

MILITARY SYSTEMS

TECHNOLOGY

ARGON ELECTRONICS (UK) LTD

high-fidelity simulators for chemical, biological, radiological nuclear & HazMat training

E-REG COATINGS LTD

Military, Defence & Specialist paint finishes

EPICOR SOFTWARE

global leader delivering business software solutions to the manufacturing, distribution, retail & services industries

NOPTEL OY

Military Rifle Marksmanship Training & Shooter Training Systems

PORT-A-COOL

Protecting our military heroes since 1990

PLUS...

BREAKING NEWS FROM...

AKZONOBEL

CUMMINS

IBODI

J&S FRANKLIN

PELI

SPINNER

Image Courtesy of Epicor



MD5 COMPACT DISCRIMINATORY METAL DETECTOR



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Welcome to this edition of the Military Systems & Technology newsletter.

As an established web portal for the International Defence & Aerospace Industry, we strive to provide a comprehensive and detailed listing of Military Equipment Suppliers, Products and Services. This newsletter is designed to keep you up-to-date with latest news and events within the Defence Industry's Governing Bodies, Organisations and Companies.

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ARGON™

World leaders in CBRN/
HazMat training systems

Argon Electronics (UK) Ltd



HIGH-FIDELITY SIMULATORS FOR CHEMICAL, BIOLOGICAL, RADIOLOGICAL NUCLEAR & HAZMAT TRAINING

Argon Electronics provides high-fidelity training simulators to enable safe, cost-effective chemical, biological, radiological nuclear (CBRN) and HazMat training exercises to take place both in open areas and internally at sensitive facilities.

Simulators to Enhance CBRN Training

Argon's advanced CBRN simulation platform enables you to create multiple simulated hazards over time within the same exercise, enabling students to practice how to use a number of different simulated detector technologies.

A modular design concept enables you to start with a basic simulation system and progress to our world renowned PlumeSIM instrumented wide-area and table-top CBRN training systems. This simple but effective approach enables you to ensure your students enjoy what we at Argon call 'real experience training' (RET).

In use by many Military, First Responder, and Nuclear emergency response teams, training facilities, specialist groups and industrial organisations worldwide, our CBRN training systems are making a real difference to response planning and preparedness.



Chemical Warfare - HazMat Training Simulators

Argon is proud of its relationship with many of the world's leading detector manufacturers. We have developed simulators for the JCAD, LCD3.2e, LCD3.3, AP2C, AP4C, RAIDM-100, Hapsite and ChemPro 100 and many other detectors.

The simulation technology employed enables your students to experience the difference between the use of different detector technologies such as ion mobility spectrometry, flame photometry and gas chromatography mass spectrometry (GC/MS).

These easy-to-use simulators do not require any consumables (with the exception of batteries), preventative maintenance or regular calibration, assuring you a low ongoing cost of ownership. You can set up most scenarios within 15 minutes and implement chemical warfare agent (CWA) / HazMat exercises in virtually any environment.

Argon simulators enable you to replicate persistency, wind direction, full and partial decontamination and certain simulated detector faults, in addition to depletion of simulated consumables such as hydrogen cylinder or sieve packs.

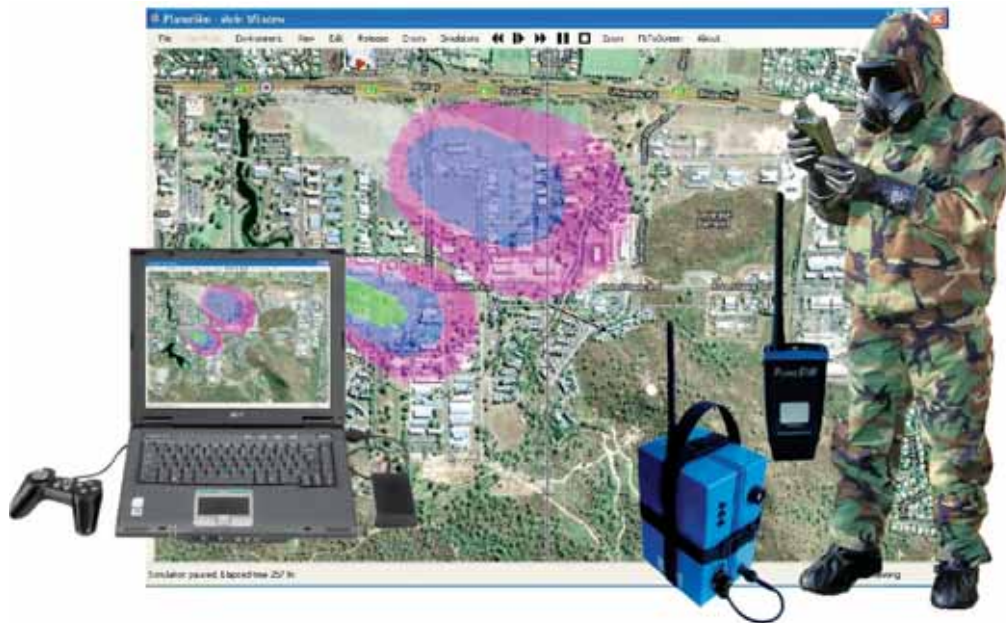
Electronic simulation sources mean you avoid the need to use chemical simulants and the challenges associated with health, safety and site remediation cost. You can also quickly set up exercises in sensitive locations without causing concern.

