

Tank Destroyers As Assault Guns

By Col. John Lemp, FA, and Maj. Ernest C. Hatfield, Cav

Task force commanders in theaters of operations have found it necessary to utilize self-propelled tank destroyers as assault guns when they were not being used in their traditional role as "tank killers." In many instances the tactical decision calling for their use was made because there was an immediate requirement for a high velocity gun and no other effective assault weapons were available. This increased use of tank destroyers should not be viewed with alarm. Rather, it should serve as an indication that a modern army requires another tool. Warfare has always required commanders to make the maximum use of tools at hand, as dictated by the situation and circumstances on the battlefield.

Tank destroyers were first conceived by the War Department as one answer to the immediate problem of developing a method to stop the German armored blitz. Since that time the self-propelled tank destroyer has been used for many purposes other than that originally intended. The widespread use of the tank destroyer has been due to its fire power and mobility. In the final analysis the self-propelled tank destroyer is an antitank gun equipped with tracks to provide mobility and light armor for protection. One of its primary advantages is its ability to be moved hastily to newly won ground in support of other arms to break up the inevitable counterattack. As a versatile weapon it has no peer. It is used effectively in many roles other than the primary one of destroying enemy tanks. The more important secondary ones are:

- (1) Direct or indirect fire to reinforce or supplement the fire of artillery units.
- (2) Destruction of pillboxes and permanent defensive works.
- (3) Support of landing operations.
- (4) Defense of beaches against waterborne attack.
- (5) Roving gun and roving battery missions.

When it was found through combat experience and tactical exercises that tank destroyers were capable of performing these secondary missions satisfactorily, doctrine was developed and training literature revised. Tank destroyer units not in combat were given additional training in preparation for these secondary missions.

Warfare is never static. The art of making war is dependent upon many factors, of which materiel holds a very dominant position. When gunpowder destroyed the knights in armor the foot soldier came into his own again. In like manner tank destroyers have limited the plunging independent movement of large waves of tanks over the modern battlefield.

As in all new ideas which go through a process of evolution to the final answer, tank destroyer materiel and doctrine have undergone change. The first tank destroyer used in combat in Africa was the 75-mm gun mounted on the M3 half track. Due to the gun's inability to penetrate the heavier German tanks, and the poor armor protection given personnel by the half track, this tank destroyer gave way to the high velocity, flat trajectory, 3-inch gun on the M10 carriage. In many respects this carriage was similar to the medium tank's, except that it did not have a closed turret nor heavy armor. The gun was powerful enough to destroy the German PzKw IV tank, and the M10 carriage offered

personnel protection from small arms fire and shell fragments.

As German armor was developed, tank destroyers had to keep pace in order to meet the newest threat. In the Spring of 1944 the M18 (commonly known as the "Hellcat"), a full track, highly mobile, lightly armored vehicle, made its appearance. It had the new torsion bar suspension and mounted a high velocity 76-mm gun. This was followed shortly by the M36, which was designed to destroy the new German Panther and Tiger tanks. This latter tank destroyer is similar in appearance to the M10 but mounts a very effective 90-mm gun that will immobilize a Tiger tank at 2,500 yards.

When the infantry division was reorganized in 1942 consideration was given to making tank destroyer units organic to the division. Although such an organization would have proved desirable, it was finally turned down because it would require too many tank destroyer units and flexibility would be limited. As an alternative, tank destroyer units were organized as army troops, which provided necessary flexibility and reduced the required number of units to a minimum. In the meantime the infantry division was reorganized to include antitank companies to provide necessary cross-in antitank defense and a cannon company to carry out many of the missions which normally would have been performed by a tank destroyer unit. The antitank companies and platoons act as the first line of defense against tanks, supported by tank destroyers, while the cannon company in its present towed form provides the infantry commander with a form of artillery support under his immediate control. The 57-mm gun (towed) and the towed howitzer in the cannon company do not meet the present command requirement for an effective assault gun to accompany the infantry. In neither case is the personnel handling the gun protected from shell fragments and small arms fire. Furthermore, it takes too long to place the towed guns in action due to weight and limited mobility.

In order to advance infantry units against organized defensive positions involving pillboxes, bunkers, and strong points, it is clear that direct fire, high velocity weapons in close support are absolutely essential. Since neither the towed antitank gun nor towed weapons of the cannon company can provide this essential close support, other means have had to be found to overcome this outstanding deficiency in the infantry division.

