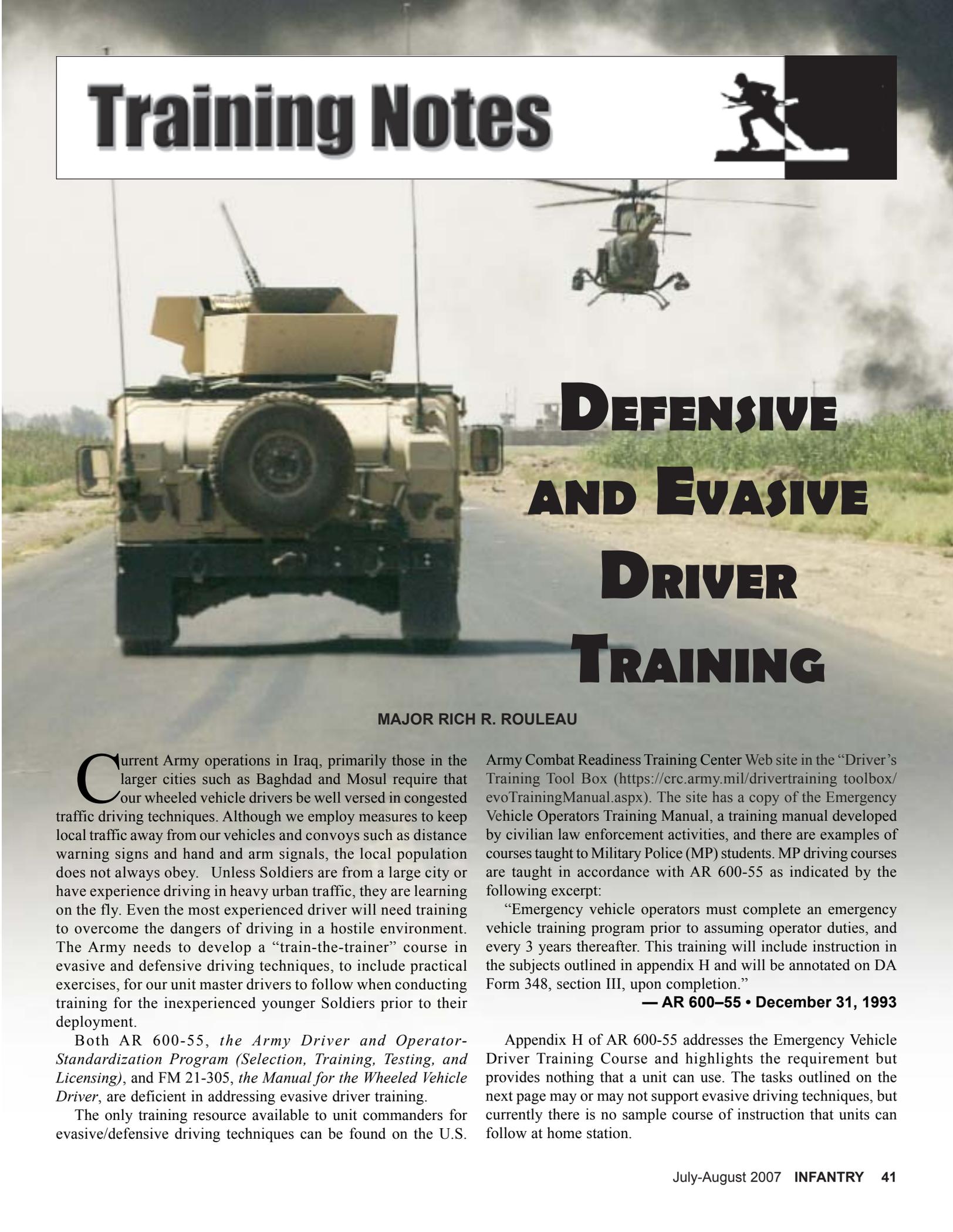


Training Notes

A photograph of a military Humvee driving away from the viewer on a paved road. The vehicle is olive drab and has a spare tire mounted on the back. In the background, a military helicopter is flying in the sky. The scene is set in a rural or semi-rural area with some vegetation and a utility pole visible.