The simulators provide you with powerful student monitoring facilities so that you can ensure any potentially costly user errors form part of your after action review and student improvement process, without the risk of costly damage and subsequent lack of availability of your actual detectors.

Radiological Training Simulators

Argon has alpha, beta and gamma simulators for many of the commonly used radiological detection instruments. Our simulation sources can be used to provide indications on gamma survey simulators, dosimeter simulators and also spectrometer simulators.

Our product range includes simulators for the AN/VDR-2, AN/PDR-77, RDS100, RDS200, FH40G, EPD-Mk2 and many more.



A variety of contamination simulation technologies and simulation probes / instruments ensures you meet your every training need. Argon has also developed simulation spectrometer probes that operate with the SAM935 and SAM940 spectrometers. Should you have any specific requirement, our extensive and highly capable product development team enjoy a good challenge.

PlumeSIM Wide Area Instrumented CBRN

PlumeSIM has the ability to transform your CBRN / HazMat exercises. This powerful but easy-to use-simulation system and has four modes of operation:

- Planning: lets you prepare your exercise without the need to use any simulation system infrastructure
- Table top mode: allows students to practice

their skills in a semi virtual world without leaving the classroom

- Field exercise mode: our advanced player is worn by the student to track their movements in real-time while driving the simulators with the CBRN scenario you have created
- After action review: you can replay all player movement, threat readings and mistakes made throughout the exercise to discuss how effectively your students carried out their mission and define areas for improvement

PlumeSIM has won acclaim from many organisations that now use this system at their CBRN training facilities. The flexible simulation architecture means that it can grow with you as your simulation and training needs advance. All trademarks acknowledged.

www.argonelectronics.com



ARGON™ World Leaders in CBRN/ HazMat training systems

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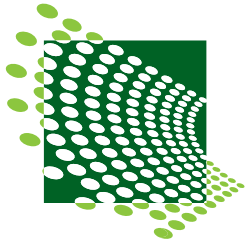
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e-reg coatings
Military & Industrial Coating Specialists

E-Reg Coatings Ltd

MILITARY, DEFENCE & SPECIALIST PAINT FINISHES



E-Reg Coatings Ltd is based in Burnley, East Lancashire, and has over 30 years experience in the finishing industry. Providing a complete service including the application of Military, Defence and Specialist paint finishes, as well as industrial powder coatings, we are committed to offering complete customer care and satisfaction. Specialising in Chemical Agent Resistant Coatings (CARC) for over ten years.

Having earned full ISO 9001-2008 accreditation since September 2004, E-Reg Coatings Ltd has a policy of continuous improvement ensuring the best solutions and quality are given to all our clients, whether its large capacity production runs or small on off projects.

All work is processed to the exact specifications and tolerances detailed by our customers and we have a dedicated team to care for every aspect of our services, from initial enquiry and order processing to Inspection and quality assurance. We work closely on all projects with our clients who are based throughout the UK and overseas, ensuring that quality is to the highest standard and that delivery schedules are always met. Committed to meeting customer needs and expectations, an environment has been established which encourages all employees to focus on, and pursue, continuous improvement in reliability, performance and the quality of products and services.

Examples of Specifications we currently work to:

Chemical Agent Resistant Coatings (CARC)

These finishes are used extensively on military vehicles, communications systems, weaponry and all ancillary equipment. The coating produces a non-porous surface that impedes chemical, radioactive and biological contaminants from penetrating the paint and base materials. CARC resists chemical attack from the aggressive cleaning detergents used for decontamination of the equipment. Coatings offered can include IRR Properties and come in various colours and gloss levels.

US CARC Paint Systems

MIL-DTL-64159B Type II

Two component waterbourne polyurethane Infrared Reflective and Chemical Agent Resistant Coating for Military equipment.

MIL-DTL-53039 Type II

Single component moisture cure aliphatic polyurethane which is a camouflage chemical agent resistant coating for military vehicles and equipment.



These coatings are available in the following FED-STD 595 colours:

- Green 383, 34094
- Black 37030
- Brown 383, 30051
- Tan 686A, 33446
- Aircraft Green 34031
- Aircraft Grey 36300

UK MOD CARC Paint Systems Include:
DEF-STAN 80-153 Defence Coating

A single pack, air drying finish with IRR properties used for service vehicles and ancillary equipment

- Colour - Light Stone

DEF-STAN 80-166 Defence Coating

A two pack IRR paint system used for defence equipment which complies with DEF-STAN 00-23 and STANAG 2338

- Colour - NATO Green and Black

We welcome enquiries for other paint systems and will strive to source materials wherever possible. Examples of some other paint systems we regularly use are:

DEF-STAN 208/209

Two pack polyurethane HS low VOC matt / gloss coatings for ground equipment and ancillary items. Satisfies requirements for IRR Camouflage and hydraulic fluid resistance. MIL-PRF-22750G

This high solids epoxy topcoat is intended for use on the interior of military ground equipment.

