

610th TD BN - 4th - RII  
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HEADQUARTERS 1ST TANK DESTROYER BRIGADE  
Office of the Commanding General

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APO 403, United States Army  
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TANK DESTROYER INFORMATION )

LETTER NUMBER 2 )

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SECTION I

CUMULATIVE REPORT OF TANK DESTROYER UNITS TO 26 NOVEMBER

BATTALION	TOTAL TANKS DESTROYED	TOTAL SP GUNS DESTROYED	TOTAL ARTY & AT GUNS DESTROYED	TOTAL (2) ROUNDS FIRED	ROUNDS (2) FIRED DIRECT	ROUNDS (2) FIRED INDIRECT
602	24	2	38	5086	1707	3379
603	29	10	20	10361	4177	6184
607	43	25	17	27458	3098	24360
609	0	0	2	13472	20	13452
610*	0	0	16	3250	794	2456
614 (1)	0	0		5294	1220	4074
631 (1)	0	0			2094	2094
654	33	7	28	8100	2636	5464
691	1	0	1	6287	741	5546
704	42	2	3	1211	567	644
705	0	0		998	143	855
773	88	19	24	5098	2317	2781
774	5	4	4	20478	60	20418
807	0	0	19	23041	759	22282
808	0	0	4	13614	371	13243
818	20	0	10	18510	2046	16464

\*Inclusion to 13 Dec 44

In addition to the tanks and SP guns destroyed as shown above, those U. S. Tank Destroyers have also destroyed 266 machine guns, 171 pillboxes, and 643 other targets, including artillery prime movers, CP vehicles, CPs, AAA guns, troop trains, ammunition dumps, airplanes, etc.

- (1) Not in action yet.
- (2) Reports on rounds fired cumulative to 19 November only.

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## TANK DESTROYERS IN COMBAT

603 Tank Destroyer Battalion

During the period 8 November to 20 November this battalion destroyed one Mark III, eleven Mark IV, one Mark V, and five Mark VI tanks, plus numerous SP guns, AT guns, GP and armored vehicles, and some concrete fortifications. During this period the battalion lost three M-18s from enemy action. Two of these were destroyed by 88mm AT fire, and one destroyed by a 150mm projectile which landed two feet from the left track.

An M-18 platoon commanded by Lieutenant Edward Snyder destroyed a Mark V Panther tank with four hits at 2400 yards range as the tank backed up in order to present his heaviest armor. One round struck the front plate between the driver and assistant driver and ricocheted over the top of the tank; another struck over the driver's compartment and cracked the weld seams; another struck the turret on the right side of the gun as the tank faced the destroyer, penetrated, and wounded some of the crew. The round which actually stopped the tank knocked off the left track.

On the night of 14 November, Lieutenant Donald K. Hovey's M-18 platoon, supporting an armored task force, moved into positions which covered the main street of Landroff, France. Apparently unaware of the presence of the American task force because of the utter blackness of the night, two German tanks entered town and moved down the main street. Sergeant Criville Parsons, gun commander of the lead M-18 allowed the first tank to approach within 50 feet before firing. The first round hit the tank but its momentum carried it past the M-18. As it passed the gunner fired the second round into the tank. The destroyed tank halted in rear of the destroyer. The gunner then engaged and destroyed the second tank at a range of 50 yards.

Supervision by the battalion headquarters is valuable in assuring correct use of destroyer companies in matters of supply, coordination, and training. Operations over soft terrain indicates ability of the M-18 to maneuver over ground where medium tanks are immobilized. Task force commanders, in some instances, assigned M-18 destroyer tasks normally assigned light tanks because of the maneuverability and high performance of the M-18. (Commanding Officer, 603 Tank Destroyer Battalion).

607 Tank Destroyer Battalion

During recent operations, this battalion successfully completed the difficult task of reorganizing from a towed to a self-propelled M-36 Battalion while supporting a division in an attack. This was accomplished by withdrawing one platoon of each company at a time from the line. These were reorganized and re-equipped in rear areas and upon completion, were sent back into action to relieve other platoons. This process required approximately 10 days. (S-3, 1st Tank Destroyer Brigade).

610 Tank Destroyer Battalion

From the 28 October to 7 November 1944, the battalion fired 2456 rounds of HE in 259 missions, most of this was interdictory and harassing fire, with the results unknown; however, in counter-battery fire, Co C was credited by an artillery observer of knocking out two German batteries, in two attempts, each consisting of two volleys. To date, the battalion has not had an opportunity to fire direct at enemy installations or tanks.

705 Tank Destroyer Battalion

On 18 November 1944, elements of the 705 Tank Destroyer Battalion, while in support of a fast moving cavalry task force, crossed the German border north of Merschweiler, France. These were the first Tank Destroyers of the Third United States Army to enter the Reich. Immediately after crossing the frontier, the 76mm guns of "B" Company had a German motorized column under fire. (PRO, 705 Tank Destroyer Battalion).

807 Tank Destroyer Battalion. The following extracts from the Weekly Operations Report of this battalion exemplifies aggressive employment of towed tank

destroyers:

14 November 44 - - - "2nd Platoon, Company A, was ordered to cross bridge at TRIONVILLE to take up direct fire positions outside FT YUTZ and protect bridge-head across NOSELLE River. The vehicles of this platoon are believed to be the first vehicles to cross the bridge at TRIONVILLE."

17 November 44 - - - "2nd Platoon, Company B, took up direct fire positions south of RUPIGNY and fired in support of Infantry advance on CHIEULLES. This fire destroyed one 88mm gun and five AA guns, resulted in capture of 72 PWs, and inflicted 6 other known casualties. Two more 88mm guns were also destroyed just north of CHIEULLES as a result of this action. . . ."

18 November 44 - - - "Company B reorganized at CHIEULLES, 2nd Platoon took up direct fire position and destroyed two 88mm guns and nine AA guns . . . . Company Commander, Captain Malloy, had his M-20 damaged as result of explosion which damaged southeast part of FT BELLECROIX. . . ."

