proper effects of each weapon.

Eventually, this ad hoc training solution will be transitioned to the Army institutionalized training. All aspects of SLM safety, employment and doctrine will be incorporated into standardized classroom instruction for Army basic, NCO, and leadership courses.

New Weaponry on the Horizon

Since the approval of the Army SLM Strategy, the M141 BDM and AT4-CS have become Army Programs of Record and have been incorporated into Army doctrine. The M141 BDM, M136 AT4 and the existing inventory of the M72 LAW are all available for use, while the AT4-CS will be materiel released in 2008 for the Army. In response to urgent operational needs from the field, the Army is releasing a limited quantity of the improved M72 LAW, called the M72A7.

"We are finally in synch from a warfighter, requirements and an acquisition perspective," said Nulk. "We are putting together long-term production contracts that will be flexible enough to support dynamic changes in both warfighting and training requirements. We are addressing the users' immediate needs by urgently fielding critical warfighting capabilities and providing critical training."

In addition, the Army is striving to reduce training and logistical complexities associated with multiple SLMs. A new munition, called the Individual Assault Weapon (IAW), will address the need for a multipurpose munition that will ultimately weigh as little as 10 pounds and provide lethal effects against threats protected by a variety of structures, field fortifications, and light armored vehicles at distances up to 300 meters.

"The IAW will be a single, multipurpose system that will replace a myriad of capabilities found in individual SLMs," said Lombardo. "Capabilities will also include the ability to fire from inside an enclosure, protecting the Soldier from small arms and other counterfire. Once fielded, the IAW will be a combat multiplier by providing superior firepower down to the lowest organizational levels."

This new SLM capability will not be available until approximately 2011, further emphasizing the importance of support and sustainment of currently fielded systems. "We need to listen to and support our Soldiers," concluded COL Nulk. "We have changed a paradigm that has existed for many years. We owe it to our country, our men and women on the battlefield and to ourselves to make sure that each Soldier has the best equipment, training, and support needed to win the fight. We hear you loud and clear and are executing to meet your needs."

Gary L. Barber is the U.S. Army SLM Project Officer for PM CCS at Picatinny Arsenal, N.J. He has a B.S. in mechanical engineering from the New York Institute of Technology and an M.S. in mechanical engineering from the Stevens Institute of Technology. Barber has more than 15 years of systems acquisition experience, is an Army Acquisition Corps member, and is Level III certified in both program management and systems planning, research, development and engineering.

EIB Testing:

A Different Way of Thinking

75TH RANGER REGIMENT PUBLIC AFFAIRS

The 2nd Battalion, 75th Ranger Regiment at Fort Lewis, Wash., recently conducted Expert Infantryman Badge (EIB) training and testing immediately after redeployment from its most recent combat tour. The methodology for preparation and testing was a little out of the Army's norm. There were no details for extensive site preparation, no sand bags to be filled, no camouflage nets erected, and no signs to be made. This EIB had minimal individual test stations and no ready lines or post-test holding areas. Most of the testing was conducted in lanes and replicated combat conditions as much as possible. The battalion conducted all planning and coordination required to conduct this EIB while deployed, and it obtained approval to conduct the testing under the new concept from the EIB committee at the U.S. Army Infantry Center, Fort Benning, Ga.

The purpose of EIB training and testing, which has not changed from its inception in the 1940's, is to create an evaluation that tests the individual skills required to survive on the battlefield and to ensure proficiency of the individual Soldier to support collective training. For at least the past 25 years, maybe longer, this has equated to EIB training and test sites which consisted of individual test stations. This allowed for refresher training just prior to conducting the individual tasks. Although this is certainly adequate