DEFENSIVE AND EVASIVE DRIVER TRAINING

MAJOR RICH R. ROULEAU

Current Army operations in Iraq, primarily those in the larger cities such as Baghdad and Mosul require that our wheeled vehicle drivers be well versed in congested traffic driving techniques. Although we employ measures to keep local traffic away from our vehicles and convoys such as distance warning signs and hand and arm signals, the local population does not always obey. Unless Soldiers are from a large city or have experience driving in heavy urban traffic, they are learning on the fly. Even the most experienced driver will need training to overcome the dangers of driving in a hostile environment. The Army needs to develop a “train-the-trainer” course in evasive and defensive driving techniques, to include practical exercises, for our unit master drivers to follow when conducting training for the inexperienced younger Soldiers prior to their deployment.

Both AR 600-55, *the Army Driver and Operator-Standardization Program (Selection, Training, Testing, and Licensing)*, and FM 21-305, *the Manual for the Wheeled Vehicle Driver*, are deficient in addressing evasive driver training.

The only training resource available to unit commanders for evasive/defensive driving techniques can be found on the U.S.

Army Combat Readiness Training Center Web site in the “Driver’s Training Tool Box ([https://crc.army.mil/drivertraining toolbox/evoTrainingManual.aspx](https://crc.army.mil/drivertraining%20toolbox/evoTrainingManual.aspx)). The site has a copy of the Emergency Vehicle Operators Training Manual, a training manual developed by civilian law enforcement activities, and there are examples of courses taught to Military Police (MP) students. MP driving courses are taught in accordance with AR 600-55 as indicated by the following excerpt:

“Emergency vehicle operators must complete an emergency vehicle training program prior to assuming operator duties, and every 3 years thereafter. This training will include instruction in the subjects outlined in appendix H and will be annotated on DA Form 348, section III, upon completion.”

— AR 600-55 • December 31, 1993

Appendix H of AR 600-55 addresses the Emergency Vehicle Driver Training Course and highlights the requirement but provides nothing that a unit can use. The tasks outlined on the next page may or may not support evasive driving techniques, but currently there is no sample course of instruction that units can follow at home station.

Appendix H of AR 600-55 Emergency Vehicle Driver Training Course

H-2. Program of instruction

- a. Unit A — Introduction, organization of course, and material review.
 - b. Unit B — State, local, host nation, and post traffic regulations and laws.
 - c. Unit C — Selection of routes and building identification.
 - d. Unit D — Use of radios and communications procedures.
 - e. Unit E — Emergency vehicle driving.
 - (1) Lights and sirens.
 - (2) Parking and backing.
 - (3) Negotiating traffic.
 - (4) Intersections.
 - (5) Turns.
 - (6) Following distance.
 - (7) Road conditions.
 - (8) Yield right of way.
 - (9) Negotiating curves.
 - f. Unit F — Handling unusual situations.
 - (1) Adverse weather.
 - (2) Collisions.
 - (3) Skids.
 - (4) Vehicle malfunctions.
 - (5) Placement of warning devices.
 - g. Unit G — Specialized instruction.
 - (1) Section I—Ambulances.
 - (a) Responsibilities.
 - (b) Route planning.
 - (c) Inspection and maintenance of medical supplies and life support equipment authorized for the type of ambulance the individual is being tested for.
 - (d) Driving to the scene.
 - (e) At the scene.
 - (f) Directing traffic.
 - (g) Driving with a patient aboard.
 - (2) Section II — Police vehicles.
 - (a) Responsibilities.
 - (b) Emergency communications.
 - (c) Pursuit driving.
 - (d) Making a traffic stop.
 - (e) Emergency escort of another vehicle.
 - (f) Directing traffic.
 - (3) Section III — Fire apparatus.
 - (a) Responsibilities.
 - (b) Inspection and maintenance of specialized equipment.
 - (c) Vehicle characteristics.
 - (d) Selecting routes.
 - (e) Operating systems.
 - (f) Special considerations.
 - (4) Vehicle dynamics.
 - (5) Size and weight.
 - (6) Speed.
 - (7) Basic control tasks.
 - (a) Steering.
 - (b) Braking.
 - (c) Shifting.
 - (d) Backing.
 - (e) Parking.
 - (f) Intersections.
- h. Unit H — Introduction to driving range and safety briefing.
- i. Unit I — Driving range.
- j. Unit J — Operator's performance evaluation.