19 November 44 - - - "1st Platoon, Company A, moved across bridge over SEILLE RIVER and into METZ to cover bridgehead and streets as Infantry moved in. This platoon destroyed two MG nests, killing the crews, destroyed three enemy command cars, and took many PWs. . . . During the above action the Reconnaissance Platoons removed five road blocks between FT ELLANGE and BERTRANGE, captured 50 PWs and destroyed two MG nests."

During the week 12-19 November, the 807th Tank Destroyer Battalion captured 160 PWs, destroyed 3 command cars, 5 AT guns, 14 other artillery guns, 4 MGs, and 1 Fort, and fired 278 rounds direct fire and 2766 rounds on indirect fire. During this period the battalion lost no vehicles or armament and personnel casualties totalled two EM wounded. (Weekly Operations Report).

### 773 Tank Destroyer Battalion

"By 14 November 44 all battalion elements had crossed the NOSELLE RIVER and joined in the division attack South and East of bridge crossing at MALLING-CATTENOM. A Company with the 1st Reconnaissance Platoon in support of the 26th Inf advance, B Company and 2nd Reconnaissance Platoon with \_\_\_th Infantry, and C Company with 3rd Reconnaissance Platoon with the \_\_\_th Infantry advance drove the enemy ahead of them until the division objective was taken on 19 November 1944. Two engagements with the enemy highlighted the tank destroyer participation; on 13 November 44, two C Company M-10s had crossed the river and immediately engaged the enemy in support of the \_\_\_th Infantry, helping to repulse the fierce enemy attack from KERLING to PETITE HESTINGS. The subsequent US counter attack spearheaded by the tank destroyers broke the enemy lines and drove them in disorder back to within 300 yards of KERLING. During this action these two destroyers knocked out two enemy 7.5 cm SP guns and killed 300 enemy troops by direct HE fire. On 15 November 44 the enemy counter attacked the town of DISTROFF and cut through the tank destroyer positions, driving into the center of the town before the Americans reorganized and routed them, regaining all positions and inflicting severe losses on the attacking Germans. In this engagement, the tank destroyers contributed much to the success of the advance." (Weekly Operations Reports).

## SECTION III

### A. TANK DESTROYER TACTICS

#### 1. Tank Destroyer Coordination

Coordination is best achieved when commanders of troops supported by Tank Destroyers include the Tank Destroyer Commander, be it Battalion, Company, or Platoon, in their planning conferences, and pass on available information concerning the enemy, adjacent Tank Destroyer units, Infantry Anti-Tank weapons, location of minefields, and what infantry protection can be expected. The Tank Destroyer Commander, in turn, is responsible for aggressively planning and recommending the employment of the tank destroyers so as to best support the action. Generally, he must not wait to be called upon for help, but must always be "one jump ahead" in his planning and recommendations. That is real support. Don't hesitate to ask anyone and everyone for information.

#### a. Tank Destroyer Coordination (Cont'd)

Just as adjacent artillery and infantry units establish lateral contact and liaison, Tank Destroyer Battalions supporting Divisions, or Tank Destroyer Company supporting RCTs, down to the last gun, must determine which Tank Destroyers are on his right and left and what their plans are. They may have to join hands within the hour against a hostile attack; if not, duplication of effort can be eliminated and support of the friendly attack facilitated. Initially, information of adjacent units must be passed down by commanders; thereafter, supplementary detailed information, not only of adjacent units but of your own area, as to minefields, obstacles, routes, and positions, should be passed up through section, platoon, company, to the Battalion Commander, as the information is obtained.

Tank Destroyer Commanders of all echelons will thus be informed. When they get together with the Commanding Officer and Staff Officers of the supported unit, they will be prepared to "tie up the loose ends". (S-3, 1st Tank Destroyer Brigade).

#### b. Use of Tank Destroyers, SF Arty. and Tanks as Assault Guns:

(1) "The tank destroyers should remain in the rear of the assault battalion areas. When a suitable target is found, the platoon leader or gun commander should reconnoiter for gun positions and routes thereto before bringing the gun forward. When the target is reduced, the tank destroyer should withdraw behind the infantry until a new target is found. Under no circumstances should the guns advance until the infantry has located targets. A very effective weapon when thus properly employed." (Commanding General, 9th Infantry Division).

(2) "Tank destroyers and self-propelled artillery as assault guns were only good when you could observe the fortification at 800 to 1000 yards. Tanks with closed turrets were almost necessary, as snipers and hand grenade men would knock out any weapon with an open turret. Tanks with infantry could push up within 50 to 100 yards of the pillbox and fire point blank. Most fortifications hold their fire until you get within 200 yards, and they are hard to locate until you can push in close. Then your infantry gets pinned down by their automatic weapons unless you have tanks." (Commanding Officer, Tank Destroyer Battalion, 4th Division).

#### c. Attack of Permanent Fortifications:

(1) Coordinated Attack: This report of an attack by an infantry rifle company reinforced by medium tank platoon, platoon of tank destroyers, platoon of Engineers, and supported by artillery, is extracted from a report by the CO, 634th Tank Destroyer Battalion, to the Commanding General, \_\_\_ Division:

(a) Enemy position. "The objective was a group of three concrete pillboxes located on the far side of a dense woods which the Germans apparently depended on to stop armored vehicles. The pillboxes had a field of fire less than 100 yards and were not covered by anti-tank fire."

(b) Armored reconnaissance. "A route for each armored vehicle was reconnoitered completely through the woods after the attack order was issued."

(c) Covering noise of movement. "The tanks and tank destroyers crashed their way through the woods under cover of the noise of the artillery preparation."

(d) Covering the debouchment. "The debouchment from the woods was covered by a rolling barrage. As the assault groups advanced, every vehicle and man kept up a continuous fire. These fires kept the enemy buttoned up in the pillboxes until the infantry and engineers were practically in position to reduce them."