Courtesy photos

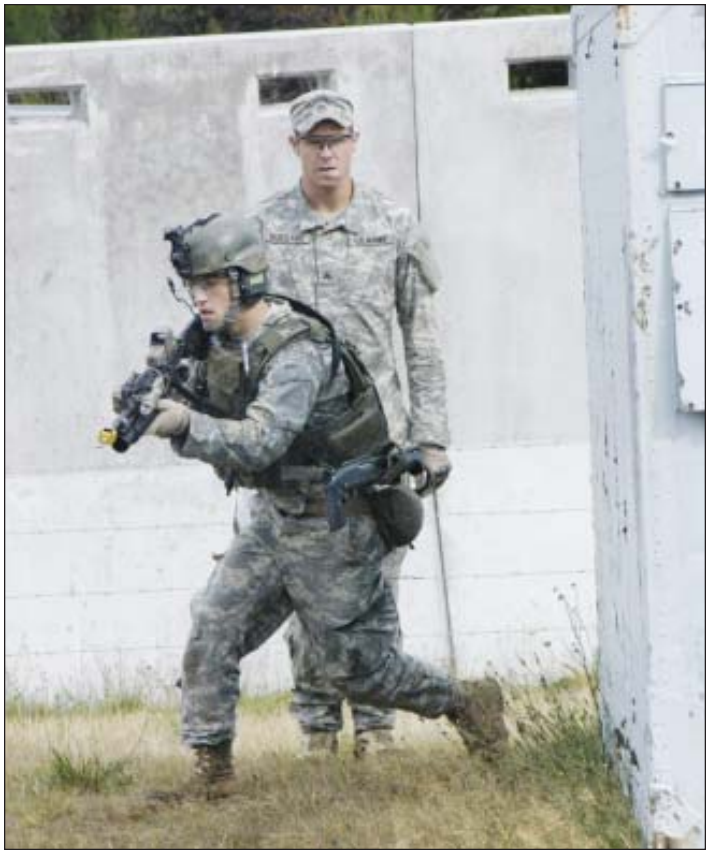
One of the tasks on Lane A is to conduct a ballistic breach with a shotgun.

to test an individual task, it is stand alone, meaning no tasks immediately precede or follow that individual task, with only the stress of conducting one task at a time.

The senior NCOs of the battalion wanted to take a more aggressive approach to EIB testing. Over the past few years, they have observed the EFMB testing concept the Ranger Regiment runs where individual tasks are conducted within lanes and follow a logical scenario a medic might find on the battlefield. These EFMB lanes were a series of individual tasks evaluated in immediate succession by a set group of graders per lane. The NCOs decided EIB testing should also replicate combat conditions. The men should know the tasks and perform them to such proficiency that they could do them under the stress of combat conditions without hesitating to think, even if the conditions around them changed each time. They also realized they were wasting time during EIB site set up by creating an elaborate EIB site and everything that goes with it: from printing thousands of sheets of paper, creating numerous signs and boards, filling sand bags, raking leaves to creating individual stations and erecting tents and nets. EIB set up, training, and testing was conducted in two weeks from start to finish.

The CSM's intent for EIB is what drove the planning process and ultimately led to the task list, lane scenarios, and execution of the EIB under a different concept. Figure 1 is taken from the initial draft of the concept for planning.

The concept was really pretty simple: identify the tasks to train on and evaluate in order to directly support the battalion's mission, and then create lanes which grouped the tasks together logically. The secondary effect that was intended by creating a new concept was to force the training for the tasks to take place off the EIB site by the squad leaders. Based on this, they formed four lanes (Alpha thru Delta) and an incentive-based testing methodology.



Lane Alpha was the assault lane and consisted of eight assault and self-aid tasks.

Lane Alpha (1 thru 5) consisted of eight assault and self-aid tasks conducted in a logical sequence which depended on the lane conditions, where stress and pace were controlled by opposing force role players and enemy contact. This lane was the assault lane.

Lane Bravo (1 thru 5) consisted of eight medical buddy-aid and communications tasks conducted in a logical sequence, controlled by prompts from the grader to create stress conditions. This lane was the medical lane and conducted in an environment that allowed it to be tested during the day, but replicated limited visibility by choosing rooms where the casualty was located so no light was available. This lane had a dual purpose lane as it also served as Ranger First Responder (RFR) refresher training.

Lane Charlie (1 thru 5) consisted of six call-for-fire and communications tasks conducted in a logical sequence, controlled by prompts and graphic measures to create stress conditions. This lane was the call-for-fire lane and conducted in an urban environment, controlling fires against targets in an urban area.

Lane Delta consisted of the remainder of the individual tasks that did not neatly fit into a lane concept, including navigation.

Figure 1 — CSM's Intent

* EIB training is conducted as combat-focused lane training in a field environment instead of individual station training as conducted in the past.
* Tasks are combat-focused tasks relevant to the unit on the battlefield today given the battalion's current and anticipated mission currently, and into the next several years, focused on the the regiment's big five (physical fitness, battle drills, medical, marksmanship, mobility).
* The training scenarios are tailored to allow maximum time and resources for squad leaders to be the primary trainers.
* All lanes are set up logically to allow seamless flow between tasks, closely replicating combat conditions.
* Subject matter experts are used to evaluate call for fire, communications, and medical tasks where possible.
* EIB training serves a dual purpose role where possible, meaning Rangers are RFR refreshed as a result of medical lane as an example.
* Individual stations are incorporated with other overarching tasks, such as movement and navigation tasks, with individual stations located along the way.
* Only tasks with clearly defined tasks and standards will be evaluated during EIB.
* There will be no administrative functions around the EIB site, meaning no visible briefing boards, admin holding areas, ready lines, etc. All areas will be related to a combat environment.
* PSGs will be lane NCOICs for all lanes.

