



INFANTRY, ARMOR NCOs TRAIN TOGETHER

ANNETTE FOURNIER

As part of the Army's ongoing transformation, senior armor and infantry NCOs began training together in September during the first combined Advanced NCO Course.

Two of the combined classes began simultaneously, with one class at Fort Benning and the other at the Armor School at Fort Knox, Ky.

ANCOC was redesigned as combined training so senior NCOs in combat arms would have a better understanding of each other's tactics, capabilities and equipment, said Fort Benning's ANCOC First Sergeant Sherman Roberts.

In the Army's restructured brigade combat teams, Soldiers of many MOSs work side by side in combat, said Michael Quirion, the Fort Benning NCO Academy's chief operations officer. The new training will help NCOs make better use of the equipment and Soldiers available, because they'll understand their abilities, he said.

"The armor and the infantry deploy together and work together all the time, but they know very little about each other," Roberts said. "Combining the courses will enable us to train as we fight."

The courses are also being combined in preparation for the Armor School coming to Fort Benning to form the Maneuver Center.

The decision evolved from discussions between Major General Walter Wojdakowski, Fort Benning's commanding general, and Major General Robert Williams, Fort Knox's commanding general, Quirion said.

First word that the courses might be combined spread in late 2005, and by January the armor and infantry NCO academies were tasked with combining the old ANCOC and updating old content to create the joint course.

Much of the course content for the armor and infantry ANCOC were similar, but combining the two was easier said than done, Quirion said.

"It's really a challenge because doctrine and manuals have to be rewritten. But, infantry and armor have the same goals, just different ways of accomplishing them," Quirion said. "We're



focusing on the common ground, then adding some MOS-specific information."

NCOs study together during the first five weeks of the seven-week course. In the class, doctrine is taught by an instructor but enhanced by student discussions. Because many of the students are combat veterans, their experiences are valuable teaching tools, Roberts said. Students also study the specialized skills, equipment and terminology of scouts, tankers, mortarmen, and infantrymen.

"I'm interested to see at the end what they learned from their brothers in arms," Roberts said.

During the sixth week, students are divided to learn certain MOS-specific skills, and the final week the students rejoin for a situational training exercise (STX).

Because Fort Benning currently lacks the equipment to launch an STX complete with tanks, the practical exercise is conducted in the close combat tactical trainer.

Each week of the course, the instructors from the Fort Benning and Fort Knox classes meet via video teleconference to discuss the week's progress.

"This is a coordinated effort all the way. Infantry doesn't have the lead and armor doesn't have the lead on the new course," Roberts said. "And it's not just putting the two old courses together."

The new course adds content relevant to today's battlefield and focuses on building skills that each MOS may not have had a lot of practice with.

New content includes combatives for armor and mounted land navigation for infantry. Other new content includes counterinsurgency operations, intelligence preparation of the battlefield, and information operations.

"Before, infantry didn't know what armor was doing and armor didn't know what infantry was doing," Roberts said. "This course is breaking ground."

(Annette Fournier writes for The Bayonet newspaper on Fort Benning, Ga.)

Doctrine Corner

DOCTRINE AND COLLECTIVE TRAINING UPDATE: The Doctrine and Collective Training division is pleased to announce the creation of the U.S. Army Infantry School (USAIS) Lessons Learned and Integration Cell. The cell is made up of three Center for Army Lessons Learned (CALL) analysts who will work at Fort Benning. Their mission is collect, analyze, validate, disseminate, and respond to requests for Infantry lessons. You can contact the Lessons Learned Cell at doctrine@benning.army.mil.

USAMU OFFERS SDM COURSE FOR DRILL SERGEANTS

The U.S. Army Marksmanship Unit will conduct a Squad Designated Marksmanship (SDM) Course Jan. 29 to Feb. 2, 2007, which is open to all Army drill sergeants.



Slots must be reserved in advance. Unit training and operations sections should request slots by e-mail to Sergeant 1st Class Edward H. Hocking at edward.hocking@usaac.army.mil; include the Soldier's full name, rank, social security number, military occupational specialty, specific unit and unit point of contact name and telephone number. For more information, call (706) 545-7174/1410.

Each student's unit is responsible for lodging, per diem, and personal transportation. The USAMU supplies the squad designated marksman rifle, ammunition, and advanced combat optical gunsight.

The U.S. Army Marksmanship Unit conducts Squad Designated Marksman Instructor Courses to help Soldiers improve their warfighting marksmanship skills. Soldiers are instructed in areas of marksmanship, range estimation and target detection; there are numerous practical exercises including instruction on known and unknown distance rifle ranges.

The course is normally available to NCOs in team leader through platoon sergeant positions, with priority going to Soldiers in combat arms; the course is leader training to develop Soldier long-range shooting skills.

The award-winning shooters of the Army Marksmanship Unit's Service Rifle Team teach the SDM course. These shooters specialize in firing small arms that are organic to units within the military including the M-14, bolt-action rifles, and all variations of the M-16 and M-4 at distances up to 1,000 yards.

(Article provided by the U.S. Army Marksmanship Unit.)