(e) Security for organizations. "While the individual pillboxes were being reduced the ground was being organized, the armored vehicles deployed to the right and left and to the front. When the reorganization was complete the armor was withdrawn to replenish its supplies." (Battle Experiences, 8 November 1944).

c. Attack of Permanent Fortifications: (Cont'd)(2) Attack of Pillboxes by Tank Destroyers, CO, 318 Tank Destroyer Battalion:

Infantry should secure bridgehead so that tank destroyers can select position areas within 800 yards of pillboxes. Recommend a tank destroyer company be assigned pillboxes on a basis of one embrasure to two guns. Since fire to flanks (crossfire) will be required the company should be under company control in a regimental sector or terrain corridor. Pillboxes adjacent to the sector should be smoked or neutralized and counterbattery fires maintained during the operation. At least two days will be required for reconnaissance, digging emplacements, movement to positions under cover of darkness and engagement of targets. Assault squads of infantry and engineers should be ready to assault and mop up pillboxes immediately after tank destroyers cease firing on pillboxes. These squads could advance to within 75 yards of the pillbox during this firing. During the operation other arms should also be firing to neutralize other weapons. The T-105 fuzed HE and APC ammunition should be used. Fire should be opened simultaneously by 1/2 of guns employed, the other half used to fire at surprise targets or to reinforced fires where necessary. After the front pillboxes have been destroyed the destroyers should withdraw or move to existing craters until new positions and targets can be found.

d. Tank Destroyer Employment:(1) Self-Propelled:

NOTE: The following comments were made in an after-combat discussion conducted for platoon and tank destroyer commanders of the 703rd Tank Destroyer Battalion. These men had used the M10 tank destroyers with considerable success, destroying 34 tanks, 12 self-propelled guns and numerous trucks, pillboxes, etc. while losing only three tank destroyers. It is noteworthy that comments of these battle experienced men principally re-emphasized existing tactical doctrine.

(a) Targets. 1. "Don't enemy infantry use HE, fuze delay, and aim slightly short. Ricochets will often cause low air bursts over the enemy."  
2. "Use the .50 caliber machine gun on thin-skinned vehicles up to 300 yards. Over that distance use three inch HE."  
3. "Range cards are still necessary. Get exact ranges from map in daylight, and if possible, zero in on critical points and record the data."

(b) Movement. "Move into position slowly. The vehicle can be better controlled and better prepared to fire. Fast movement attracts attention and causes considerable noise."

(c) Orders. "Orders must be complete and concise, and given with an air of confidence. Too often they lack the information necessary for even a simple operation."

(d) Personnel. 1. "A well disciplined outfit goes farther with fewer losses. Even at the front the disciplined outfit is marked by its morale, pride of unit, saluting, appearance and wearing of uniform."

2. "New men should be thoroughly oriented and put at ease as soon as they join an outfit. They must be made to feel that they are an important part of the crew."

3. "The best place to get away from mortar and artillery fire is in the M10 tank destroyer. A long slit trench under the hull will also make excellent protection for the whole crew."

(e) Equipment. 1. "Keep your equipment on the vehicle so you can move quickly."

2. "Field glasses can be used effectively in the moonlight."

3. "Always completely destroy an enemy vehicle before you leave it."

(f) Security. 1. "The security outposts for roadblocks should have wire communication to the guns."

d. Tank Destroyer Employment: (Cont'd)

(1) Self-Propelled: (Cont'd)

(f) Security. 2. "When machine guns are dismantled for security work, dig them in. The tendency is to throw the gun on the ground and forget about it.

3. "Learn more about booby traps and mines, and forget about souvenirs.

4. "If you have no infantry support at night, pick a position with open fields to the front. Then put your outpost out quite a ways and get the artillery to prepare a fire plan for the front."

(2) Towed:

(a) Positions for towed guns. "There is a feeling in many towed units that they should be far back behind the infantry line to 'stop a breakthrough'. In certain types of terrain, defense of reverse slopes is essential. Guns too far behind the MLR are useless, for if a breakthrough occurs, the enemy is intermingled with our own troops and tank destroyers cannot fire. Breakthroughs must be prepared for locally - not in areas 1800 to 2500 yards to the rear . . . (4th Armored Division Memo).

(b) Movement of towed guns into firing positions. "In many cases the towed 3" gun cannot be pulled into position by the prime mover because of the danger of drawing enemy fire. To avoid manhandling the gun, we reinforced the jeep front bumper, mounted a pintle on the front of the jeep and pushed the gun into position." (Commanding Officer, 644 Tank Destroyer Battalion).

(c) Organization for combat. "Normally in the \_\_\_ Division we have been employed with one company attached in support of each Combat Team. In a fast moving situation, as during the drive across the Seille River to the Maginot Line, we have found it advisable to have the platoons attached to the battalions rather than have the company under regimental control. This, in effect, gives each platoon a sector equivalent to the infantry battalion sector and enables the platoon to occupy positions promptly as the infantry organizes an area, being well forward and in position to repel any armored counter-attack. This method is particularly effective in river crossings as the TD's cross with the battalion. In a defensive situation, however, the better solution is to have the company under regimental control as this permits better coordination of fields of fire, mutual support, etc." (Commanding Officer, 808 Tank Destroyer Battalion).

e. City Fighting:

(1) Fire Power: "I learned to use the fire power of every available weapon in the Aachen fighting. We took one strongly held position without a single casualty by laying an artillery barrage, a closer in mort-barrage, and having every man in the assault wave throw a grenade as the fire lifted and the assault started.

