PFC Moradeke Obunkoya tests liquid air samplers inside the biological detection suite, which is mounted in a HMMWV.

Detecting Biological Agents

Story and Photos by SSG Alan Moore
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SFC John Burns' job is to detect something that is as virtually undetectable as it is lethal. You can't see it, taste it, or smell it.

Strangely, for much of their careers Burns and the soldiers who work with him have had very little training for the job. But that could be said about all soldiers who work as nuclear, biological, and chemical specialists.

"We went over biological detection," said Burns. "We studied it in reference material and books, but we didn't spend much time training to detect biological attacks."

In fact, short of waiting to see if soldiers got sick, there was really no way to detect biological agents on the battlefield. That changed when the Army Christened the first active-duty platoon dedicated to detecting biological agents.

The 20th Chemical Detachment is the active-duty element of the 310th Chemical Company, an Army Reserve unit at Fort McClellan, Alabama. It's the first active-duty unit to field the biological integrated detection system, a non-developmental item that uses state-of-the-art commercial equipment.

The concept for the BIDS was first explored in 1991 at Edgewood, Maryland, home of the Chemical and Biological Defense Command.

"The BIDS is the Army's foremost detection system for biological warfare agent attack, combining complementary biological agent detection components in an

PFC Moss installs the detector air collector equipment on the biological integrted detection system.

integrated platform," said CPT Adam Stroup, commander of the 20th Chemical Detachment.

"There are a number of countries that have biological weapons: China, Libya, and North Korea to name a few," said Stroup. "As long as a biological threat exists, the BIDS will be an important part of the battlefield."

Basically, the BIDS is a HMMWV-mounted shelter housing a two-man biological detection suite. The shelter has room for several bulky pieces of air sampling and detection equipment. With a sophisticated mobile laboratory on board, BIDS is capable of sustaining 24-hour biological surveillance operations. The equipment takes continuous air samples. If biological agents are present, an alarm bell notifies the BIDS team. Within minutes, technicians can rule out or identify the suspected agent.

Each BIDS team consists of four soldiers operating the BIDS vehicle and a support vehicle. Two soldiers perform analytical duties within the detection suite while the other two resupply the team, provide security, and evacuate collected samples to the rear.

"We are protecting a lot of folks," Stroup said. "By capturing the agent with the BIDS, we can pass it on to medics, who will be able to study it, test it, and figure out what will kill it."

Before the detachment's activation, soldiers assigned to the unit attended a 6-week specialized training course.

About half of the unit's 35 troops were privates just out of AIT, but they attended the course with the NCOs and learned to operate BIDS as a team.

"We had to learn and grow together to make this happen," said Burns, the detachment's first sergeant. "We had to get to know each other quickly to develop a team."

Commanders will use the BIDS as a corps-level or higher intelligence asset, so a team must provide accurate and timely results. To that end, the system has several built-in redundancies.

"Soldiers are counting on our assessment, so there's a lot of responsibility on our shoulders," said SSG Karl Kithau. "But if the BIDS gives you a series of positives, you can bet there is a biological agent present."

"BIDS works," said Kilthau. So well, in fact, that an enemy would never know his biological attack had been detected. That assurance provides commanders a luxury they've never had—the ability to detect the undetectable.

A soldier sits within the detection suite of the BIDS.