- Colours include: Flat Grey, Gloss white and Sea foam green.

DEF-STAN 80-122

Polyester high durability, IRR Powder coating in NATO Green and Tan.

Most paint systems are available upon request.

Quality Control

E-Reg Coatings Ltd holds full ISO 9001:2008 accreditation and uses fully documented quality procedures. These procedures are adhered to at every stage to ensure all components are pre-treated, coated, inspected and packed in accordance with the customer's specifications. Sample panels are processed to full spec, alongside components, which are then tested for paint thickness and adhesion, using fully calibrated equipment.

One of our most valuable assets is our highly skilled and experienced staff. Using their knowledge and expertise they apply a proactive approach to problem solving on the job. Some of our members of staff have

over fifteen years experience working with military contracts and specialist specifications.

Investment

By using the most suitable plant, and using first rate materials, we are able to guarantee consistency and quality. We believe that by investing in our equipment, and our work force, we can provide a superior finished product which, in turn, results in satisfied customers and repeat business. Over the years we have heavily invested in plant and equipment to provide in-house facilities to cover all aspects of pre-treatment and processing required for the Military, Defence, Specialist and Industrial sectors.



Capacity and Plant

We currently deal with contracts ranging from one off jobs through to regular, large quantities of small components i.e. over 15,000 components per month.

Staff

Our plant consists of:

- 3m x 3m Clean air room with water wash spray booth
- 4m water wash spray booth
- 3m water wash spray booth
- 3 cubic meter Electric Oven
- 5m x 3m x3m Gas fired oven
- 5m double pass gas oven with online conveyor track
- Alocrom pre-treatment plant 900mm x 900mm x 600mm
- 2m x 1.2m Vapour De-greasing plant
- Specialist Masking / De-masking facilities
- 2 x Pad Print Machines
- 2 ton Counter Balance Fork lift truck
- Flat bed transport Collection / delivery facilities
- Sister Company to E-Reg Sheetmetal Fabricators LTD



www.eregsheetmetal.co.uk

EPICOR®

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GLOBAL LEADER DELIVERING BUSINESS SOFTWARE SOLUTIONS TO THE MANUFACTURING, DISTRIBUTION, RETAIL & SERVICES INDUSTRIES





Epicor Software Corporation (recently combined with Activant Solutions Inc.) is a global leader delivering business software solutions to the manufacturing, distribution, retail and services industries. With nearly 40 years of combined experience serving midmarket organizations and divisions of Global 1000 companies, Epicor has more than 20,000 customers in over 150 countries.

Epicor enterprise resource planning (ERP), supply chain management (SCM), and human capital management (HCM) enable companies to drive increased efficiency and improve profitability. With a history of innovation, industry expertise and passion for excellence, Epicor inspires customers to build lasting competitive advantage. Epicor provides the single point of accountability that local, regional and global businesses demand. The Company's corporate office is located in Texas, with offices and affiliates worldwide.

Regardless of what you manufacture, Epicor provides a solution that enables the manufacturing process, from planning and procurement to job costing, scheduling, production, financials and more. Our solution goes beyond traditional ERP, encompassing customer relationship management, business intelligence and e-commerce. Most important, Epicor manufacturing solutions seamlessly manage complex requirements such as configure-to-order plus repetitive requirements such as make-to-stock, offering versatility that supports a truly mixed-mode manufacturing environment.

Aerospace and Defence Manufacturing Software

Epicor understands that as a UK-based aerospace and defence (A&D) manufacturer, you must identify, consider and respond to a new set of challenges each day. Change in this industry is a given; managing the change with tools and services to distinguish your business from local and global competition is fundamental.

Epicor for Aerospace and Defence is a global enterprise resource planning (ERP) business software solution designed for manufacturing organizations who supply products and services to the aerospace and defence industry. The solution goes beyond traditional ERP to provide product management, project management, customer relationship management (CRM), supply chain management (SCM) and more, backed by comprehensive financial management in support of an increasingly regulated sector.

Aerospace and Defence Software

- Meet strict guidelines for products with robust product data management solutions
- Improve lead times and reduce waste through implementation of lean strategies
- Automate the compliance process and meet

the requirements of ISO/AS9001 using Epicor comprehensive quality management solution

- Improve estimating with exceptional quoting capabilities utilizing aerospace manufacturing software
- Manage bids and control costs on a project basis in order to secure new contracts and deliver as planned
- Improve visibility with Epicor comprehensive end-to-end solution designed for companies like yours

With award-winning integrated applications, Epicor ERP for Aerospace and Defence is a powerful business software solution that provides the flexibility and scalability you need to grow your company profitably by optimizing your most important resources.