(2) Infantry-tank coordination: "We kept the tanks and tank destroyers well forward, usually one to a street. Four infantrymen were assigned to protect each vehicle from bazookas and other AT weapons" . . . (Battalion Commanding Officer, 26th Infantry) (Battle Experiences - 10 November 1944).

f. Coordinating Tank Destroyer Fires:

"In the reduction of fortified areas where the TD's are called upon to deliver direct fires on pill boxes and emplacements and supporting fires, their fires should be closely coordinated by the artillery and directed by observers with the infantry. The observers may be the artillery observers or may be furnished by the TD's, but it is essential that there be observers in front with the infantry. In the reduction of the Maginot Line in the vicinity of St. Avold each company was attached to a direct support artillery battalion. One company had two platoons in direct fire positions and one in indirect positions supporting the attack. The artillery battalion assigned sectors of fire for the platoons, lettering each sector. The artillery observer called for direct fire (by radio) as the situation required. The resulting fires were extremely effective and were delivered continually until the objectives were seized. (Commanding Officer, 808 Tank Destroyer Battalion).

## g. Countering Enemy Tank Tactics in Woods:

(1) Attacking: "Enemy tanks in woods generally fire from well camouflaged, dug in positions, where our tanks and tank destroyers can't get at them. We fire Smoke from our 81mm mortars on the tanks and at the same time maneuver our tanks to the enemy flanks or rear. The enemy tanks move to avoid being screened and this permits our tank destroyers and bazookas to 'draw a bead' on them."

(2) Avoiding Harassment: "Dug in enemy tanks in woods remain comparatively quiet during the daytime, but during the night they move around and shoot just enough to keep our troops disturbed. Keeping tank destroyers and tanks well up toward the front counters this threat and greatly increases the morale of the men."

(3) Defending: "German infantry and tanks attacking at night soon to move in alternate bounds, the infantry advancing first about 25 to 50 yards and then hitting the ground until the tanks come up. We fire 60mm mortar illuminating shells up to a range of 800 yards, shoot hand flares close in, then open up with everything we have, including tank destroyers and tanks. We shoot like hell when the infantry is advancing because if you stop the infantry you stop the tanks." (Commanding Officer, 314 Infantry). (Battle Experiences, 6 November 1944).

## h. Use of Tank Destroyers:

(1) Aggressiveness: "The practice of holding tank destroyers back - the infantry going forward, then the tanks, followed by the tank destroyers - tends to foster timidity and lack of aggressive action. Platoon leaders and MTO commanders should go forward with the infantry, locate effective firing positions, and then have their vehicles brought forward."

(2) Communications: "Infantry companies and tank destroyer platoons must be tied in by wire, and by radio if possible, to insure mutual support and coordination."

(3) Concerning noise of approach: "Artillery fire placed on three enemy tanks caused them to button up and prevented the enemy from hearing our tank destroyers moving up. The tank destroyers knocked out all three tanks without loss." (S-2, 813 Tank Destroyer Battalion) (Battle Experiences, 2 November 1944).

## i. Tank Destroyer Communications in Armored Battalions:

"Attached tank destroyer units are added to our command channels by allocating to them one of the three SCR 509 radios in our mortar platoon. The mortars are generally used in battery, thus freeing a radio for this purpose." (Commanding Officer, 68th Armored Battalion) (Battle Experiences, 26 October 1944).

## j. Reports are Easy to Get! :

Platoon Commander of 607 Tank Destroyer Battalion, recently converted from towed to self-propelled, now rides in the leading destroyer because of increased mobility and additional protection from small arms and mortar fire. In the confined space of the M-36, particularly when under fire, platoon commanders found it very difficult to encode locations and as a result reports to Battalion during combat were delayed or were not submitted. The Battalion now numbers all key terrain features in their zone on the operations map and unit commanders number their maps in a similar manner. Reports are submitted in the clear, as "Plat CP at 78"; or "Firing on pillbox 200 yds S of 45". When the situation becomes static numbers are changed or one of the routine map coordinate systems can be used. (S-3, 607 Tank Destroyer Battalion).

## SECTION IV

### INTELLIGENCE NOTES

#### a. Enemy Tactics:

(1) Dummy Tanks: The enemy has employed partially camouflaged dummy tanks as decoys, and installed well-concealed AT guns in the vicinity of the dummy tanks. PWs report that when the AT guns fired on our tanks, the tanks would immediately

fire on dummy tanks. This ruse could be employed against SP Tank Destroyers as well. (AT Officer, XII Corps).

(2) Road Traps: Several instances have been reported of taut wires being encountered across roads behind our lines approximately 5 feet high. "Wire catcher" attachments on vehicles prevented injury to occupants. (Third US Army G-2 Reports).

(3) Anti-Tank Fox Traps:

(a) "Anti-tank fox traps" have been encountered by \_\_\_\_ U.S. Armored Division in its zone. They are manned by bazooka teams which fire at tanks at very short ranges. The trap consists of a slit trench approximately 6 feet long, 4 feet deep, and 6 feet wide at the front, tapering to a narrower width at the rear. Logs and grass cover the top of the trench with the result that the trap is extremely difficult to identify. There are two openings, apparently with removable covers at the front, from which the bazookas are fired. There is also an opening in the rear leading to an escape trench.

(b) These traps are usually located close to roads with the escape trench running behind a nearby farm building or through a hedge. Machine guns are emplaced on either side of the road in support of the bazooka teams. When a column advances down a road the bazooka team waits until the leading tanks are opposite the fox trap and then attempts to knock out the first two tanks. When the tanks have been hit the machine guns open fire on the crews and other personnel who expose themselves to learn what has stopped the advance of the column. The machine guns do not fire on leading infantry or soft skinned vehicles but wait until a tank has been stopped.

(c) It is believed that this technique is being taught to all German forces. Training in this technique has been witnessed in German rear areas. The witness reported that stress was laid on the bazooka teams escaping without revealing themselves and on the machine guns not opening fire until a tank had been hit. (Third U.S. Army G-2 Periodic Report No. 156).

(4) Current Enemy Techniques in Mining:

(a) New type of minefield has been encountered whereby point man of unit trips a wire detonating entire field causing casualties throughout the unit. (ETOUSA Special Intelligence Bulletin No. 153).