Figure 2 — Lane Training Tasks

Lane A (Assault Tasks)
* Load, fire, reduce stoppage, and clear the M4
* React to contact (fire and correct malfunction of M4)
* Conduct individual movement techniques (Use of cover in urban environment)
* Conduct ballistic breach with shotgun
* Employ offensive grenade (flash bang)
* Enter building/clear a room as member of a team
* Control PUC (persons under control) using language phrases
* Conduct self aid (tourniquet to extremity)

Lane B (Medical Tasks)
* Put a MBTR into operation
* Evaluate a casualty
* Open and maintain an airway (unconscious patient)
* Control external bleeding (trauma dressing)
* Treat life-threatening chest wound
* Manage or prevent shock
* Package casualty for evacuation (CASEVAC)
* Call for CASEVAC (9-line request)

Lane C (Call-for-Fire Tasks)
* Put a PRC 117F into operation
* Establish SATCOM communications
* Identify own location on map or imagery
* Identify target on a map or imagery
* Call for and adjust organic fires (mortars)
* Call for and adjust rotary wing fires

Lane D (Navigation, Foot March, Individual Task Training)
Concept: The concept of this portion is to test the Ranger's ability to plot a route and navigate using technologies available to him on the battlefield today. The Rangers must move over land for extended distances (12-20 miles) in full fighting gear while maintaining the ability to perform individual tasks under the stresses of physical exhaustion and limited visibility. All these tasks will be conducted during hours of limited visibility.
Tasks to be trained:
* Load waypoints and route into Toughbook CF-18 (or laptop computer)
* Transfer waypoints route from Toughbook CF-18 to GPS device
* Print map/imagery using field printer (demonstrated capability; provided by grader once verified)
* Conduct the following individual tasks at each point:
  - Mount, put into operation, and adjust PVS-14/15
  - Load, fire, reduce stoppage on a M240B
  - Load, fire, reduce stoppage on a MK46
  - Put a LAW into operation and engage a target
  - Put thermal into operation and identify S-vest or S-belt
  - Engage targets with an RWS (.50 cal)
  - Set head space and timing on the M2 (.50 cal)
  - Navigate over land using only map and compass

  (Conducted at point 10 after individual weapons station is complete)

This lane was conducted only at night, and night vision goggles were used for all tasks except for those related to loading the routes in the computer. These were conducted in a shelter at the navigation and movement starting location with limited light available.

The standard prerequisite tasks were also modified. Instead of conducting a 12-mile foot march and land navigation event separately, these tasks were rolled up as part of Lane Delta to better maximize time as well as increase the level of stress on the land navigation course by extending the distances. Weapons qualification was conducted allowing the use of assigned aided-vision devices working off of Change 4 to FM 3-22.9 (dated: 13 September 2006). The Army APFT was administered as directed in USAIC Pamphlet 350-6.1 (dated: 1 February 2007).

The methodology behind the EIB test was to create an environment where the squad leaders had to be proactive and creative in training their men. They would not be afforded the opportunity to train on the EIB site, so they had to find other locations to train and manage time and materials to conduct their own training. A pre-test incentive was also created to motivate squad leaders to train their Soldiers intensely and thoroughly from the beginning. If the Ranger was a first time "go" for a lane during the pre-test phase of EIB testing, the Ranger would not have to retest that lane during the test day the following week.