Noptel

MILITARY RIFLE MARKSMANSHIP TRAINING & SHOOTER TRAINING SYSTEMS

Noptel was the first company to introduce an optical training system for everyday use. Since 1982 the company has supplied more than 10 000 units to more than 60 countries. The Noptel Training Program allows using own conventional or scaled targets or conventional pop-up or moving targets. The training scenarios and level of difficulty can easily be varied in the field. The three-phase Noptel Integrated Rifle Marksmanship (IRM) Program takes into account the important factors behind successful military marksmanship instruction.

The training program starts with indoor training to achieve sufficient marksmanship skills and to understand the shooting principles. This helps the shooter to manage better in the further studies and to perform the field exercises in a safe and efficient way. In each section of the training program most part of the shooting is made safely using optical training devices instead of the live fire. The benefit of this is that the shooter has the possibility to get more training exercises in the same time frame because the user friendly environment allows

mistakes to be made without endangering the trainee.

The live fire safety procedures are practice throughout all training, however the trainee can be allowed to make mistakes as part of the training methodology. The shooter is shown where he is deficient and then the corrective action. The increase in training repetitions will make for a better shooter in both basic shooting, maneuver and combat skills. The final exercise and test is always made using live fire, but in that phase of the training program the shooter is already a skilled shooter and can handle this challenge.



Military Indoor Marksmanship Training

Indoor training system allows training of practically all disciplines in a classroom. The shooter has the same difficulty level as in the real shooting. He will see the gun pointing path, hit point and grading of the shots in the computer display. This helps him to understand the basic shooting techniques and be prepared to live fire shooting. Sufficient basic shooting skill is essential for the shooter to be successful in the further training.



Military Advanced Marksmanship Training

In the shooting range the shooter can practice more advanced shooting skills. Outdoor training adapts the shooter to the real or realistic environment and helps him to bear the weather, distance, other shooters, noise and other disturbances and still hit the target. Outdoor training can comprise of one or more targets in each lane. When the shooter hits the target, it falls down. The targets are computer controlled and the shooter can use rapid fire in the shooting.

Military Outdoor Marksmanship Training

The Maneuver Range exercise helps the shooter

to understand the process of attacking the hostile targets in coordination/synchronization with other friendly elements and practice it until he is ready to make the training with live fire safely. The safe training at the ranges can be



major part of the total training, making the throughput more efficient and results better than using only live firing.

After passing the Field Training the soldier will be able to hit the target with each shot tolerate battlefield shooting conditions handle the weapon with confidence use live fire safely and will be ready for further training to learn tactical skills and more advanced operations in the field.

Conclusion

The leading principle in developing shooter training systems has been to make simple, easy to use and efficient systems that any shooting instructor can use as a daily tool for the training of shooting skills. The Noptel system is a serious tool for all shooting instructors and training centers. It can be used in a daily training without extra hassle, difficult calibration and support of computer experts. It is meant to be a tool for any military trainer.



PROTECTING OUR MILITARY HEROES SINCE 1990

Our military members deal with many dangers each day. They work around the clock patrolling the streets and countryside, keeping vehicles and aircraft in top working order, and participating in drills and warfare. Often they are required to perform these and many other duties in foreign climates and extreme heat.

High Temperatures and Heat Stress

Research has shown sustained high temperatures can lead to less than ideal work environments where heat stress can lower



performance levels, reduce morale, and impair mental alertness. Ultimately, these factors can increase the risk of accidents and compromise personnel readiness.

Along with the mental impairments heat stress can cause the human body, there are several serious physical conditions it can inflict as well. When the body's normal mechanisms for dealing with heat stress – sweating and temperature control – are lost, severe and potentially life-threatening heatstroke can occur. The main sign of heatstroke is a markedly elevated body temperature (generally greater than 104°F or 40°C). Victims can also experience changes in mental status, which can range from personality changes to confusion and even coma. The victim's skin may be hot and dry; however, if heatstroke is caused by exertion the skin may be moist.

To avoid heat stress, experts recommend spot cooling and periods of rest in a cool area during physical exertion.

Weighing the Drawbacks of Typical Cooling Methods

Traditionally, air conditioning (A/C) is a go-to cooling method. However, in large open spaces, the first impediment is the inability to close the space off and seal in air to achieve maximum cooling. Areas where outside doors will be open



allow air to escape and render A/C an impractical solution. Another drawback is air conditioners require compressors and a place to ventilate the heat generated from the compressor. This limits the mobility of an A/C unit given the fixed-ductwork and adds another point of heat generation. Harsh refrigerants and energy consumption are other downfalls. Refrigerants are an integral part of air conditioning systems to emit cool air, and A/C can pull a great deal of energy that translates to more energy expense.

Fans – both oscillating and ceiling options – seem like a quick, inexpensive fix to cooling. However, fans simply circulate stagnate air throughout the space. The air is not chilled in any capacity and cannot reach all areas of the large space to be cooled. In fact, industrial ceiling fans seem to be particularly more effective in the winter to improve heating operations by giving airflow to warm air.