(b) Mines have been planted in mud tracks of own vehicles. (Third U.S. Army G-2 Periodic Report).

(c) "Toft" or non-metallic mines, have recently been encountered in Third Army zone.

(5) Booby Traps: Booby traps consisting of "egg grenades" have been found fastened to tree trunk approximately four feet off the ground and very well camouflaged by bark placed over grenade. Grenade fitted with pull type ignitor and black trip wire attached to it runs down trunk of tree to base and across to another tree. Wire set about 8 inches off ground. (Third U.S. Army G-2 Periodic Report No. 143).

(6) Patrols: Jeep containing 5 EM going to CP stopped by 4 or 5 Germans. One German, reported wearing an American helmet, spoke English and ordered "Halt". EM were told to dismount and place their helmets and rifles on the ground. A second jeep with two EM drove up and was similarly halted. Germans then put seven EM in vehicles and started toward German lines. They were stopped by wire strung across road by an American outpost. Sentry opened fire and captured EM dove for ditch. Germans replied with machine pistols and also sprayed their captives as they ran for their lives. 2 Americans killed, 3 wounded and 1 German killed. (Third U.S. Army G-2 Report No. 144).

(7) German Tank Smoke-Shell Tactics: As a rule German tanks employ smoke shells to achieve surprise, to conceal a change of direction, and to cover their withdrawal. The shells normally are fired to land about 100 yards in front of an Allied force. There are no reports to indicate that smoke shells are used in range estimation.



a. Enemy Tactics: (Cont'd)(7) German Tank Smoke-Shell Tactics: (Cont'd)

In attacking a village, German tanks fire smoke shells to lay a screen around the village in an effort to confuse the defenders as to the direction of the attack. Smoke shells always are used to conceal a change of direction of the attack, the wind permitting. When a German tank company (22 tanks) wishes to change direction, smoke shells are fired only by one platoon. With the five tanks of a platoon firing three shells each, the total of 15 shells is said to provide enough smoke to cover the movement of the entire company.

If a German tank force knows the exact location of an antitank gun position, it uses both smoke shells and high-explosive shells. If the force does not know the exact location, only smoke shells are used. When a single tank runs into an anti-tank position, it likewise fires only smoke shells, usually two or three rounds, to cover its movement. (Intelligence Bulletin, Volume II, No. 12, August 1944).

b. Enemy Equipment:

(1) Goliath Tanks: A Prisoner of War states he attended a meeting recently where the new GOLIATH was shown pictorially. This new miniature tank differs from the old model in that it returns after firing, whereas the old one blow up with the charge. (Third U.S. Army G-2 Periodic Report No. 161).

(2) Cement Covering for Tanks: The only thing new in the line of material has been the increased number of cement covering on Mark V tanks. This type covering has been encountered previously, but present frequency of appearance indicates experimental stage passed and mass production begun. Majority of enemy tanks knocked out lately on Seventh U.S. Army front appear to have been "fresh from the factory". (Information Bulletin No. 32, Seventh U.S. Army).

(3) Vulnerability of the PzKw V (Panther) Tank to Tank Destroyer Weapons: The Panther tank has proven itself a formidable weapon. However, a tank having the weight, fire-power and speed characteristics of the Panther cannot attain all-around invulnerability against the up-to-date weapons of our Tank Destroyers.

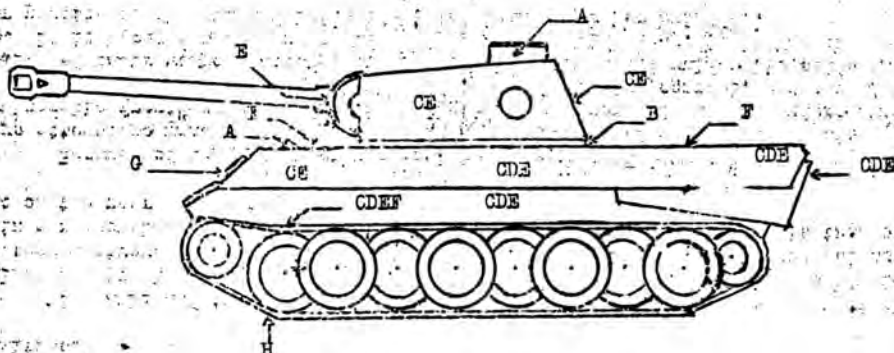
The designers have succeeded in making the hull front practically invulnerable to our tank destroyer guns, except at point-blank range. The turret front and gun mantlet are likewise invulnerable. Frontal attack against the Panther by our tank destroyer weapons has, therefore, usually proven to be ineffective. One flaw has been found in frontal design, however. A hit by the 76mm APC, 3" APC, or 90mm APC, below the traverse center line of the gun mantlet is often deflected down into the tank through the relatively thin hull roof, causing damage and casualties.

The hull and turret sides, having sacrificed armor thickness to create the invulnerable "tank front", have been definitely proven vulnerable to all our primary tank destroyer weapons. A hit almost anywhere on the hull and turret sides within a reasonable angle of impact, will be a damaging hit. The same is true of a hit on the rear of the tank.

Because of these characteristics, the experienced German "tanker" will always attempt to maneuver his tank during an engagement so as to present his "invulnerable front" to our fire. Tank Destroyer platoon and gun commanders must always, by taking advantage of pre-planning, surprise, fire control, and the high mobility of their weapon, attempt to engage a Panther on its vulnerable sides and rear. If it becomes necessary to engage the front of the tank, shoot for the lower portion of the gun mantlet. (S-2, 1st Tank Destroyer Brigade).