FM 21-305: Manual for the Wheeled Vehicle Driver

This manual covers the general principles of non-tactical wheeled vehicle operation. It also describes special instructions for tactical vehicle operation. Military and civilian drivers of government-owned vehicles will use this manual as a guide for safe and efficient operation of a vehicle. Instructions in this manual will help the wheeled vehicle driver maintain a high degree of driving efficiency. This manual does not restrict its contents to any particular vehicle. It is a guide to normal everyday operations and to driving under difficult conditions. When more information is needed for a specific vehicle, check the technical manual written for that vehicle.

Chapter 8, Operating Practices and Maneuvers, should address evasive driving techniques only focuses on driving practices, starting, steering, turning, braking, and stopping, ground guide safety procedures, backing, turning around, parking and the elements of safe driving.

Typically, unit driver's training standard operating procedures (SOPs) will include reviews of the above information with additional training that is unit specific or condition specific such as winter driving. Here is an excerpt from one unit's SOP.

OBJECTIVES: To establish a training program at the squadron and troop level for motor vehicle drivers and equipment operators that promotes the highest

standards of technical proficiency, equipment safety, and driver knowledge.

a. To insure that, at a minimum, the troop master drivers license all the Soldiers that are not in a command position on a high mobility multi-wheeled vehicle (HMMWV) within 60 days of arrival under the supervision of the squadron master driver.

b. To teach and/or sustain basic operator skills on motor vehicles and equipment.

c. To instill in vehicle operators and supervisors a safety attitude and a greater sense of pride in his/her assigned equipment.

d. To ensure that Soldiers are aware of all state and post environmental protection and traffic laws.

e. To ensure that Soldiers' motor vehicles and equipment are in proper operational status by complying with proper preventive maintenance checks and services (PMCS).

f. To promote safety.

Evading Contact

Although some unit's have convoy leader's handbooks and other driving-related unit level products, many focus on breaking contact not evading it.

Several federal agencies and private contractors have programs which emphasize evading contact. One of these programs offered by the Federal Bureau of Investigation (FBI) is the Tactical Emergency Vehicle Operators Course (TEVOC).

The TEVOC program instructs new agents and other law enforcement personnel in the basics of defensive driving and emergency vehicle operation techniques. It is used to improve the driving skills and confidence of personnel and reduce the possibility of accidents; students receive classroom instruction in vehicle dynamics, defensive driving principles, and legal and liability issues. Students also are given skill development exercises in skid control, performance driving, and evasive driving techniques. Sending master drivers to the TEVOC or other federally sanctioned courses would assist the Army in building a training base to prepare units for combat driving in the big cities of Iraq.