Port-A-Cool Evaporative Coolers

A Port-A-Cool evaporative cooler actually works with a supply of outside ambient air to deliver a temperature reduction by as much as 30 degrees Fahrenheit depending on the humidity. It should be noted, however, that even in the highest humidity regions, temperature drops can occur because as the temperature rises, humidity levels go down.

The technology at the center of an evaporative cooling system is the cellulose pad that collects



water. Air passes through the pads and is cooled as the water evaporates. The cellulose pad material is specially treated to prevent rot as well as ensure a long service life. A special water distribution system spreads water over the surface of the pad within the cooling unit to ensure a uniform water supply. This keeps the entire air-contact surface of the pad thoroughly wet. A control system operates the water pump and distributes the cool air.

Port-A-Cool portable evaporative coolers from Port-A-Cool, LLC provide a natural, highly-effective cooling alternative to fans and air conditioners. Port-A-Cool evaporative cooling products utilize the all-natural evaporative cooling process to cool temperatures by as much as 30 degrees Fahrenheit. This evaporative cooling process is perfected by the state-of-the-art technology in the company's KÜÜL® pads. KÜÜL pads, manufactured in the USA, are the high-efficiency rigid cooling media that make all the difference in providing advanced evaporative cooling. Testing has proven KÜÜL pads to perform at superior levels for highest

tensile, dry crush, and wet crush strengths per square inch.

The convenience and portability of Port-A-Cool evaporative cooling units makes them a perfect fit for use in airplane hangers, machine shops, engineering facilities, gymnasiums, cafeterias, gun ranges, barracks and many other locations. Port-A-Cool units do not require chemicals, special outlets, set up, or installation. The units come fully assembled and will only require a standard electrical outlet and a supply of tap water.



Boeing Qualification of AkzoNobel Base Coat/Clear Coat System



AkzoNobel Aerospace Coatings is delighted to announce Boeing qualification of the Aerodur 3001/3002 Base Coat/Clear Coat System.

Aerodur 3001/ 3002 Base Coat/Clear Coat System

The newly approved Aerodur Base Coat/Clear Coat system is qualified by Boeing to both the BMS 10-72, Type 10 and BMS 10-125, Type 4 specifications and is applicable for use on all Boeing legacy models (777, 747, 737, 767) under BMS 10-72 as well as the Hybrid Laminar Flow areas of 787-9 model aircraft per BMS 10-125.

To date, Aerodur 3001/3002 Base Coat/Clear Coat has been applied to well over three hundred new and repainted aircraft.

Aerodur 3001/3002 Base Coat/Clear Coat has been developed with a focus on reducing drying times and bringing operational efficiency to the paint shop. The fast dry to tape time and ease of application has demonstrated paint cycle time reductions of up to 30%. Data gathered on aircraft flying with the durable Aerodur 3001/3002 system since 2008 also demonstrate the outstanding gloss and color retention of the cutting edge



EOD Solutions

Explosive and Ordnance Demilitarisation

SURPLUS AND SHELF LIFE EXPIRED SMALL ARMS AMMUNITION IN OPERATIONAL THEATRES

In any conflict there is a large amount of Small Arms Ammunition (SAA) issued to the troops on the ground which when unpacked cannot be returned to stock. Other issues such as climate and age render the ammunition unfit for front line use and in some cases unfit for training.

This SAA takes valuable resources and manpower to look after it until it is transported from theatre or destroyed. The TRADS 20 built and supplied by EOD Solutions Ltd and Caldo Engineering would solve these issues and be a cost effective way of destroying SAA as it became available.

Container or Trailer mounted the TRADS 20 which has been proven in Afghanistan can destroy up to one and a half tons per day and will need the minimum of resources as it is completely self contained and meets the EU Waste Incinerator Directive for emissions to atmosphere.

The TRADS 20 is totally self contained and requires only diesel to operate. Lime and Urea is supplied with the system and one 20 foot container can hold enough of these materials to work for up to one year. The trailer mounted version can be pulled to FOB and other outstations and camps so it also reduces the need to transport SAA in theatre. The TRADS 20 is ahead of its rivals as it requires only two personnel to work it with a small number of personnel for unpacking and searching the scrap to ensure all the ammunition is destroyed. The system is currently working in Afghanistan and has proven to have a good reliability and production record. Average cost per day is approximately £200 plus labour. Daily and routine maintenance is elementary and can be undertaken by anyone with a rudimentary knowledge of engineering. Full training and first site commissioning is included in the cost of the system and a company technician will remain for the first two weeks to ensure the personnel who work the system are completely at home with the system.

EOD Solutions Ltd in conjunction with CALDO Engineering have supplied machines to Bosnia, which was funded by the UK MoD, also in Albania, funded by US Dept. of State and now in Afghanistan with the British forces in Camp Bastion. A TRADS 20 is currently working in Camp Leatherneck with a US company and another is currently waiting installation in Bagram.