### B. Enemy Equipment: (Cont'd)

The sketch below indicates the vulnerability of the Panther tank to our tank destroyer weapons:



- LEGEND: A - Small Arms (Vision slits and periscopes).  
B - Caliber .50  
C - Bazooka  
D - 57mm (APC)  
E - 3", 76mm, 90mm APC  
F - 3", 76mm, 90mm HE (Contact Burst).  
G - Possibly vulnerable to 3", 76mm, 90mm at point blank ranges and to 3", 76mm, 90mm APHV Ammunition.  
H - Land Mines:

#### c. S-2 on the Job:

"Our S-2 publishes a daily Intelligence Summary for the companies. The summary contains information on nine fields, roads, general and specific enemy information, numbers of enemy captured, enemy material destroyed and items of general interest, including progress of the front. Sufficient copies are issued so that each platoon receives a copy. The men receive these reports with great interest, and they have been a prime factor in stimulating their interest in the 'big picture.'" (Commanding Officer, 806 Tank Destroyer Battalion).

## SECTION V

### CHANGES IN TABLES OF ORGANIZATION AND EQUIPMENT

#### a. Authorization For Additional Officers:

Letter, TUSA, file 320.3, subject: "Authorization of Officer Over Strength", dated 12 November 1944, is quoted in part as follows:

(1) "An advance issue of one officer per combat tank destroyer company is authorized. Tank Destroyer battalions organized under T/O 18-25 are authorized one Cavalry and Tank Destroyer Officers. Tank Destroyer battalions organized under T/O 18-35 are authorized three Tank Destroyer Officers".

(2) "The provisions of paragraph 1 b, 1 c, and 3, letter this headquarters (TUSA) file and subject as above, dated 1 November 1944, are applicable to this authorization, except that initial requisitions will cite TWX, Headquarters European Theater of Operations, EX 61452, as authority."

#### b. Change 1 to T/O and E 18-25:

This is not available for distribution at this time. An effort is being made by higher headquarters to procure this change and, when available, it will be distributed to all units concerned. T/O and E 18-25 with Change 2 has been reproduced for all towed units which are being converted. (S-3, 1st Tank Destroyer Brigade).

c. Forward Pedestal Mounts:

Although not a change in T/O and T/E, higher headquarters has ordered a newly developed pedestal mount for the caliber .50 machine gun for all self-propelled tank destroyer battalion of this Army. This mount can be spot-welded on the hull of the destroyer by the battalion maintenance personnel and will permit forward fire of the machine gun. The manufacturing of these mounts for Third Army Tank Destroyers has already begun.

## SECTION VI

## TECHNICAL NOTES

a. M-36 Tank Destroyer:

(1) Extracts from letter by Commanding Officer, 703 Tank Destroyer Battalion. (This battalion has employed this weapon in combat for approximately two months):

"... In preparation for firing indirect, no problems, other than those allied to the M10, were anticipated. However, from the initial laying of the pieces to observation of the rounds, new problems have developed.

"Mechanical abilities of the gun. Elevation to twenty-five (25) degrees and depression to ten (10) degrees, with the hull at level. This elevation expressed in range equals 16,500 yards w/Shell HE M71 w/Fuze BD M48. The maximum range of this combination of gun and shell is 19,000 yards at a quadrant elevation of forty-three (43) degrees. To fully exploit the range of the gun it becomes necessary to "elevate the hull" eighteen (18) degrees.

"As with the 3" Gun, the flat trajectory of this weapon creates problems to observation. More often than not, the minimum range line is at quite a distance from the OP. Since there is no smoke shell, and the burst is difficult to observe at increased ranges, it is often necessary to employ time fire for initial registration, or at least for orientation until the deflection is approximately correct from estimation.

"The 90mm Shell, HE, M-71, is issued with fuze, time mechanical, M-43A3. This fuze has graduations from 0 to 30 seconds with .2 second graduations. A thirty-second time of flight expressed in range equals 13,000 yards. The base point range should not exceed 13,000 yards, therefore, to attain good results with this method. The observer calls for BP registration with air salvo. The guns fire at base point range, with corresponding time of flight set on fuze, but with a five mil increase in quadrant elevation. These air bursts are easily observed and sensings are given to correct deflection differences and to move the bursts to the ground. As the burst nears the ground the observer calls for impact, assured of knowing where this round will hit the ground.

"Tube life of this gun is rated at 900 rounds of HE. For this reason the total number of rounds fired from any given gun has been limited to 500 maximum for the time being."

(2) Experience with M-36 of the 610 Tank Destroyer Battalion coincides with that of the 703 Tank Destroyer Battalion. It is believed the tube life will be well over 900 rounds. (Commanding Officer, 610 Tank Destroyer Battalion).

b. Effects of Anti-Tank Guns on Pillboxes:

Excellent results have been obtained with 3" HE ammunition with delay fuze against small pillboxes. Prisoners removed from small emplacements so attacked have had bloody noses, cut faces, and other wounds. Inspection of some of the captured boxes indicates that the concussion caused splintering of the concrete inside the pillbox. (Anti-Tank Officer, V Corps, Battle Experiences No. 75).

c. 3" HE Smoke Ammunition: (Over)

c. 3" HE Smoke Ammunition:

Tank Destroyer units using the 3" HE ammunition with HC Smoke are cautioned that, due to reaction of smoke filler within the shell, it is necessary that the ammunition be expended within 60 to 90 days from date that smoke pellet is inserted. If not expended, smoke mixture must be removed. A small amount of WP Smoke Shell, is now available for 3" gun and is expected to be a great improvement over the HC. (S-3, 1st Tank Destroyer Brigade).

d. Tank Destroyer Firing Tables. The following information is not news to most of the tank destroyers, but is based on most recent official and unofficial available information:

(1) 3" Gun. FT 3-R-2 January 1943, which does not include Metro Data, is the only official firing table for M5 and M7 3" TD guns according to letter of 3 November 1944 from Chief Ordnance Officer of Communications Zone, ETOUSA. Field expedients in use include "Range Table" prepared by AF Hqs Artillery Section and FT 3-Q-1 with one change which is approved for use with 3" gun on various mounts, pending issuance of revised tables. 3" shell, HE M42A1 reduced, with HC smoke spotting charge was prepared in this theater and the letter quoted above advises it should have same ballistic qualities as HE. Units which have fired a sufficient number of rounds of smoke to determine its capabilities are requested to submit data, giving variations from FT figures to this headquarters.

