

INFANTRY and TANKS

CAPTAIN GUY C. SWAN III

As an Armor officer attending the United States Army Infantry Officer Advanced Course, I was surprised to find that many of my infantry colleagues had had little experience working with tanks. In particular, the officers just coming from airborne, air assault, Special Forces, and Ranger assignments knew little about employing and supporting tanks within a company team. At the same time, I found that those officers who had recently served in mechanized infantry battalions had an exceptionally good knowledge of combined arms operations.

As one of 12 Armor officers in the class, I was constantly pumped for information on the use of tanks. The instructors did a good job teaching the general employment of tanks as part of the combined arms team, but seemed to take for granted a level of experience that many of the officers did not have. Because of this, I answered many questions from my classmates about the real nitty-gritty problems of what tanks can and cannot do for the company team commander.

OPERATIONS

First and foremost, the tank is the *primary* tank-killing weapon system on the battlefield today. But because there is so much emphasis in today's infantry training on antiarmor guided missiles, this function of the tank is sometimes obscured. The company team commander, therefore, should

think of his tanks as his main tank-killers, and then supplement them with his antiarmor weapons as a particular situation requires.

All U.S. tanks also have sophisticated ranging and sighting components as part of their fire control systems. Their laser rangefinders, for example, can help the team's leaders set up their range cards, especially for their TOWs, Dragons, and machineguns.

For battlefield illumination, most tanks still carry high intensity xenon searchlights, even though tankers don't like to turn them on for fear of compromising themselves. Certainly a tank's survivability is jeopardized whenever its searchlight is turned on, even in its infrared mode, but a team commander can use the light if he is careful. Perhaps the best way is to put the tank in a turret-down defilade position and reflect the light off the cloud cover. Although this method may sound odd, it can provide adequate illumination if the cloud cover is right.

Another piece of useful equipment on the tank — one that is often neglected in combined arms training — is the external telephone. An infantryman who is using the phone actually becomes a kind of fifth crewman for the purposes of observation and target acquisition. (For safety, the infantryman should remain clear of the rear of the tank and walk to the right flank where the tank commander can see him.)

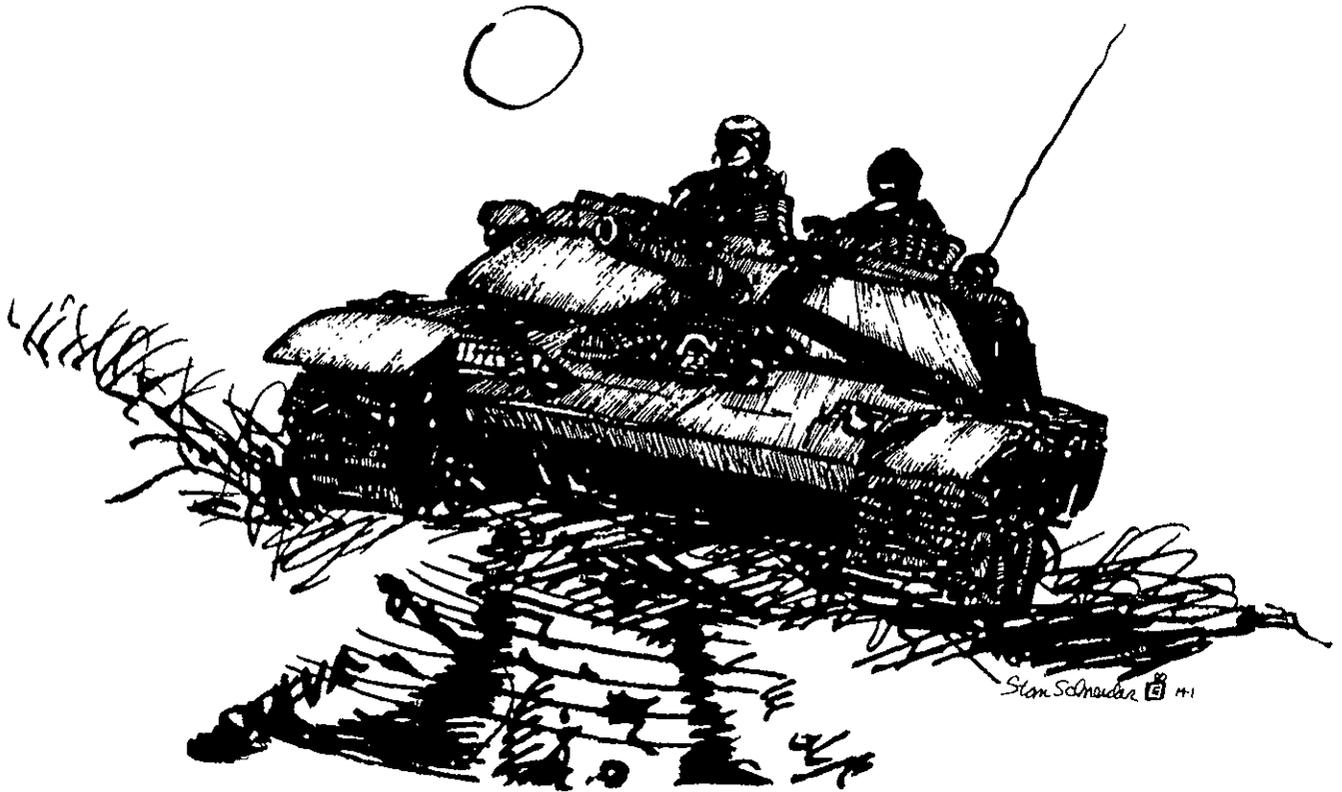
The team commander must always make it a point to know the personnel