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Cummins-powers tornado intercept vehicle (TIV2)

Cummins powers the Tornado Intercept Vehicle (TIV2), made famous by the television show "Storm Chasers" and the IMAX® film "Tornado Alley." The brainchild of IMAX filmmaker and storm chaser Sean Casey, has withstood six seasons of traversing the Plains of the United States during the spring storm season, and has survived 11 direct tornado intercepts without an engine failure. Casey recently announced that National Geographic has given the green light to his next cinematic adventure with TIV2, "Extreme Weather 3D," slated for release in 2015/2016 in digital 3D cinemas worldwide.

"The original TIV was built on a different chassis with a different engine under the hood. Every time we would have a breakdown and I would show up in a repair facility, I was always told I should have bought a Ram with a Cummins diesel engine," said Sean Casey. "After hearing that enough times, when building TIV2, it was a no-brainer on which chassis and engine the vehicle would be built. When you are out chasing, you want the best possible components you can get; you need reliability. That's why I depend on Cummins."

Built For The Elements

Design and build work on TIV2 started in late 2007, with its debut in spring 2008. Design and aerodynamic engineering came from Casey, who had learned from experience with the original TIV. Sitting on a 2008 Dodge Ram 3500 chassis, the TIV2 comes in weighing around 16,000 lb, thanks to the layers of protective armor that shield the vehicle and its occupants from the over-150-mph storm winds that the TIV2 encounters while chasing storms. The vehicle is built on



a 2-inch steel frame, and utilizes hydraulics to hunker down as a storm approaches.

Hydraulic skirts drop down to stabilize the vehicle, and four hydraulic spikes pierce the earth to anchor the vehicle, preventing the vehicle from flipping if winds should catch underneath. Windows in TIV2 are 1.6-inch polycarbonate, and the armor protecting the cab of the vehicle is a 2-inch combination of aluminum, Kevlar,® steel, rubber and polycarbonate. Even with the weight, TIV2 has a top speed of over 100 mph. Multiple data collection instruments are mounted on TIV2, measuring humidity, air pressure, wind speed and direction.


Rolling Science Lab

In addition to its media notoriety, TIV2 is widely known in the science community, as it serves as a rolling science lab. Weather instruments capture data and transmit it to weather experts focused on fully understanding tornadic storms, and furthering warning times ahead of storms in the effort to save lives.

“TIV2 is one of the most unique and instantly recognizable vehicles on the road today. This

vehicle is a testament to the dependability and reliability that customers have come to expect from Cummins, and demonstrates just one of the many unique and innovative applications of Cummins power.”







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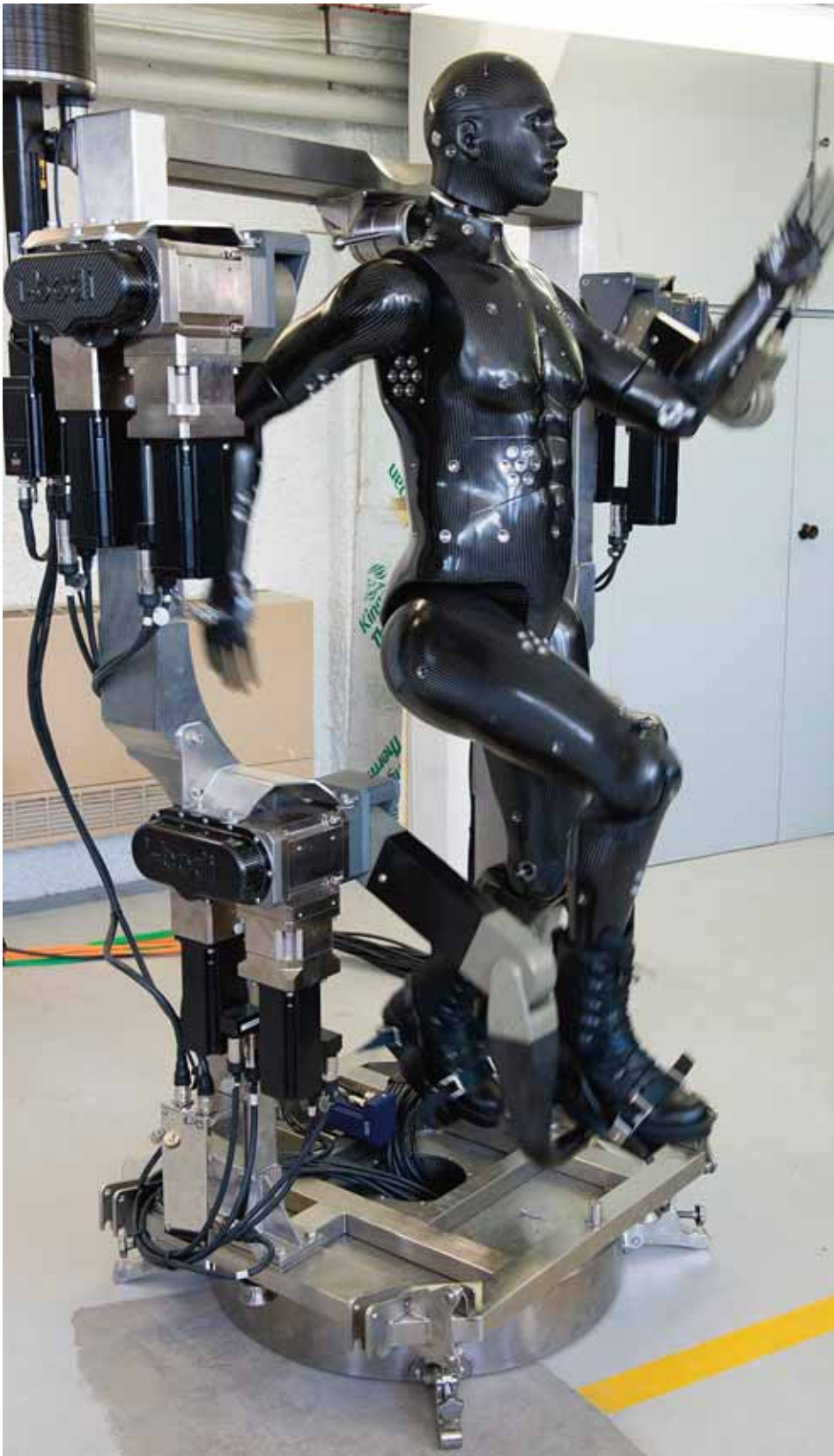
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Animatronic mannequin to test protective equipment