(2) 76mm Gun. FT 76-A-4, January 1944, which also does not include Metro Data, is the official FT for this gun, and, as far as is known at this time, is the only FT available. When it is necessary for these units to use Metro Data, the correction determined by adjacent artillery units may be used with fairly good success.

(3) 90mm Gun. FT 90-C-3, April 1944, with changes 1, 2 and 3 is the official firing table for 90mm gun M-3 on gun motor carriage M36. These FTs are usually in the motor carriage. A limited number are available through Tank Destroyer Group Headquarters. (S-3, 1st Tank Destroyer Brigade).

e. Instrument Light: MWO C58-W2 of 11 July 1944 provides for installation of Light M30 on M18s to provide lighting for elevation quadrant M9 for indirect fire missions at night. (S-3, 1st Tank Destroyer Brigade).

f. T-105 Fuze. "Excellent results with the T-105 fuze were obtained by 'B' Company, 603 Tank Destroyer Battalion, against three concrete pillboxes in the vicinity of THIONVILLE, France. Armor piercing ammunition had been fired at all three emplacements but had ricocheted, whereas one round each of HE with T-105 fuze neutralized all three pillboxes at 2,000 yards. 'C' Company reports T-105 fuzes used against concrete pillboxes and in some cases structures completely disintegrated." More T-105 fuzes are recommended in the basic load of each destroyer." (Commanding Officer, 603 Tank Destroyer Battalion).

g. Graphic Firing Tables for 3" HE: "We have prepared Graphic Firing Tables for 3" HE (Reduced Charge) which were printed by the Topographical Engineer Battalion. Recently we have fired a considerable number of rounds of the reduced charge ammunition. (Commanding General, 808th Tank Destroyer Battalion).

h. APC - 90mm: "APC 90mm was 'stepped up' to 2850 f/s and 5300 rounds of this type manufactured. However, experiments showed the erosion to be such as to reduce tube life to approximately 400 rounds. Manufacture of this type was discontinued but the APC has been standardized at 2800 f/s. (S-3, 1st Tank Destroyer Brigade).

1. Grousers:

(1) Battalions in XII Corps equipped with M-36 or M-10 Tank Destroyers find that when tracks are equipped with flotation-type grousers the vehicles can traverse softer ground without getting stuck. The only objection made to the flotation grousers is their method of installation, some of the grousers not being properly welded to the track and soon break loose. This, however, will eventually be remedied. (S-1, S-4, 9th Tank Destroyer Group).

(2) The three-inch track extensions welded to 18 M36s have been of questionable value. In the three weeks that they have been installed, at least 50% of them have been either bent out of shape or broken off entirely.

J. Firing on Maginot Forts:

"This Battalion employed the M36 destroyer in attacks upon the MAGINOT FORTS within the 80th Division sector and were credited with the neutralization of 13 forts. One fort located at coordinate (Q165575), just north of BALBIDESTROFF, was inspected after the action and the following data are taken from this inspection. Fort was located on the edge of woods with embrasures covering the valley to the South, which runs roughly East and West. The destroyers were located on a wooded crest of hill about 2,000 yards to the South. . . . The fort under discussion was fired upon by one gun.

"The fort was constructed of reinforced concrete, the reinforcing consisting of 3/4" iron rods, spaced 10 inches vertically and 18 inches horizontally. At the point of penetration, there were four rows of this reinforcing. The wall thickness at the small arms gun embrasure, 3 feet from the point of impact was 31 inches thick. The roof of the fort was approximately 4 feet thick. The gun firing at this fort, fired a total of 8 rounds. Five rounds were HE, with T105 fuses, and 1 round of AP. Also 2 rounds of HE were fired at personnel around the fort. The range on the gun was 2300 yards.

"At the point where the wall was breached, the face of the fort was flaked for a distance of 3' 10" horizontally and 3' 4" vertically. The hole left by the projectile was about 12" x 6" through the wall. The projectile traveled through about 36" of the reinforced concrete. The shell struck at an angle of 30 degrees from the vertical face of the wall. The penetration was made at a distance of 6' above the ground level of the fort and at the corner of the firing room and the roof. The firing chamber showed evidence of a large amount of fragmentation inside the room, with many large fragments of concrete scattered about the room. It was also observed that in the case of three rounds of the HE, with the T105 fuze, the projectile had penetrated the wall with the base of the shell, approximately 10" from the outside face of the wall.

"Captain Duchossois, the company commander, stated that the gunners had great difficulty in picking up the embrasures at the range at which they were firing (2300 yards). He also recommends that guns aim low to insure that they do not get hits on the roof, which is a solid block of concrete." (Commanding Officer, 610 Tank Destroyer Battalion).

SECTION VIICOMBAT TIPS

a. Danger From Water Cans: In the kitchen area mess room cleaning cans should not be filled and left uncovered overnight. Water-filled cans will reflect flares dropped during air raids like mirrors.

b. Crating For Personal Effects: We use the fiber containers of grenades and ammunition up to 155mm to ship personal belongings of evacuated personnel to the Effects Quartermaster. The only other materials needed are tape and address labels.

c. Use of Wrappings and Cans: The waterproof wrapping of Class II clothing makes an excellent liner for dug-outs and slit trenches. Cardboard from 10-in-1 rations makes a sanitary floor in the field kitchen. (29th Quartermaster Company) (Battle Experiences No. 77, 26 October 44).