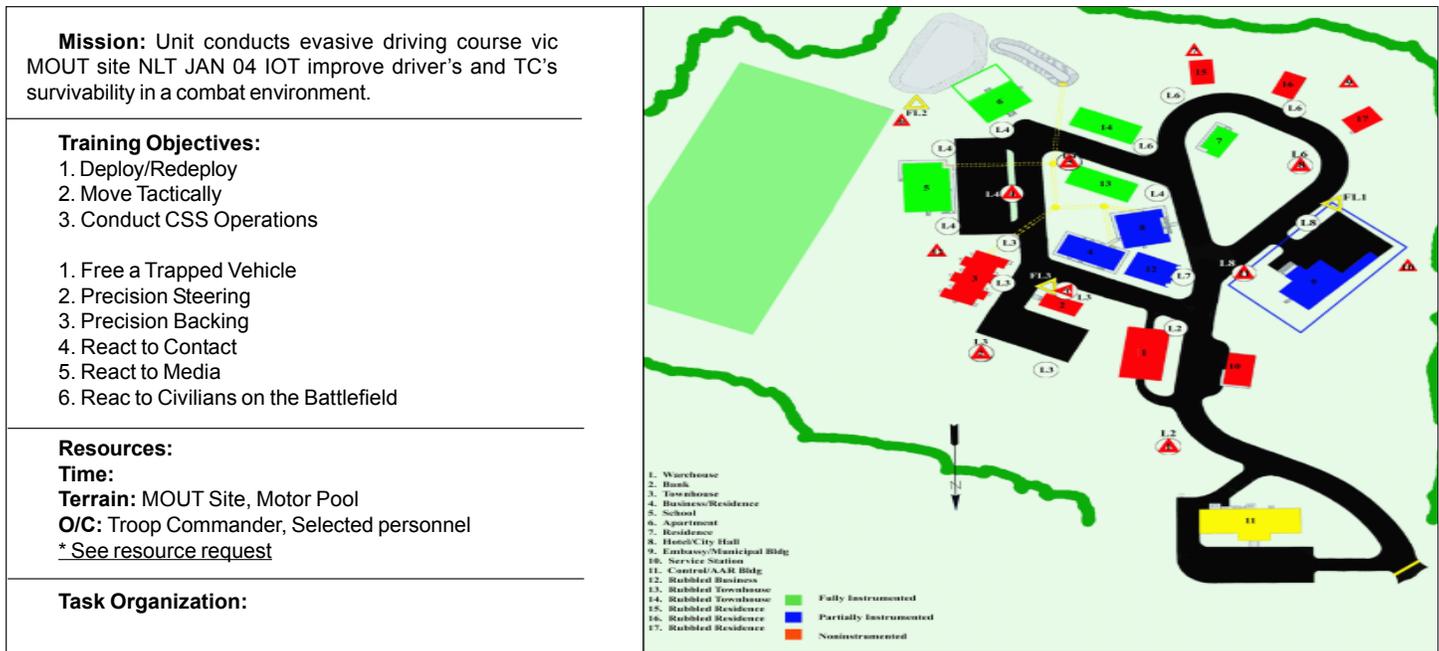


Figure 1 — Concept Brief for Combat Drivers Assault Course

Combat Drivers Assault Course

Figure 1 is a concept and example of a scaled down/modified version of training a Soldier received while attending a course prior to his unit deploying to Iraq.

The unit named its training course the Combat Drivers Assault Course (CDAC). The following is an example concept brief used by the unit to brief the participants.

The purpose of the course was to improve drivers' survivability in a combat environment. The course consisted of limited classroom training and a series of driving exercises designed to teach drivers new techniques and to instill in them confidence in their abilities.

The training objectives for CDAC were:

- Free a Trapped Vehicle
- Precision Steering
- Precision Backing
- Ramming Techniques*
- React to Contact
- React to Media
- React to Civilians on the Battlefield (COBs)

*This training was trained only in a classroom environment, but not put into practice.

The unit used its post military operations on urban terrain (MOU) site as its training site, and it provided a great setting for the training. The personnel at the site were able to acquire every training aid requested. These included junked cars, telephone poles, tires, 55-gallon drums, and barriers, all of which made the training more realistic. Sound effects (call to prayer, weapons fire, and screams) were used to add realism. The MOU site's theater also proved to be the ideal place to conduct classroom training and after action reviews (AARs).

Old tires were used to provide protection to the vehicles used in training to protect them from unnecessary damage. Tying used

tires to the four corners of the vehicles with parachute cord took about five minutes per vehicle and were very effective in reducing damage suffered during training. Additionally, the vehicles never collided with anything while moving more than 10 miles per hour (mph), and the tires prevented damage to vehicle lights and body. The low-speed collisions included contact with other HMMWVs, junked cars, and 55-gallon drums.