The Ministry of Defence has invested £1.1m in a new state-of-the-art robotic mannequin that will test protective suits and equipment for the UK's Armed Forces.

The "Porton Man", named after the Defence Science and Technology Laboratory (Dstl), based in Porton Down in Wiltshire, is able to walk, march, run, sit, kneel and can even lift its arms to sight a weapon like an infantry soldier. More than a hundred sensors all over the body record data during tests enabling scientists to carry out real-time analysis on equipment such as chemical and biological suits in a realistic but secure environment.

Mannequins have been used by Dstl in the past, but this animatronic version, which is designed and built by a British company, is unique to the UK. Dstl is also the only laboratory in the world that can use chemical warfare agents to assess the effectiveness of complete clothing systems such as the chemical, biological and radiological suits used by UK Armed Forces.

Minister for Defence Equipment, Support and Technology, Philip Dunne MP, said:

"This technology, designed by a British company is enabling the UK to lead the way in this important testing. Increased investment in science and technology by the MoD is not only enabling battle winning and life saving equipment to be developed but also helping innovative companies like i-bodi Technology to develop cutting edge capability."

Jez Gibson-Harris is the CEO of i-bodi Technology in Buckinghamshire who designed the mannequin. He said:

"Our brief was to produce a light-weight robotic mannequin that had a wide range of movement and was easy to handle. Of course there were a number of challenges associated with this and one way we looked to tackle these challenges was through the use of Formula One technology. Using the same concepts as those used in racing cars, we were able to produce very light but highly durable carbon composite body parts for the mannequin."



EMCEL FILTERS

PRESS RELEASE

Emcel were approached in 2010/11 and asked to design and manufacture a 3 stage filtration unit to be installed on the inlet of a compressor, on board a Royal fleet auxiliary ship.



With very limited space available to install the unit the design had to conform to certain military standards and criteria.

The unit also had to be built to withstand the harsh marine environment.

Features:

- 3 Stage Filtration
- Cleanable pre-filter
- Quick release — 2 stage main filter
- Variable flow
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J&S Franklin launch new range of Archer Portable Vehicle Barriers from Meridian Rapid Defense (MRDG) Group in the United States at CTX14 London

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J&S Franklin has added to their extensive protection equipment range by securing distribution rights for Archer Portable Vehicle Barriers in the UK, Europe, Middle East and Africa.

Archer Portable Vehicle Barriers offer a complete range of “Drop and Stop” Modular Barrier Systems that are engineered for speed of deployment, retrieval and relocation making them ideal for Emergency Response Kits (ERK’s) and temporary physical security requirements.

Simple to deploy with no electrics or hydraulics needed, and easy to install with just two people, the Archer Portable Vehicle Barriers are ideal for crowd control, conferences, large events and critical infrastructure protection.

Manufactured from dual-wall, high strength bullet-resistant ballistic rated steel, the Archer also provides ballistic and HVM protection.

Jeremy Milton of J&S Franklin said “We’re excited to be able to add these unique deployable barriers to the DefenCell range of security equipment.”

“The modular systems are fast to deploy without any heavy equipment. They can be moved and reconfigured at a moment’s notice. The barriers and systems are rated by the Department of State in the United States and are completely reusable. We are pleased to have J&S Franklin as our distributors as

they bring many years of experience with perimeter security products.” said Peter D. Whitford, CEO of MRDG.

The new range of Archer Portable Vehicle Barriers will be demonstrated on the J&S Franklin Stand No G95 Counter Terror Expo, London from the 29th to 30th April 2014.

Archer Beam Gate

A rapidly deployable beam gate that is ideal for high traffic entrances and perimeter security.

Archer 500 Anti-Vehicle Barrier

A flexible rapid solution for crowd control, traffic flow and vehicle incursions.

