PlumeSIM®

Argon's integrated wide area field exercise and table top training system using Argon CBRN / HazMat simulators.



Argon Electronics' PlumeSIM® wide-area collective instrumented training system enables remote instructor management of our chemical and radiological simulator instruments under a fully configurable 'virtual plume', in real time, over user selected mapping.

Instructors can now manage the detection instrument training of multiple personnel, selecting the parameters for the activation of simulation instruments (including the type of threat, release/delivery of single and multiple sources and a full range of environmental conditions), and record the actions of trainees from a single location.





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Planning Mode - the virtual plume

Innovative system design permits the use of common file format map images and even 'home made' sketches of the proposed training area. Easy to use menus enable the instructor to quickly set and adjust the source type(s), quantity, and the location and nature of the release source, as well as the desired environmental conditions. 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. Exercise parameters can be saved for repeating defined scenarios with absolute fidelity.

Table-top mode

Using simple gamepad controllers trainees are able to move themselves as icons around an on-screen display of the training area. The virtual plume scenario is activated, and subsequent 'contact' with a simulated agent will result in the appropriate activation of their simulation instruments which are connected to the control base by a short range radio link. All student 'movement' is recorded in the session and can then be played back for analysis prior to departing for the field training area.

Field exercise mode

With the students deployed with GPS enabled Player Units to the desired external training area, the instructor can monitor their location on the control base map via a long range radio comms link in real time. Once again the virtual plume scenario is activated and, providing the student is fielding the correct type of instrument for the nature of the simulated threat, has prepared the instrument properly, and the levels or concentration of simulated agent are sufficient to be recognised by the particular device, then the display of that simulation instrument will indicate the appropriate response to any contact with a simulated source. Where environmental conditions inhibit the ability to obtain or maintain continuous long range radio communication, the selected scenario is pre-loaded on the Player Unit for timed activation and local broadcast.

Post event exercise review

A full record of player movement and simulator activity is captured for correcting any equipment use errors at the end of the exercise, 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



PlumeSIM® Table-top Mode for pre-deployment training