The student-to-instructor ratio is very important in order to provide proper instruction. One instructor for approximately every five students is the desired level. This allowed for smooth rotation of the students and vehicles for each exercise, and it allowed for some instructors to do administrative work for the course (set-up, etc) while the others ran the exercises. The number of instructors also allowed the students to be split into small groups to better use all of the training sites in the limited time available.

Instructors with experience driving HMMWVs are key to the success of this course. Without experienced instructors, the leader certification would have easily taken several days. With the experienced NCOs, the leader certification focused more on the specifics of each exercise. Classroom instruction followed by practical exercises and a written exam completed the certification.

Leader Certification

Unit leaders and trainers are certified in providing this type of instruction. The course instructor teaches unit master drivers the techniques to be trained and certifies them to teach these techniques.

Driver's Training Program

The target audience for this course is drivers of wheeled vehicles (i.e. supply specialist, NBC specialist, and command group drivers). A small group was chosen to ensure the student to instructor ratio was low. Additionally, other units from post sent

Leader Certification

CDAC, Phase I

0900-0945	Overview/Read-ahead Review* (MOUT Clrm)
0945-1030	Media / CA overview
1030-1200	MOUT Site walk / obstacle set-up
1200-1300	Lunch
1300-1310	Motor Pool orientation
1310-1400	Drive Motor Pool exercises (all instructors)
1400-1600	Drive MOUT Site exercises (all instructors)
1600-1700	Revise/Refine/Drive (as required) obstacles and exercises
1700	Return vehicles to Motor Pool

*Instructors are responsible for reading instructor packet before Leader Certification IOT expedite leader training

personnel through the course to develop their own training course. Initially, students were given classroom instruction (the crawl phase) followed by controlled execution in the motor pool with traffic cones (the walk phase), and then advanced execution (the run phase) with an instructor in the vehicle in the urban sprawl of the MOUT site.

The morning of Day 1 included classroom instruction for afternoon execution. Soldiers were trained by on the fundamentals of evasive driving, a serpentine course (as depicted in Figure 2) under controlled conditions and then given a practical exercise (PE) in the afternoon in the MOUT site with typical urban sprawl. Each vehicle used consisted of the driver, the vehicle commander/instructor and two additional students. After each student executed the course, they were immediately AAR'd by the instructor and their peers on the application of the techniques being trained. Soldiers executed numerous iterations of the course and due to the immediate feedback and low student-to-instructor ratio were able to retraining effectively. A sample Day 1 schedule is listed below.

Day 1

CDAC, Phase I

0900-1030	Fundamentals of Evasive Driving/4WD applications (MOUT Classroom)
1030-1200	Media / CA Considerations (MOUT Classroom)
1200-1300	Lunch
1300-1330	Prep Vehicles for Operations (Motor Pool)
1330-1430	Drive Serpentine Course (Motor Pool)
1430-1600	Drive Basic Urban Steering Course (MOUT Site)
1600-1630	Review (MOUT Site)
1630-1700	Return Vehicles to Motor Pool

The morning of Day 2 included the fundamentals of precision backing (Figure 2), lane change (Figure 3), and precision driving courses (Figure 4) under controlled conditions with traffic cones and then given a PE in the afternoon in the MOUT site with typical urban sprawl. Each vehicle used consisted of the driver, the vehicle commander/instructor and two additional students. After each student executed the course, they were immediately AAR'd by the

instructor and their peers on the application of the techniques being trained. Soldiers executed numerous iteration of the course and due to the immediate feedback and low student-to-instructor ratio were able to retraining effectively. A sample Day 2 schedule is listed below.

