Chemical Biological Systems Support Laboratory

The Chemical Biological Systems Support Lab integrates sensors and networking technologies to detect, classify, and report simulated chemical events. The facility is capable of software development, testing, and integration for both the ongoing Multipurpose Integrated Chemical Agent Alarm (MICAD) project and the eventual replacement system called CBRN Processing Group (CPG). The facility will support the simulation and test of chemical events and the generation of NBC reports that are automatically sent to higher command for dissemination to other units.

The Lab, although focused on the CPG and FOX efforts, is well equipped for general purpose and related digital communications analysis, troubleshooting and prototyping. The Lab will support initiatives related to the Joint Biological Point Detection System (JBPDS) in support of the Joint Program Manager Biological Defense (JPM BD). It will also support the Joint Program Manager Information Systems (JPM IS) Joint Effects Model (JEM) and Joint Warning and Reporting Network (JWARN) programs used to produce automated CBRN hazard area plots.

Laboratory Capabilities:

- Circuit Board Rework Station for repair of production equipment and development of prototypes and low rate production for new systems.
- Lab bench power supplies used to simulate vehicle power.
- All required equipment to support complete lab setups of the MICAD and CPG systems under development and evaluation.
- Large screen projection capabilities for demonstrations.
- Actual sensors or simulation capabilities to demonstrate and test detection of chemical events and generation of NBC reports to higher commands.
- Interfaces with FBCB2 for reporting of NBC events.
- JBPDS used for system trouble shooting and system updates.

User Applications/Transitions:

- Compile software source code delivered by contractor.
- Develop or modify source code, upload to target platforms, debug, and test software.
- Support Software upgrades for CPG and MICAD systems.
- Facility will be used to support Government Software Testing.
- Reverse engineering and component integration for the CPG production support effort for JPM Contamination Avoidance.
- Evaluate alternative design considerations.
- Demonstrate side-by-side the older MICAD system versus the newer CPG system.

Point of Contact

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