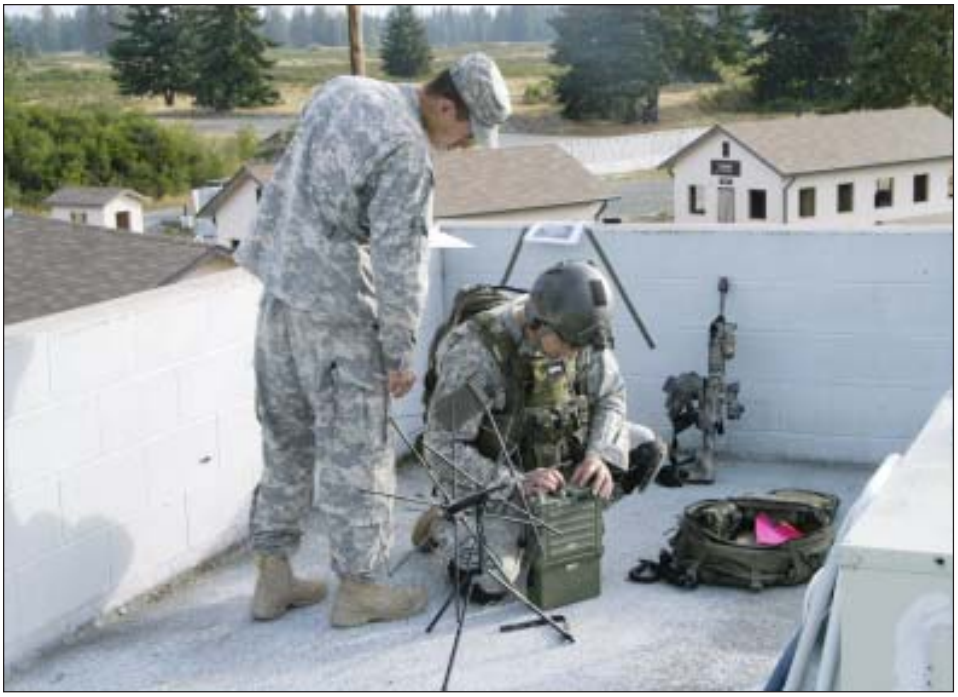
The testing sequence for lanes also created stress. The normal sequence for a company was the company would start on Lane Charlie testing call-for-fire skills, with a block of time by platoon. The squads would then move off the EIB site by platoon and have time for training of upcoming lanes. The company would then test on Lane Delta that evening and walk anywhere from 12-20 miles while testing the Rangers' navigational skills and cognitive abilities under stress during other individual tasks along the way. The company would then start testing Lane Alpha the next morning at 10 a.m. This would put prolonged stress (about 36-40 hours of testing, training, and movement) on the Ranger, testing his ability to function while fatigued. If the Ranger did not pass a lane during the pre-test, he had to negotiate the lane again during the test week. A "no go" on a task constituted a "no go" on the lane. Lanes Alpha, Bravo, and Charlie each consisted of five sub-lanes, which simultaneously conducted the same individual tasks. Each of the sub-lane conditions, however, were slightly different with varied OPFOR placement and conditions, making the Rangers adapt and think.

There were challenges in the planning and execution of this concept. The major challenge with conducting a lane concept was standardization. Each sub-lane had a pair of graders evaluating six to eight individual tasks in rapid succession. This required the graders to be experts at all tasks on their lanes and know the performance measures without having to read them off a sheet. The lane NCOIC also had to ruthlessly enforce the same evaluation standards on all five sub-lanes. With the ambiguous flow of tasks from one to the next, this proved to be the most challenging part to the whole training event.

There are pros and cons to conducting EIB testing and training using a lane concept.

The pros are:

- It takes less site preparation time and material; maybe up to



Lane Charlie consisted of six call-for-fire and communications tasks in an urban environment.

a week less time and hundreds less man hours for set up. EIB testing lasted two weeks from start to finish, which included lane set up, validation, practice days per company, pre-test, and test.

■ Training is managed by the platoon and conducted by the squad leader, not EIB station grader, resulting in more intense training and leader development.

■ The individual Ranger can perform all individual tasks under multiple conditions, under stress, and without preparation prior to execution.

■ This concept requires less graders overall.

■ It is possible to do the administration almost completely paperless.

■ The leaders and candidates were challenged by the change in the EIB concept and increased their efforts to ensure success.

■ Lane graders have more ownership of developing their lanes to achieve the training requirements, and therefore took a lot of pride in making their lanes thought provoking and challenging.

The cons are:

☐ There is a potential of lane grading standards to be slightly different between sub-lanes, so vigilance is the key to preventing this from happening.

☐ Training effectiveness is almost solely reliant on the desire or talent of the squad leader to train his men to standard. It will be very apparent who took the time required to be successful at the tasks when tested, and who did not.

☐ The ability to perform the tasks under the lane conditions are much more challenging and could result in far fewer EIBs being awarded.

☐ It's hard to break away from doing EIB a certain way when it has been unchanged for decades; senior leaders get used to seeing things or doing things one specific way, and changing that vision is hard.

Leader development was a key implied task for this EIB. The responsibility for training was on the squad leaders; success of their men during testing was directly linked to their ability to train them first to conduct each task to standard, then to be able to do several tasks rapidly without practice to standard, in limited visibility in some cases. The development for the NCOs was learning how to create training that ensured their men were successful later under test conditions.

As a result of the changes in training and testing for EIB, the Rangers can perform individual combat-related tasks more efficiently under stressful conditions, which will support the collective tasks for the next combat deployment train-up. It took less time to conduct EIB, but the end result in training proficiency, both for the individual competing for his EIB and for the leader who trained him, is significantly higher. Theoretically, this concept can be done anywhere by a battalion-size element that has two weeks to conduct EIB.