

2008 Summary of Research Reports

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Project: Development of Smart IDM Measurement System for SNM Detection

Sponsor: DTRA

Statement of Work:

The objective is to develop a smart stationary system for use with an IDM based array that could operate in either a scan or detect mode in order to locate isotopes associated with either a Radiological Dispersal Device (RDD) or a nuclear weapon. In the scan mode, the system would continuously move in a radial and vertical search pattern until an elevated count in some direction was detected. Then the system would automatically move into detect mode to collect improved statistical data and perform isotope identification. After which, the system would return back to scan mode. It is envisioned that a midshipman will participate as a research assistant for this project, including a summer internship and academic year efforts as a EM49X assistant or as a Trident Scholar.