Day 2,

CDAC, Phase I

0900-0930	Prep Vehicles for Operations
0930-1030	Drive Precision Backing Course (Motor Pool)
1030-1130	Lane Change Exercise (Motor Pool)
1130-1300	Lunch / Course Set-up
1300-1330	Walk Precision Steering Course (Motor Pool)
1330-1500	Drive Precision Steering Course (Motor Pool)
1500-1530	Walk Advanced Urban Steering Course (MOUT Site)
1530-1600	Drive Advanced Urban Steering Course (slow, MOUT Site)
1600-1630	Return Vehicles to Motor Pool

The morning of Day 3 included a review and execution of advanced urban steering, free a trapped vehicle and classroom instruction of evasive driving techniques followed by a PE. Again initial introduction to training was first executed under controlled conditions with traffic cones and then given a PE in the afternoon in the MOUT site with typical urban sprawl. For advance techniques, each vehicle used consisted of the driver and the vehicle commander/instructor. After each student executed the course, they were immediately AAR'd by the instructor and their peers on the application of the techniques being trained. Soldiers executed numerous iterations of the course, and due to the immediate feedback and low student-to-instructor ratio were able to complete retraining effectively. A sample Day 3 schedule is listed below.

Day 3

CDAC, Phase I

0700-0730	Prep Vehicles for Operations (Motor Pool)
0730-0900	Drive Advanced Urban Steering Course (fast, MOUT Site)
0900-0930	Free Trapped Vehicle (MOUT Site)
0930-1000	Evasive Driving Overview
1000-1200	Drive Evasive Driving Exercise (MOUT Site)
1200-1300	Lunch
1300-1600	Drive Evasive Driving Exercise (MOUT Site)
1600-1630	AARs
1630-1700	Move Vehicles to Motor Pool

The purpose of the course was to improve drivers' survivability in a combat environment and with a small student-to-instructor ratio of the first execution CDAC, which was completed in four days. Day 4 was left for retraining, vehicle maintenance, and site clean-up.

Day 4

CDAC, Phase I

0900-1200	Convoy Driving Overview (MOUT Classroom)
1300-1430	AAR (MOUT Classroom)
1430-1700	Clean-up (MOUT Site) / Post-ops PMCS (Motor Pool)