Due to the fact that German tanks are not so plentiful as heretofore, tank destroyers are being assigned more and more to secondary missions. They are not being held idle in a state of readiness for their primary mission. In the European and Mediterranean theaters tank destroyers have recently been employed on assault gun missions. Although the use of tank destroyers in close support of small infantry units was not anticipated originally, self-propelled tank destroyers have been used for this purpose—first, because they were available, and secondly because there were on the spot no other units that could do it better. The technique of utilizing tank destroyers in the capacity of assault guns is very similar to that of using them to destroy pillboxes. When used in this manner, however, tank destroyer personnel must be thoroughly grounded in infantry tactics and technique, because such use calls for

intimate and detailed knowledge of infantry operations in order to participate effectively in combined missions. Close liaison has to be maintained constantly with the infantry units, and problems of supply and communication must be foreseen and worked out on the ground before H-hour. Prior planning for one of these operations is a prerequisite to success.

In a recent operation in Europe a tank destroyer company was assigned to support an infantry regiment which had been given the mission to attack a town. One tank destroyer platoon, in position on dominating ground, supported a battalion of infantry. The infantry moved against light resistance until it came to a railroad track, where it was pinned down by fire from a fortified position. Because the infantry was in such close proximity to the enemy, artillery fire could not be used. The tank destroyer platoon leader who was at the infantry battalion OP called his guns, identified the target, and ordered direct fire to be placed on the enemy strong point from a position in the infantry front line. As soon as the fortified position was reduced the infantry advanced into town. In town the tank destroyers were used to destroy the upper floors of buildings which were enemy strong points, while the infantry cleared out the lower floors. This close support was possible because the guns were mobile and the platoon leader was able to communicate with his platoon and immediately take under fire enemy targets designated by the infantry.

In hedgerow fighting in Normandy the self-propelled tank destroyers were used in direct support of infantry. Although tanks were present under division control, tank destroyer companies which were attached to the unit or placed in support of infantry regiments were used many times to assist the infantry in reducing pillboxes, machine gun nests, and local strong points, because they were more readily available. In these particular cases tank destroyers performed missions normally assigned to tanks. In one instance a company supported an infantry attack and destroyed one tank, two antitank guns, and at least a platoon of infantry. Moreover, the company effectively aided the supported unit in repelling an enemy counterattack in the same vicinity by firing against enemy infantry with all weapons, ranging from the 90-mm gun to hand grenades and small arms.

Battlefield experience has indicated that tank destroyers are particularly effective when the enemy uses artillery fire sparingly. Under such conditions the tank destroyer guns can closely follow the attacking infantry. The open turret, which is a characteristic of all tank destroyers, affords no protection to crews from high burst artillery fire. To overcome this defect some units in the theaters have improvised covers for the turret out of salvaged armor plating. The need for protection has been



An M-36 of the 607th TD Bn takes position in a Metz street.

recognized, however, and a proposed answer to that problem is undergoing service tests at the present time. In the assault gun role the turret cover is absolutely essential, as by protecting crews from artillery air bursts it permits the destroyers to follow the infantry closely without suffering casualties.

Tank destroyer platoons have been attached to the leading elements of the infantry regiments to act in a capacity of accompanying gun because they are instantly available for direct fire on point targets and are not susceptible to small arms fire and shell fragments. Due to its high velocity and flat trajectory, the self-propelled tank destroyer gun serves as an excellent weapon for use against enemy automatic weapons located in strong points. Furthermore, its antipersonnel fire is extremely accurate and effective. Rapid, high velocity, direct fire is very demoralizing. Aside from the destructive capabilities of tank destroyers, reports from overseas indicate that the presence of these effective weapons unquestionably bolsters the morale of the infantry with whom they are working.

Inasmuch as self-propelled tank destroyers are used as assault guns and will continue to be used as such in combat, tank destroyer units and replacement personnel should receive necessary training in carrying out this vital role. Combined training, using tank destroyers as assault guns, should be given in rear areas prior to the assignment of a joint battlefield mission to insure successful operation. Although the battlefield may act as a stimulant, inspiration and sound tactics are born of knowledge and confidence. There can be no substitute for timely combined training under effective supervision.

Indirect Fire Pocket Reference Card—Part II

For Key Tank Destroyer Personnel

By Lt. Eugene T. Oborn

Efficiency of a Tank Destroyer Platoon in indirect firing is directly proportional to its training in and understanding of the secondary mission. Particularly in Tank Destroyer units, it is not only important to learn the principles of the secondary mission but also to remember them. Since most of the time of Tank Destroyer crews is spent performing the primary mission, direct firing, fundamental and essential principles on indirect firing can and do become hazy with the key personnel of these units.