situation in his attached tank platoon. While a rifle squad can still function if a man is missing, a tank crew must have all its members to accomplish its mission. Because each crew member is responsible for certain critical tasks, the loss of one man can render the crew virtually ineffective. Therefore, tankers should not be used to man observation posts and listening posts except under emergency circumstances, although in certain situations they can and should be used to observe from their vehicles where they can take advantage of their sighting equipment and their .50 caliber machineguns.

In combat, as well as during some training exercises, infantry soldiers may have to be transported on the tanks. The infantrymen must maintain "three-point contact" at all times, and should climb onto a tank at the right rear sprocket or over the right front slope if it is either an M60 or an M48 tank, or over the left front slope if it is an Abrams tank. The tank commander should be able to see all of the soldiers before they climb aboard.

Finally, the tank platoon leader should be used as the team's armor advisor in much the same way the FIST team leader is used as the team's fire support advisor. The team commander should seek his advice on how he can best support the team's scheme of maneuver before making his final decision on how the tanks will fight.

The attachment of a tank platoon will create a number of logistical



problems that the company team commander will have to deal with. Tank turrets, for example, are hydraulically operated and need fire retardant hydraulic fluid. Tank brakes, unlike those on the M113A1, are also hydraulic and require brake fluid. While the tank platoon normally carries these fluids as well as oil and extra grease, the team commander and his executive officer should be prepared to get additional amounts if they are needed.

Repair parts for the tanks could also become a problem, particularly if the team's maintenance people do not plan for them. Today in Europe, some mechanized infantry companies are carrying certain key high-use tank parts on their PLL stockages.

Ammunition will also require some additional planning. Both the M48A5 and the Abrams tanks mount variations of the M2 .50 caliber machinegun that require the same close-link ammunition an infantry company's organic machineguns use. The M60 tank, however, mounts the M85 machinegun, which fires open-linked

.50 caliber ammunition that has been especially designed for it. (Almost all U.S. tanks also mount the M240 coaxial machinegun, but its 7.62mm ammunition is the same as that used in the M60 machinegun.)

Ammunition for the tank's main gun, on the other hand, is quite bulky and can take up a large part of the team's resupply space. Careful attention must be paid to how the team's ammunition resupply vehicles are loaded.

MAINTENANCE

When a tank platoon is attached to a mechanized infantry company, the commander of that company assumes responsibility for the tank platoon's organizational maintenance support. There are some steps a team commander can and should take before his team has to move out to lessen some of his maintenance worries. He should be sure his team's mechanics are aware of the basics of tank maintenance, since they will be the

ones who will have to repair the tanks. They might even visit a tank battalion maintenance setup and get some maintenance pointers they can use later. The company motor sergeant should certainly add some tank manuals to his library of maintenance and repair parts manuals, keeping in mind that tanks have separate manuals for the turret and the hull. The company executive officer and the motor sergeant should also see about getting any special tools the team may need.