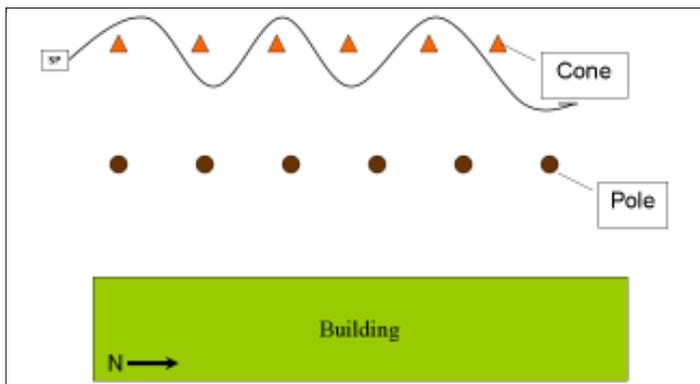


Figure 2 — Serpentine Course

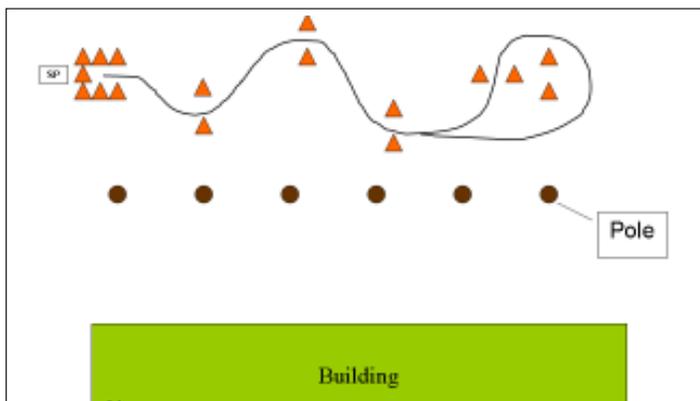


Figure 3 — Precision Backing Course

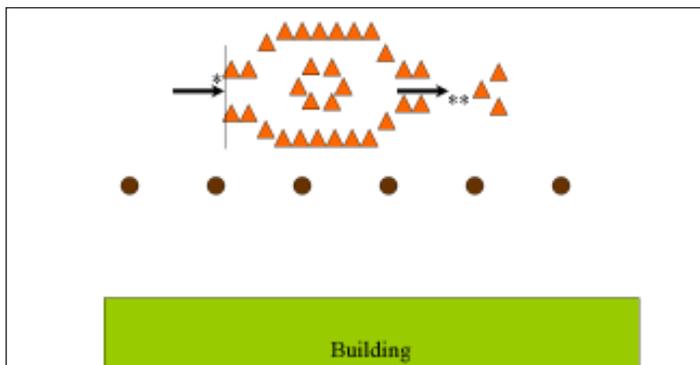


Figure 4 — Lane Change Exercise

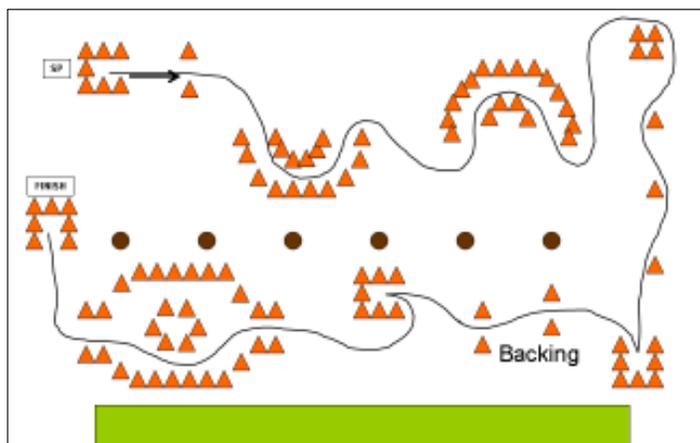


Figure 5 — Precision Steering Course

Again, this training was adaptive to meet the goals of a unit commander based on available resources and knowledge. The following were some of the resources required to execute the training:

Personnel

Instructors: 5x NCO (troop master drivers)
 Set-up/tear down detail: Instructors + 5 Soldiers
 Minimum student-to-teacher ration: 5:1

Land

Classroom: MOUT site classroom
 Urban obstacle course: MOUT site
 Skills area: Motor Pool

Vehicles

1x dedicated medic HMMWV
 5x training HMMWVs

Other

Urban obstacle course:
 20 55-gal. drums (empty) or equivalent
 10 plastic Jersey barriers (empty)
 10 junk vehicles (kept at MOUT site permanently)
 Skills area: 100 road cones/pylons, 18-36" height
 Targets (simulate COBs)

Conclusion

The days of conducting simple operator/driver's training in a sterile environment are gone. Convoy live fires are now a way of life for units preparing to go to combat in Iraq. Even in the third world, urban sprawl and modernization has made defensive or tactical driving in a congested urban environment a fact of military life. Doing so requires the careful application of creative training by unit leaders. This brief article showed how one unit maintains its combat edge by using all the available tools at hand.

Leaders must continue to draw on the experience of its combat veterans, seasoned in operations in Afghanistan, Iraq, Somalia, Haiti, and Bosnia. Finally, a unit never stops refining its tactics, techniques, and procedures (TTPs) in combat drills that improve the unit's ability to meet the challenges of urban operations. This is an example of how one unit made up for inadequacies in Army training as it prepared for combat in Iraq.

Major Rich R. Rouleau is currently assigned to the National Training Center at Fort Irwin, California, as the Light Task Force XO Trainer. He enlisted in the Army National Guard in 1982 and transferred to active duty in 1984 as an M60A1 armor crewman. He has served as a tank platoon leader, company executive officer, and battalion maintenance officer for the 2nd Battalion, 37th Armor, 3rd Infantry Division, and assistant S3, S4 and troop commander of A Troop, 3rd Squadron, 17th Cavalry, 10th Mountain Division. He also served as an armor/mechanized observer/controller at the Joint Readiness Training Center at Fort Polk, Louisiana, and as S3 and XO for the 4th Squadron, 14th Cavalry, 172nd Stryker Brigade Combat Team in Iraq.
