National Guard unveils virtual range

By DARREN IVY Staff Reporter

For the Nebraska Army National Guard, successfully hitting a target now means hitting a red X on a computerized projection screen rather than a hole in a paper bull's eye.

This virtual shooting range, assembled in the Adjutant Major General's building at 1233 Military Rd., is replacing traditional live-fire ranges as the new marksmanship training for the Army National Guard.

Camouflage netting, computer screens, surround-sound stereo, CO2-powered weapons, and a 12 foot by 30 foot movie projection screen make up the Nebraska Army National Guard's Engagement Skills Trainer, or EST.

We tried to create a battlefield atmosphere, so the troops will have the right mind-set for training," said Maj. Tom Brewer, state marksmanship coordinator for the Nebraska National Guard.

When civilians enter the Engagement Skills Trainer room in the Adjutant General's building, they might think they have plopped a coin into a computerized video game.

However, the \$500,000 system is not designed for video game antics.

"It was designed to allow Nebraska Guards-

men to work on their marksmanship skills in a computerized virtual reality environment," Adjutant Maj. Gen. Stanley Heng said. Heng said the EST evaluation will allow

National Guard marksmanship officials to evaluate the troops' shooting skills before they go to an actual live-fire range. Heng said he hopes the individual evaluation of soldiers' shooting will improve their first-time scores on the Guard's annual qualification tests.

'The Guard doesn't want to eliminate liverange shooting. We just want to make sure soldiers are well prepared when they take their qualification tests so they don't have to retake them," Brewer said.

Shooting for success

In addition to providing individual soldier evaluation, the EST will also make marksmanship training cheaper and more efficient for the Guard. Compared with live-fire ranges, the EST costs considerably less to operate.

Brewer estimated the Guard spent \$100,000 in a year for the live-fire range. The cost includes ammunition, gun maintenance and transporting troops to the range in Hastings for three weekends every month.

Brewer estimated the total costs of operating the EST at less than \$5,000 for the year.

By reducing the use of live-fire ranges, weapons will not wear out as fast and using fewer bullet casings will benefit the environment, Brewer said.

The EST was supposed to cost \$750,000, but because of the large number of systems ordered through a joint contract with the Marine Corps and Army National Guard, Fire Arms Training Systems in Virginia gave the federal government a \$250,000 discount.

Aiming for improvement

With camouflage netting and tarps on the walls, life-size images and surround sound, "The Range" looks like a real battlefield.

Ten to 20 different battlefield scenarios are found on each of the \$1,000 laser disks that the National Guard owns. Brewer said the Guard will have to constantly update the laser disks to make sure that troops stay challenged

After picking a battlefield scenario, the computer operators in the back of the 50 foot by 50 foot training room can specifically tailor the scenario. They must decide the number of firing stations, volume level, wind speed, wind direction and whether the scenario is in the day

Unlike a live-fire shooting range, the weapons are operated by CO,. This is one of the only differences between the EST guns and live-fire range guns. Trainees will still have to deal with gun jamming, magazine reloading and gun recoiling.

"These factors force the shooter to act just like they would in firing the real thing," Brewer

After the options are chosen and the weapons are loaded, the action begins. The loaded battlefield scenario comes onto the huge screen and the shooters are given directions.

Shooters are told to focus on specific areas of the screen and their goal is to shoot enemy troops as they move toward them. After a certain amount of time has passed or after the en-



RICK TOWNLEY/DN

LT. COL. ROGER MEISINGER watches Damian Kelly, a Lincoln Southeast senior, fire a matically controlled M-16 rifle at the Nebraska National Guard's new Engager Trainer. The state-of-the-art, \$500,000 EST will be open to the public this weekend.

emy troops have all been killed, a message appears on the screen telling shooters to cease

Once the battle scenarios end, the evaluations begin. A chart appears on the screen that tells each shooter how many rounds were fired, how many targets were hit, and the percentage of targets hit. Then computer operators can replay the battle scene in slow motion, normal motion, or fast motion.

"In order to do well on the system, soldiers must make split-second identifications, critical ballistic corrections and perform other skills that are considered critical in a real battle," Brewer said.

If shooters missed the target during battle, a green X with the gun's number shows up exactly where the bullet landed. If a target is hit, a red X appears and if a friendly soldier is shot, a blue X appears.

"Instructors can then take this information

to make reinforcement training based upon the individual's performance," Brewer said.

According to formal military evaluations, the accuracy in marksmanship has skyrocketed after EST training.

Improved accuracy is just one of the many ossible benefits of the EST. Because the EST is located in Lincoln, soldiers waste less time on the road.

"Because it doesn't take as long to run a group through this system as on a regular range, we've got more time for individual training, which will ultimately make our soldiers better shots," Brewer said.

Since the Guard received the system three weeks ago, officers have been testing it and making sure it operates properly. They haven't encountered any problems yet, so the Guard will let the public test its marksmanship on the EST. Building 1233 will be open to the public this week on Thursday, Friday and Saturday from 10:30 a.m. to 9:30 p.m.