New Course Trains Long-Range Shooters

ANNETTE FOURNIER

To meet the need for long-range marksmen, Fort Benning cadre are training Soldiers in a new long-range marksmanship (LRM) course.

The LRM course began in June to "fill a gap," said Sergeant First Class Michael Hodge, an LRM team sergeant and instructor with the course, which is managed by 2nd Battalion, 29th Infantry Regiment.

"We're changing with the Army," Hodge said, "and the Army is changing because of the (global) war on terrorism. Units need long-range marksmen."

In basic training, Soldiers learn to shoot targets up to 300 meters away. Sniper students learn to fire at 800 to 1,000 meters, but the intermediate range was left void, said Captain Mark Messerschmitt, commander of C Company, 2nd Bn., 29th Inf. Regt.

"Units deploy with sniper weapons and don't have anyone who knows how to use them," Messerschmitt said. "The long-range marksmen can be pulled down range to fire with the sniper weapon from a fixed position."

The students learn to use an M-16 and M-4 with attached sniper scopes and sniper weapons, like the M-24 and the .50 caliber sniper rifle. They also learn to detect targets, estimate the distance to a target, collect ballistics information, and correct for factors like humidity, wind, and weather conditions when shooting. The course includes firing at moving targets during the day and night.

LRM is not a replacement for Sniper School, he said, but it's a good way to meet the Army's need for long-range marksmen. The students don't learn the stalking and reconnaissance skills of snipers, but they are able to engage targets at an intermediate range using sniper weapons.

"We can train 256 snipers a year, but we've already trained 255 marksmen in five months. That's more than anyone thought we would."

They've taught one class at Fort Benning, but most are taught by mobile training teams of four to six instructors who train units at their installations. The MTTs have gone to Fort Drum, N.Y.; Fort Stewart, Ga.; Fort Hood, Texas; and Korea.

The MTTs cost less and allow for more

students to train, Messerschmitt said. When a unit requests training, four to six MTT instructors travel to the unit's installation. The unit pays the instructors' per diem while they teach classes of about 36 students. It's more cost effective than sending 36 Soldiers to Fort Benning for two weeks, Messerschmitt said.

While the main goal is training Soldiers to be long-range marksmen, it's great preparation for Sniper School, Hodge said.

The majority of LRM instructors are snipers and all but one are combat veterans. The class is targeted for Soldiers from E-1 to E-4, Hodge said, because they will be the squad riflemen in deploying units. The class stands out because the subject matter experts train students directly, rather than a train-the-trainer approach.

"It would be a lot for an NCO to learn in just two weeks and bring back to teach others," Hodge said. "Even though the Soldiers won't be snipers, this doubles their range and lets them use their weapons to their maximum capability. This extends their range and makes them more lethal on the battlefield."

It's a menu-based course, Messerschmitt said. "We work (with) the unit to focus on what training their Soldiers need. Because it doesn't have the requirements Sniper School (has), it gives us flexibility to adjust training."

Each day ends with a mentoring session when the instructors meet with small groups and answer questions. The class is focused on teaching, not attrition, Hodge said.

"We want to teach them skills they can use when they deploy," Hodge said. "This training might save a Soldier's life. That's what makes this assignment satisfying."

(Annette Fournier writes for The Bayonet newspaper on Fort Benning, Ga.)

SOLDIERS GET GROUP DINING ON THE GO

U.S. ARMY SOLDIER SYSTEMS
CENTER - NATICK

The Natick Soldier Center's (NSC's) Unitized Group Ration-Express (UGR-E) provides a group dining capability anytime, anywhere.

With a quick pull of a tab, the meals are ready in 30 to 45 minutes and provide a change of pace from Meals, Ready-to-Eat (MREs). UGR-E modules serve hot meals for up to 18 warfighters without requiring kitchen equipment, cooks, fuel, or a power source. UGR-Es also reduce the costs and logistical burden associated with using a field kitchen.

"Warfighters would utilize the UGR-E in locations where they are unable to use a Mobile Kitchen Trailer (MKT), but want a group dining capability. This could be before MKTs make it to the field or if they are located too far away for the group to congregate there. UGR-Es also eliminate the need for trucks to bring them food in insulated containers," said Shari Dangel, an NSC physical scientist.

"The UGR-E borrows technology from the MRE's Flameless Ration Heater (FRH) to heat the food. These magnesium-based heaters produce a significant amount of heat with relatively small amounts of raw material. All that is required to start the reaction is mixing salt water with the magnesium. The UGR-E contains four heaters that are 10 times the size of each single FRH heater," explained Dangel.



Sarah Underhill

Soldiers pull a tab to activate the Unitized Group Ration-Express (UGR-E). UGR-E modules serve hot meals for up to 18 Soldiers without requiring kitchen equipment, cooks, fuel, or a power source.

Dangel said that there are two types of UGR-Es. The Type I UGR-E requires warfighters to place the four heaters into the heater trays before pulling the tab. With Type II UGR-Es, the heaters are sealed into the heater trays. Warfighters need to pull one tab that will uncover the heaters and then pull a second tab that will release the activator solution.