SECTION VIIIFIELD EXPERIMENTS

Many field expedients have been designed by all Tank Destroyer Units. A few are listed below:

80th Tank Destroyer Battalion: Scrap iron racks have been constructed on all vehicles to provide a more suitable method of storage for ammunition, baggage, and additional gas cans. Racks have been constructed on trucks, 1/2-ton for wire reels and loops provided for laying wire. Reinforcing has been provided on the

### 807th Tank Destroyer Battalion: (Cont'd)

floors of the M-8 vehicles by welding 3/8 inch plates over the present floor. Wire cutters have been constructed for the front of each 1/2-ton vehicle. Small boiler plate shields have been constructed on reconnaissance 1/2-ton vehicles to replace windshields. When overhead cover is not available the kitchen tent is used as a Fire Direction Center and cover for the kitchen is improvised.

808th Tank Destroyer Battalion: Pintles on front of half-tracks. Wire reels on 1/2-ton trucks for laying and picking up wire. Graphical firing tables.

602nd Tank Destroyer Battalion: When this battalion was unable to draw replacements on battle lost binoculars, the binoculars of certain officers and NCOs whose tactical missions did not demand the use of such instruments were turned into battalion supply and reissued to the line companies.

610th Tank Destroyer Battalion: An additional modification desirable to the carriage is to put a board of improvised grating over the oil radiator located beneath and to the rear of the turret. Previously, the shell cases were ejected with sufficient force to smash this radiator.

808th Tank Destroyer Battalion: The SCR 608 radio has been taken from Headquarters Company and each line company given two 608's. This enables the company commander to use one radio at his CP for his executive and at the same time maintain constant communication with Battalion and his platoons wherever he may be. This has resulted in better communications, since there is always one radio available in case of a breakdown.

## SECTION IX

### TANK DESTROYER TROOP LIST

The latest available list of Tank Destroyer Brigade, Groups, and Battalions, with their commanders, is furnished for your information below.

#### BRIGADE

1ST TANK DESTROYER BRIGADE -- Brigadier General HERBERT L. EARNEST

#### GROUPS

1st TD Group	-	Colonel STEVENS	7th TD Group	-	Colonel HERMAN
2nd TD Group	-	Colonel ELMS	8th TD Group	-	Colonel LARTER
3rd TD Group	-	Colonel MATTHEWS	9th TD Group	-	Lt Col DARLING
4th TD Group	-	Colonel BROWNING	12th TD Group	-	Colonel DEERY
5th TD Group	-	Colonel JACOBY	20th TD Group	-	Colonel SERGEANT
6th TD Group	-	Colonel SEARCY	23rd TD Group	-	Major BAKER

#### BATTALIONS

601 TD Bn	-	Unknown	705 TD Bn	-	Lt Col TEMPLETON
602 TD Bn	-	Major CONLIN (Temp)	771 TD Bn	-	Lt Col SMITH
603 TD Bn	-	Lt Col MCCURRY	772 TD Bn	-	Unknown
607 TD Bn	-	Lt Col SANDT	773 TD Bn	-	Lt Col SPIESS
609 TD Bn	-	Lt Col BROWNE	774 TD Bn	-	Lt Col STURGIS
610 TD Bn	-	Lt Col JEFFREY	776 TD Bn	-	Lt Col MOOREHEAD
612 TD Bn	-	Lt Col DEELEY	801 TD Bn	-	Lt Col HORSFALL
614 TD Bn	-	Lt Col PRITCHARD	802 TD Bn	-	Lt Col MONTGOMERY
628 TD Bn	-	Major GALLAGER	803 TD Bn	-	Lt Col GOODWIN
629 TD Bn	-	Lt Col COLE	807 TD Bn	-	Lt Col SMITH
630 TD Bn	-	Lt Col BURGESS	808 TD Bn	-	Lt Col McDONALD
631 TD Bn	-	Lt Col MATEAN	811 TD Bn	-	Lt Col BROWNFIELD
634 TD Bn	-	Lt Col LAVINSCH	813 TD Bn	-	Lt Col JEFFRIES
635 TD Bn	-	Lt Col SMITH	814 TD Bn	-	Lt Col JONES
636 TD Bn	-	Lt Col FORDY	817 TD Bn	-	Lt Col BARNES
638 TD Bn	-	Lt Col DAVIS	818 TD Bn	-	Lt Col HALL
643 TD Bn	-	Lt Col FARE	820 TD Bn	-	Lt Col PATRICK
644 TD Bn	-	Lt Col GRIFAM	821 TD Bn	-	Lt Col ARBURY

## BATTALIONS (Cont'd)

645 TD Bn	-	Lt Col AUSTIN	821 TD Bn	-	Lt Col DETMAR
654 TD Bn	-	Lt Col WINTON	824 TD Bn	-	Unknown
691 TD Bn	-	Major TIMNEY	828 TD Bn	-	Lt Col HEADING
692 TD Bn	-	Unknown	827 TD Bn	-	Unknown
702 TD Bn	-	Lt Col NEALL	835 TD Bn	-	Lt Col KAYS
703 TD Bn	-	Unknown	832 TD Bn	-	Lt Col TINGHER
704 TD Bn	-	Major ALANIS	831 TD Bn	-	Lt Col MAGGIER

\* Regiment Blindor Fusiliers Marines.

SECTION X

## TAILPIECES

a. "Or Else"

Pupils at WALHEIM High School were locked up in a room with two statements each, one of which they had to sign before leaving.

No. 1 "I hereby volunteer for service in the Waffen SS".

No. 2 "I do not volunteer for service in the Waffen SS because I am a coward and a bastard". (Intelligence Notes No. 35, 11 November 1944).

b. 4Fs in Uniform:

A PW from 211 Grenadier Regiment had on him the following document dated January 41, which he stated was still valid:

"Gefreiter Hans MULLER, Stabskp 2/XI is blind in his left eye and the vision of the right eye is seriously diminished. He is unable to recognize a superior in the street and is therefore medically exempted from saluting". (AFHQ Intelligence Notes No. 73).

*James C. Colburn*  
 HERBERT L. EARNST Lt Col USA  
*For* Brigadier General, U.S.A.  
 Commanding

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