

INTRODUCTION: A GLOBAL CHALLENGE

The prospect of a deliberate or unintentional hazardous material/radiological release or CBRN attack is now increasingly recognized as an acute global challenge. However, the responsibility for effective response remains with individual nations, national, regional and local Government agencies and corporate entities.

It is essential that organisations develop their emergency response procedures and resources to respond to and mitigate the consequences of such threats to life, infrastructure and the environment.

Early detection and response is critical, as is the quality and accuracy of information flow. Ensuring personnel understand how to correctly operate, interpret and report readings of Detection, Identification and Monitoring (DIM) equipment is essential to maintaining a capability to respond to a CBRN/HazMat incident.

Argon is responding to these requirements with innovative tools and strategies that will enhance existing individual training and collective exercise programs to facilitate the delivery of what we call Real Experience Training™ (RET) – training so real, participants forget it's an exercise.



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Established in 1987, Argon™ is the world leader in the development and manufacture of CBRN/HazMat simulation and training systems.

We provide realistic, safe, environmentally friendly and cost effective chemical, biological, radiological and HazMat simulators that enable civil and military organisations to deliver and validate the high quality training the CBRN/HazMat responder community requires to ensure effective operational response in a real emergency.

Collaborating to continually improve training solutions

Argon works in partnership with many of the world's leading detector manufacturers and CBRN/HazMat instructors, which allows us to provide our customers with a suite of simulation sensor systems of the highest fidelity.

Argon simulation systems are designed and developed using a proprietary common technology platform that allows accurate replication of service or commercial sensors. Recognition of the validity of this integrated approach to instrumented training has been evidenced by contracts awarded to Argon by many of the world's foremost CBRN response organisations, confirming that Argon is the first choice of CBRN/HazMat professionals worldwide.











Ensuring the quality and accuracy of information flow from the incident scene.

An expanded hazard environment has resulted in a broad array of sensors which has increased the training burden. Argon has responded by investing significantly in research and development to provide effective training solutions. We understand that detectors are used to collect *information* that is used to make *life saving decisions*.

We are committed to providing CBRN/HazMat simulation solutions that, through Real Experience TrainingTM, help demonstrate the effectiveness of information flow from detection to decision making. This allows thorough testing of command and control as well as operator proficiency.

Our simulators are safe, environmentally friendly and permit your exercises to be repeated or varied with ease. Powerful activity monitoring and recording helps you evaluate, enhance and validate the proficiency of participants and ensure consistent instruction.

Argon simulators have proven reliability and do not require regular calibration or preventative maintenance, and by avoiding potential damage to real detectors or costly use of consumables ensure your ongoing cost of ownership is extremely low.

Fast, easily set up training scenarios ensure the maximum amount of time is available for exercises, whilst providing a consistent means of evaluating student performance.

Through the use of advanced technology designed to provide CBRN/ HazMat instructors with an unparalleled level of simulation capability for use in any environment, Argon simulation systems are the preferred choice of professionals who need to deliver integrated training across an ever-increasing range of sensor technologies.









Chemical/HazMat Simulators

CBRN/HazMat training needs to exercise, stretch and prepare your personnel. It is increasingly common that a number of instruments may be used as part of chemical Detection, Identification and Monitoring (DIM) activity. You might, for example, use a CAMTM and an AP4CTM for initial assessment, then a HapsiteTM to aid confirmation and identification of the substance present. Our simulators can enhance a wide range of DIM training tasks including decontamination, confined space entry, explosive atmosphere monitoring and EOD because they accurately replicate the features and functions of the real detectors.



These enable you to teach survey, search, source recovery, radionuclide identification and decontamination procedures without the need to use ionizing radiation sources. Our radiation simulators can be used for survey training, depleted Uranium munition clearance training and specialist C-IEDD (Counter Improvised Explosive Device Disposal/Defeat) training.

Biological simulators

Biological simulation technology has been developed to simulate powder, liquid and airborne hazards. Argon's technology has the capability to simulate air based collection via a concentrator, resulting in a simulated liquid sample which can then be processed in a simulation PCR based identifier to complete the process.

Flexible technology

Our simulators implement a wide range of technology including ultrasound, electromagnetics, fluorescence and virtual modeling to simulate threat sources. Simulators are implemented as replica instruments or replacement probes for use with real instruments. We can also develop customised interfaces to third party First Responder/Military Ground Combat Instrumented Training Systems.







PlumeSIM® is a state-of-the-art system for integrated wide area field exercise and table top training using Argon CBRN/HazMat simulators.

You can now manage and control CBRN/HazMat training of individual or multiple personnel, selecting the parameters of single or multiple releases and a full range of environmental conditions whilst monitoring the activity of students from a single location. Ideal for local, 'home station' and national emergency responder training facilities.

Planning mode – You can pre-plan exercises using only the PlumeSIM® software. A powerful mapping system permits freely available and even internally produced/sketched maps to be used.

PlumeSIM® allows you to define a plume or hotspot based upon variety of specific substances, CW agents, radionuclides or compounds, and to implement different release characteristics including duration, direction, persistence and deposition.

Table top mode – used to prepare students for field exercises and perfect for those brought up using modern computer software. A standard gamepad controller is used to navigate a virtual world whilst simulators indicate readings and alarm accordingly.

Field exercise mode – personal player units incorporate GPS (Global Positioning System) to track student movement whilst monitoring errors and initiating simulated readings and alarms in real time.

Post-event exercise review – all player movement and simulator activity is recorded, enabling you to maximise learning opportunities during debriefing. Exercise results can be forwarded to an independent moderator for response capability assessment and validation of contingency plans. All simulators can be used independently of PlumeSIM®, providing you with maximum flexibility.



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For exercises where purchasing simulators may not be appropriate, be they for internal training, or to demonstrate compliance to an external body.

Argon is able to provide simulator equipment rental to enhance the quality and realism of your CBRN/HazMat training scenarios.

The Argon rental option enables you to demonstrate and develop your organisational response capability without resorting to capital outlay, whether your need is for a complete PlumeSIM® system, individual or additional simulation instruments.

A helping hand

For assistance in effectively and expertly deploying and incorporating rented simulation systems within your exercises, Argon has partners that can offer a comprehensive exercise planning and facilitation service ranging from system set up, with through exercise telephone support, to complete exercise management. Our free PlumeSIMTM planning tool enables you to prepare and plan your exercises in advance and review performance even after the system has been returned.





Pioneering: As a market leader we set the standard in CBRN/HazMat simulation technology. Our knowledge and experience makes us the first choice of CBRN/HazMat professionals wishing to enhance and improve their exercises by incorporating Real Experience Training[™].

Integrity: Our customers and partners can engage with us and be confident that we can be trusted with sensitive information.

Innovation: We continually strive to offer cutting edge solutions for training in the use of evolving Detection, Identification and Monitoring (DIM) technologies.

Commitment: To provide the global response community with an effective, realistic means to not only better prepare for but also demonstrating a capability to respond to CBRN or HazMat incidents.

Quality: Our Quality System is certified to BS EN ISO 9001:2008

Environment: All product design and manufacture and operations are implemented with due regard to environmental sustainability.

MISSION STATEMENT

To be the global market leader in the provision of realistic, safe, cost effective training systems that will ensure worldwide excellence in CRBN and HazMat preparedness and emergency response.

VISION STATEMENT

To ensure we live in a world where every CBRN and HazMat responder is fully prepared to provide rapid, safe and effective incident response by provision of Real Experience Training TM .

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