According to Peter Lavigne, NSC chemical engineer, "To meet the immediate needs of the services, an accelerated development effort will field the UGR-E initially as Type I, and later the Type II will be transitioned as improvements in the heating system are completed. We're also investigating other opportunities to improve the concept, to include the use of coated fiber heating trays that are low cost, lightweight and offer improved disposability and recyclability."

According to Dangel, the first offering of the UGR-E will include three breakfast menus and six lunch/dinner menus. The meals can be easily transported with the unit. The four six-pound polymeric traypacks include an entrée, vegetable, starch, dessert, plus snacks as well as

dining trays, beverages, eating utensils and serving utensils.

"While the food is heating, warfighters can enjoy the snack items included in the UGR-E. These can include M&Ms, Reese's Pieces, Trail Mix, and powdered beverages," said Dangel.

According to Dangel, warfighters who have evaluated the UGR-Es have liked that they do not have to rely on drivers to bring them food in insulated containers cooked in field kitchens hours beforehand. They can wait until they are almost ready to eat to start heating the food, then eat it while it's still hot.

The technology most benefits small, remote units operating in austere environments. According to Dangel, prototype UGR-E's have been sent to both Afghanistan and Iraq.

Future improvements are already in the works.

"An Enhancement Box, or E-Box, is also being developed to provide a supplement for the UGR-E. It will include milk, cereal, bread, and other complementary items that will increase the variety and nutrition offered by the ration," said Lavigne.

INSTITUTE INVESTIGATES WAYS TO HELP SOLDIERS OVERCOME ALTITUDE

U.S. ARMY SOLDIER SYSTEMS CENTER - NATICK

Scientists at the U.S. Army Research Institute of Environmental Medicine (USARIEM) are investigating ways to help Soldiers adjust to high-altitude environments.

Soldiers being sent to Afghanistan are often quickly deployed to high-altitude environments via helicopter, leaving little time for their bodies to adjust and putting them at risk for contracting high-altitude sickness. High-altitude conditions, which include adjusting to less oxygen and thinner atmosphere, can impact even the most physically fit Soldier.

According to USARIEM's Dr. Stephen Muza, high-altitude conditions, at a minimum, affect stamina and cause Soldiers to fatigue much more quickly. Other problems can develop as well.

The most prevalent type of altitude sickness is acute mountain sickness (AMS), which can cause headaches, dizziness, nausea, and make it difficult to fall asleep. According to Muza, AMS typically occurs within 4-12 hours.

Although most people experience the aforementioned symptoms of AMS, 100 percent of the population experiences a decline in task performance.

"Soldiers can still make accurate decisions, but it takes them longer to do so. Altitudes above 5,000 feet can impair vision, especially the ability to see color," said Muza.

AMS symptoms will often dissipate once a Soldier's body adjusts to the high-altitude environment, but sometimes AMS can

intensify into pulmonary edema, which is caused by a build up of fluid in the lungs and can lead to shortness of breath and heavy coughing.

AMS can also transform into cerebral edema, which is caused by an increased blood flow to the brain. Cerebral edema can cause swelling, disorientation, hallucinations and can impact physical coordination. It can be deadly if left untreated.

USARIEM scientists are investigating the use of pre-exposure to high-altitude conditions to prevent altitude sickness to help Soldiers who need to make sudden and prolonged ascents to altitudes of 5,000 to 14,000 feet.

Soldiers will perform a myriad of typical tasks in USARIEM's Hypoxia Room and Hyobaric Chamber, which replicates a high-altitude environment. The Hypoxia Room is a low-cost, low-oxygen environment and can be replicated anywhere, even in small nuclear, biological, and chemical (NBC) shelters.

The study will document changes in Soldier performance under both high-altitude and low-altitude conditions. The study will also document changes in performance and well-being before and after Hypoxia Room treatments. USARIEM's investigation will reveal exactly how much time Soldiers need to be exposed to high-altitude conditions to offset the effects of altitude sickness.

Based on observations so far, Muza said it appears Soldiers exposed to 10,000-14,500 feet for three or four hours a day are ready to undertake their mission with less sickness and higher performance.

According to Muza, if the Hypoxia Room treatments are done over six to seven days, it has been found that the treatments can increase physical stamina by 30 percent and can reduce or eliminate AMS. USARIEM scientists have found that two-thirds of improvement occurs during the first week of treatments.

One result of the study will be the creation of altitude preparation guidelines. Muza said that USARIEM's research will develop predictive models to determine rates of decline in physical and cognitive abilities in correlation to how fast Soldiers need to ascend.

In addition to the Hypoxia Room treatments, recently completed studies by Muza's team have determined that a high-carbohydrate diet in high-altitude conditions improves Soldier stamina and appears to reduce AMS. However, taking anti-oxidants or creatine did not lessen the effects of high-altitude exposure. Muza says that future studies will examine several other ways to lessen the effects of exposure to high-altitude conditions.

The study should be completed sometime prior to the end of 2006.



Sarah Underhill

Private Jerrod Howard performs a task measuring marksmanship under both high-altitude and low-altitude conditions.