Once in the field, the team commander must see to it that the tank platoon leader supervises the preventive maintenance procedures in his platoon; tanks require frequent maintenance checks if they are to operate properly.

Thrown tracks can be an embarrassing problem in training and a costly one in combat, and tanks have a nasty habit of throwing their tracks more frequently than other armored vehicles do. This problem can be reduced only if track tension is checked constantly and if proper ter

range driving techniques are enforced.

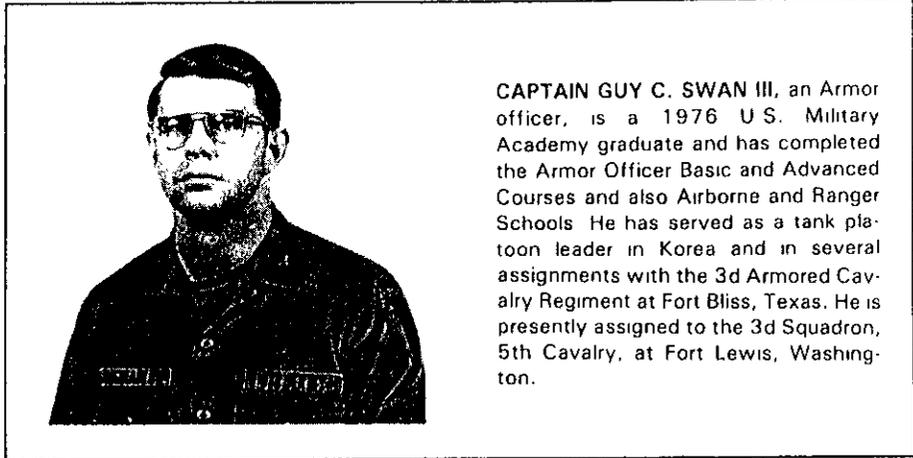
Because the team's organic M578 light recovery vehicle cannot recover tanks, the commander should plan to use operating tanks to recover disabled ones. Armor units do this fairly routinely, and the operator's manual prescribes the procedures for doing it safely.

CONCLUSION

Many of the things mentioned here may be old hat to experienced mechanized infantry officers. But for those officers who have had little or no mechanized infantry experience,

this advice may help to stimulate their thinking on the complexities of combined arms operations in general and

on tank-mechanized infantry operations at the company team level in particular.



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TOW Training

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The goal of our TOW training is to develop a TOW gunner who can hit tank targets, stationary or moving, in a tactical situation at ranges out to 3,000 meters. The best way to train a TOW gunner, of course, is to let him fire TOW missiles at heavily armored tank-like targets. Obviously, this is impractical. As an alternative, the Army has developed several training devices for use in training TOW gunners to hit targets without actually firing missiles. But these devices do not allow for tactical training, especially of tactical leaders. In fact, the training devices have numerous deficiencies.

The M-70 trainer, for instance, is the main training device for the TOW. It allows a gunner to track a moving target board, usually

mounted on a quarter-ton truck, and it scores him with a hit or a miss. But this tracking is normally done over ideal terrain with no obstacles such as trees, brush, power lines, or bodies of water between the gunner and his target. The target moves laterally to the firer on a smooth surface at a steady speed, providing the best exposure and tracking conditions. Obviously, no unit tactical training is possible with this device.

The Sony TV Trainer (TVT) provides a video tape recording of a gunner's performance as he tracks a target for a specific length of time. A detailed critique can be made when the tape is played back, but no hit or miss can be registered, and no immediate feedback can be given to the gunner. Again, this trainer cannot be

used for tactical training.

Although dry tracking may be good for individual practice, it provides no way for anyone else to evaluate a firer's ability to hit a target. One version of dry firing is available in Realtrain; a sighting device affixed to the launch tube allows an evaluator to track the target as the gunner does. This system does provide some realistic field training, but its evaluation is highly subjective. The quality of the results all too often depends on the evaluator's qualifications and judgment.

Laser instrumented training, on the other hand, offers a commander a good way to train his TOW crews tactically in a force-on-force exercise. It does something that no other TOW training aid can do: it rewards good