesign of trailer decking for tactical use. From lighter in weight, flame resistance, complete protection against UV damage to 570% stronger when compared to the current Apitong wood.

Smart Tension Guard

Smart Tension Guard is a product that will be used in logistic applications. It will deliver immediate results to a portable electronic device of any irregularities with the tension of all tie down applications. This will provide efficiency and peace of mind for all private and public consumers, by confirming securement of their load being transported. In a military application it will also provide safety for operators not needing to exit the vehicle to check on load securement.

G-Drobe 360 Utility Lighting Harness

Techrein Public Safety Innovation is a wearable technology startup providing innovative safety solutions to personal protective equipment for government workers who work or engage in high risk/low lighting environments. Techrein's mission is to save lives by integrating wearable technology in everyday activities.

X-VAP Portable Self-Contained Solar Desalination

Katz Water Technologies will use solar desalination to provide sustainable sources of purified water. This water can meet the DOD mission needs for drinking, training, weapons testing, fire suppression, and sanitation. The technology is a patented heat exchanger which can perform the entire

water purification process within one small, modular, and inexpensive piece of equipment. Using exclusively solar power, remote forward deployments would have access to freshwater in areas without reliable power or thermal energy source. The system is designed to be easily transported by standard military vehicles and could be deployed anywhere with a previously unusable water source like seawater, contaminated lakes, and streams, or compromised well water.

My Smart Plans

MySmartPlans is transforming Knowledge for all stakeholders, MySmartPlans supports all data entry for all stakeholders, our staff (PIMS) along with our proprietary software provides audit ready data information on the project, we eliminate corruption, change orders and support life cycle management. MySmartPlans has supported over 1500 projects, including the NNSA, GSA, Corps of Engineers, and the Air Force.

Autonomous D2D Payload Transfer

Embracing biomimicry, swarm elements must physically interface with one another to aggregate the most efficient, modern warfare solutions. Autonomous drone to drone payload transfer is an elemental platform technology required for intraswarm cohesion; solving mission logistics and enabling significant advances in the swarm's ability to coordinate its efforts for complex and extended tasks.

Autonomous operators within the swarm will be specially designed to facilitate the needs of the whole, by possessing the ability to mechanically exchange payloads. This unique ability affords warfighting capabilities currently unattainable:

- Scalable and modular logistics solution with the ability to integrate services across a range of environments without mission interruption
- Indefinite mission range and duration
- Secure communication strategies, multi-dimensional and multi-modal
- Real time responsive tactics for a dynamic and continuously evolving theatre
- Discriminately target and neutralize individual micro targets
- Reduce unwanted collateral damage to persons or property

Facility Management Hardware & Software System

Qwik Response Systems is a customizable Facilities Management Hardware and Software System that connects every worker in the workplace with our standard universal military grade QRS IOT device. Qwik Response incorporates cutting edge 21st century technology into the QRS IOT Device... such as asset tracking, drone deployment, push to talk, real time reporting, text, talk, email, barometric/altitude reading and more all in one device eliminating the need for multiple devices being carried around. The QRS IOT device brings the "Internet of Things" into the battlefield, field hospital or military base increasing communication, accountability, productivity and safety for all military personnel.

Direct Digital Manufacturing of Aircraft Components in Combat Theatre

XTRU is a suite of manufacturing technologies, for making airframe components from metal sheets, bars and extrusions. Developed to produce structural components in aircraft grade aluminum without tooling. It combines two well understood forming technologies in a unique manner. An industrial prototype (TRL 7) has been developed to form extrusions that make up the structural parts of airframes. High-value Combat Asset repair parts often require expedited shipping, with a resulting large

fossil fuel foot-print. In-theater asset readiness is increased by local manufacturing capacity, while supply chain logistics are simplified for a range of common repairs.

Nomad Security Fence System

The Nomad Security Fence System is a portable protection fence that does not penetrate the ground or use external weights. The patented post assembly uses steel picket fence panels that can be installed on multiple terrains without the use of equipment and is easily transported. The modular components allow for added security and technology accessories. The Nomad system is a force multiplier that can fit into any technology category that would benefit from higher security but is restrained by ground conditions.

Drone hosted wireless sniffer

A drone hosted long range fully secure, undetectable wireless sniffer

Secure cellular network in a backpack

Multi frequency, undetectable complete cellular network with in backpack

SECURE HUMAN SIM

DNA linked human SIM for secure biometric identity

HEMPIRE NANOTHERM CASING

Hemp based light weight nanomaterial thermal case

Nov8tive Air Products

Our product line consist of the MP2 Multi-Port Shutoff Valve and the Eco-Reveal Brand of Heating, Air-conditioning, and Refrigeration Equipment and related HVACR Products.

(A) The Patented MP2 Multi-Port Shutoff Valve is a simple device, which provides isolation control of the four main components of the refrigeration circuit, ie; Evaporator, Condenser, Liquid Line, and Suction Line for refrigerant leak detection.

(B) The Eco-Reveal Brand of Air-conditioning and Refrigeration Equipment features the MP2 Multi-Port Shutoff Valve, which allows our brand to have in place an accurate and timesaving means of refrigerant leak detection. Our brand is the only brand on the market that features this eco-friendly capability.