To aid in maintaining the highest degree of proficiency within the organization a pocket reference card has been prepared covering much of the material involved when a Tank Destroyer Platoon goes into an indirect firing position.

The issuing of this card to Gun Commanders, Gunners, Computers, and Recorders does not purport to be a substitute

for further training of the platoon and company in indirect firing methods when circumstances permit. It is, however, a useful aid in helping the above men to better understand and accordingly more proficiently to perform their duties when occupying indirect firing positions. The material on the reference card is first learned, then the card is used as a "refresher" for the men concerned.

BEFORE FIRING	GENERAL
1. Check recoil mechanism.	1. The recorder (recon cpl) keeps a record of all fire commands, reports, and messages.
2. Boresight the pieces.	2. The recorder (recon cpl) keeps the ammunition record and <i>at any time</i> is able to furnish information as to the amount of indirect fire ammunition at the battery (i.e., platoon) position.
3. Check the gunner's quadrant.	3. All rounds fired through each 3-inch gun will be recorded in the respective gun books at the end of the <i>same day</i> in which the rounds were fired.
4. Test firing mechanism, breech mechanism, gas-check pad, etc., for proper operation and functioning.	4. All guns follow fire commands unless the command is "No(s) Adjust." Normally, in battery firing, the first fire command is "Battery adjust," although only one gun may be given the command to fire.
5. Inventory the ammunition to see that it meets the requirements as to quantity and type; spot check it for condition (clean, dry, rotating bands uninjured).	5. Gun commanders repeat all commands of the platoon leader.
6. Have field glasses and firing tables at the battery position.	6. Initial fire commands include all data necessary for laying, loading, and firing the guns. Subsequent commands include only such data as are changed, except that the command indicating the range or elevation is always announced.
7. Check errors <i>before</i> they are fired, not after. Always make the visual check of sighting over the tube for proper direction.	7. A change for an individual gun is announced and set after any change of the same element is given for all guns.
8. Check concealment and camouflage, including restrictions on the use of lights and fires, particularly at night.	
9. Compute minimum elevation.	
10. Send battery executive report to FDC.	
GUNNER ZEROES AZIMUTH INDICATOR ON COMMAND	
1. Record base deflection.	
2. Record referred deflection.	
TO DESIGNATE A TARGET, OBSERVER SENDS INFORMATION IN THE ORDER.	
1. Location of center of target.	
2. Nature of target.	
3. Method of attacking target.	
4. When to fire.	
COMPLETE GFT SETTING	
MAP RANGE/ADJ	
ELEV/ADJ TIME	
FIRING REPORT (SENT IMMEDIATELY)	
1. Time.	
2. Target.	
3. Coordinates.	
4. Results.	
5. Any additional operational or intelligence data.	
"SHELREP" (SENT IMMEDIATELY)	
1. Where shells landed, when, and how many	
2. Direction shells came from.	
3. No. of seconds from muzzle flash to sound of gun firing.	
4. Type of gun.	

"NCO'S OF ALL GRADES WILL BE THOROUGHLY CAPABLE OF PERFORMING THEIR ASSIGNED DUTIES WITHOUT SUPERVISION"

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|----------------------------|---------------------------------------------------------------------|
| A—Air (Sensing) | L—Left |
| ADJ—Adjust | NCH—Normal Charge |
| AMC—at my command | O—Open |
| AP—Aiming point | Q—Quadrant |
| BD—Base deflection | R—Right |
| B—Battery (pieces to fire) | RN—Range |
| BA—Battery adjust | RCH—Reduced charge |
| BL—Battery left | Rd—Round |
| BR—Battery right | RD—Referred deflection |
| C—Close | RGM—Rounds/Gun/Minute |
| CA—Compass | SCH—Supercharge |
| CF—Cease firing | SH—Shell |
| DF—Deflection | SI—Site |
| DNI—Do not load | T—Target (sensing) |
| EL—Elevation | AC—Aiming circle |
| F—Number one (first) | TL—Traverse left |
| S—Number two (second) | TR—Traverse right |
| T—Number three (third) | OL—Orientation line |
| L—Number four (last) | ∠—Angle |
| FD—Fuze delay | O—Round(s)—Numeral inside circle as "S 3" for "No. 2, three rounds" |
| FQ—Fuze quick | |
| G—Graze (sensing) | |
| HE—High Explosive | |