Archer 750 Anti-Vehicle Barrier

A modularly designed anti-vehicle barrier that provides rapid deployment and installation on a variety of surfaces for protection of facilities, roadways and personnel.

Archer 1000 Anti-Vehicle Barrier System

A rapidly deployable anti-vehicle barrier system, which is two-person installable without the use of heavy equipment. (Full US Dept of State K4 III Anti-ram certified)

Archer 1200 Anti-Vehicle Barrier

A rapidly deployable unanchored “drop-and-stop” barrier for deployment on roadways and hard surfaces.

For further information or to arrange a demonstration, please contact Jeremy Milton.

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Peli Introduces the ProGear 2350 LED Torch

Peli Products, the global leader in the design and manufacture of advanced lighting systems and high-performance protective case solutions introduces the Peli ProGear™ 2350 LED light, a handy, pocket-sized light with large performance.

Peli ProGear™ 2350 LED Light

Great for camping, tool-boxes, car or as a backup light in professional settings, the Peli ProGear 2350 LED is powered by a single AA battery (included), weighs 100 g (3.7 oz) and offers three lighting modes (high/strobe/low). Its super-bright LED provides clear bright light (up to 100 lumens for as long as 1 hour 45 minutes in high mode).

Its anodised aluminium construction makes it extremely durable and the anti-slip knurled pattern facilitates a better grip.

Additionally, it comes with a removable clip for easy pocket storage and transport, which also discourages rolling.

The Peli ProGear 2350 LED is part of a growing line of Peli ProGear lighting products for a variety of situations and is backed by Peli Products' Legendary Guarantee of Excellence.

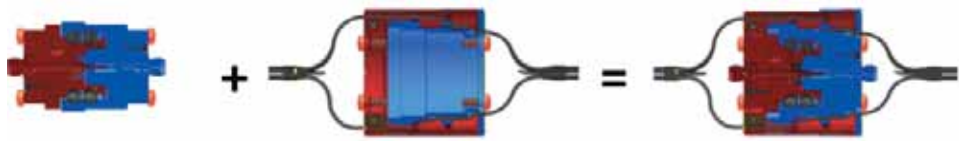
The Peli ProGear line includes rugged, protective consumer products designed to allow users to transport and protect all that they value, regardless of weather conditions. For more information on this model and on the full ProGear line, please visit www.PeliProGear.com.



SPINNER's S³ Technology – Slim Sized Slip Ring

SPINNER is expanding its solutions in the field of rotary joints for satellite communications to include a further component: A compact slip ring with very thin walls now complements the range of standard couplings for all fields of use. S³ Technology (Slim Sized Slip Ring)

The new S³ technology (Slim Sized Slip Ring) from SPINNER is optimized to combine a dual channel RF joint with a dual channel slip ring with an unchanged overall length of the RF coupling (approx. 55 mm) and a minimal external diameter of less than 50 mm. The design of the slip ring channels makes it possible to transmit up to 10 A (per channel). The slip ring is also suitable for transmitting signals and data. The slip ring currently has a design with the dimensions shown in the table. It is available from SPINNER as a simple slip ring or in combination with other transmission channels. Depending on the customer's request, the slip ring can be combined with various standard RF couplings, such as BN 153167, 153168 in a U or L shape (see picture). It is also possible to integrate all single channel RF (for example BN 835045,



835047, ...) or optical joints (single and dual channel).

The special S³ technology means that many accurately defined contact points are used for each transmission channel. A very reliable, un-interrupted transmission is guaranteed due to the high number of contact points. SPINNER's many years of experience with contacting RF joints has made it possible to design the contact point in the slip ring to be low-wear and, thus, low-maintenance.

From the very beginning, the slip ring was developed while taking into account the fundamental legal requirements and standards, such as ROHS, REACH and DIN EN 60950. These standards can also be complied with for customer-specific developments.

The advantage of the technology comes from its compact structure, with the removal of the conventional module/brush technology it is possible to achieve a wall thickness for the entire slip ring of less than 10 mm. The picture above shows a solution with several channels and a modular solution for up to 10 channels. As can be seen, the thickness of the slip ring is defined by the integrated bearing, i.e. the transmission channels can be integrated at this height.

The technology is being used initially in satellite communications. The S³ slip ring

makes it possible to create 2 paths to supply the antenna motor in a very compact and, therefore, very light design. It allows location-independent in-flight entertainment (telephony and internet) on long-haul and short-haul flights.

The consistent development of the SPINNER portfolio means we can now provide all customers with solutions from one single source. As a supplier with the following transmission types and their combinations, SPINNER is rising to the new challenges posed by existing and new customers for applications from the industrial sector:

- RF couplings in contacting and non-contacting designs
- Optical joints in multi and single mode designs with up to 20 channels in 4 casing graduations
- Media joints in 2 performance and size categories
- Non-contacting active rotary joints for energy and data transmission
- Compact slip rings with S³ technology with thin walls
- Integration of slip rings by renowned manufacturers into hybrid rotary joints



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