DESCRIPTION OF BDS EQUIPMENT

A. **Non-Developmental Item (NDI) Biological Integrated Detection System (BIDS) – M31:** The M31 is a biological point detection system consisting of a shelter mounted on a dedicated High Mobility Multi-Wheeled Vehicle (HMMWV), with a towed, trailer-mounted, 15-kW diesel generator. The shelter contains multiple complimentary detectors and systems to include a Threshold System, Biological Sampler, Liquid Sample Collector, Microluminometer, Flow Cytometer, and the High Volume Aerodynamic Particle Seizer.

B. **Pre-Planned Product Improved (P3I) Biological Integrated Detection System (BIDS) – M31A1:** The M31A1 is a biological point detection system consisting of a collectively protected shelter mounted on a dedicated Heavy High Mobility Multi-Wheeled Vehicle (HMMWV), with a towed, trailer-mounted, 15-kW diesel generator. The shelter contains multiple complimentary detectors and systems to include a Biological Detector, Biological Sampler, Chemical Biological Mass Spectrometer, Collector Concentrator, Central Information Processor, Miniature Flow Cytometer, and an Ultra Violet Aerodynamic Particle Size.

C. **Joint Biological Point Destection System (JBPDS) – M31A2:** The M31A2 provides the Joint Services (Army, Air Force, Navy and Marine Corps) with automated equipment to collect, detect, identify, and warn of the presence of various aerosolized Biological Warfare Agents. The JBPDS consists of a Biological Aerosol Warning System and a Cyclone Collector that collects the aerosolized particles and traps them in a liquid solution for identification.

D. **East Coast Excursion (ECE) JBPDS – XM97:** The XM97 consists of JBPDS mounted in trailers which are set-up and running in the Washington, D.C. area.

E. **Joint Service Installation Pilot Project (JSIPP):** The JSIPP consists of JBPDS mounted in shelters for operation at Ft. Campbell, KY

F. **Long Range Biological Standoff Detection System (LR-BSDS):** The LR-BSDS is a large area detection system capable of detecting, tracking and ranging (locating) aerosol clouds. This system consists of a commercial laser, telescope and an information processor integrated into a lightweight frame and mounted in a UH-60 helicopter.

G. **Joint Biological Standoff Detection System (JBSDS) – XM104:** The XM104 is a detection program to provide interim early warning of a biological agent attack. The system will be capable of providing near real time detection of biological attacks/incidents and standoff detection of biological aerosol clouds for distance of up to 5 kilometers. The system will be deployed at fixed sites or mounted on vehicle platforms such as the High Mobility Multipurpose Wheeled Vehicle (HMMWV).

H. **Joint Portal Shield Detection System:** The Portal Shield is an automatic networked biological warfare digital detection system that consists of a variable number of sensors operated in a network configuration and located at fixed site facilities such as military bases and ports. Each sensor provides automated computer-controlled component functions: automated system triggering, automated aerosol sample collection upon triggering, automated detection, and, ultimately agent identification. The major system components include the Laser Reader Detection Sensor, Robotic Module; Caddy Module; Fluids Module; Sampler Module; Command Post Computer Module**;** Power Supply; an Electronic Weather Station, and a Global Positioning System.

I. **Stryker Vehicle – XM97:** Consists of a JBPDS mounted in a Stryker Vehicle.

J. **Nuclear, Biological, Chemical Reconnaissance System (NBCRS) Vehicle – XM97:** Consists of a JBPDS mounted in a NBCRS vehicle.

K. **Man Portable JBPDS – XM96:** The XM96 is a JBPDS configured to be man portable.

L. **Shipboard JBPDS – XM98:** The XM98 is a JBPDS configured for shipboard mounting.

M. **Trailer Mounted JBPDS – XM103:** The XM103 is a JBPDS mounted on a M116A3 trailer.