## TOREIDERILAND

### HEADQUARTURS 776TH TANK DESTROYER BATTALION APO 75E

12 December 1944

(Incl #1)

SUBJECT: Report of Test of 57mm Apti-tank Gun Against Encay Aracr.

- TO : The Commanding General, Division Artillery, 44th Infantry Division, APO #44, U.S. Army.
- 1. Attached is report of test conducted with the cooperation of the 71st Infantry Regiment against a German Mk V Fanther in the vicinity of SCHALDACK. This particular tank is distinguished by a high velocity 75mm gun and with an extreme slope of the front armor, making penetration of that area very difficult.
- 2. The test conducted indicated that this weapon is very effective against energy armor when employed to its full effectiveness. It is believed that penetration would also be obtained at greater ranges than 500 yards but it is certain that designing effect can be produced 500 yards or less when the point of ain is any other part of the tank than the front armor.
- 3. It has been noted in many instances that the towed 57mm anti-tank gum has been sited pointing directly down a road with no camcuflage and no efforts to dig the gum in. It is believed that the gum can be used with greater effectiveness if this practice were discontinued, as it means that the crew must of necessity fire against the front armor, the adventage of concenhent and surprise is lost and the gum crew may be forced to leave the gum or continue an action in the face of fire from the sneary tank.
- 4. It is recommended that this weapon when employed be dog in and well executlaged to take full advantage of surprise fire and to permit holding fire until enemy tanks approach to within 500 yards or less. In addition it is recommended that these gums, when possible, he sited off the flanks of expected enemy tank approaches in order that flanking fire may be obtained. Such position has the advantage of permitting fire where the most damage may be accomplished against the enemy armor and also denying knowledge of the fire to the enemy tank crew due to the restricted vision in the tanks.

/s/ D. S. Moorhoad D. E. MOORHEAD Lt. Col. CAC Commanding

Attachment - 1

CORFIDENTIAL

# HEADQUARTERS 776TH TANK DESTROYER BATTALION APO #758

11 December 1944.

### -EFFECTIVENESS OF FIRE OF 57 MM ANTI-PANK GHR ON ME V TANK

On 8 December 1944 a demonstration was conducted by the 776th ID Bn in the vicinity of SCHALBACH, 572-268 with a 57mm AT gun beloning to the 71st Inf. Regt. of 44th Inf. Div. The purpose of this test was to determine the effectiveness of the 57mm AT gun against a Mk V Panther tank. An effort was made to secure AT gun positions so the tank could be fired at from all angles. The terrain was too wet to get the gun into all the desired firing positions, but three positions at different ranges and firing angles were occupied.

The crew was comprised of members of the AT crews of the 71st Regt, with two members of each gum crew being present. The Panther tanks previously knocked out by the 776th TD Bn, were used. One tank did spot burn when it was knocked out, while the second tank had a turret fire and it was in this tank's turret that a 3 hole was made with the 57mm AT gum.

The AT crews were impressed with the favorable results of the firing and showed a marked increase in their confidence of the 57mm AT gun at the conclusion of the test.

The 57mm AT gun was put into position behind the tank at a range of 300 yds at a 15 degree angle from the tank's flank. From this position 7 rounds of APC were fired. Three rounds were fired into the turret, all of which made a clean hole and sparted small fires. Two rounds were fired at the hull just above the track, which made clean holes, but started no fire. Two rounds were fired into the track, which dook out one begey wheel and broke the track.

The gun was moved to a new position of 500 yds at a 10 degree angle off the rear of the tank. Three rounds were fired into the turret, two on the sides and one in the rear, which made clean holes and started small fires. Two rounds were fired into the rear of the track, which was broken with those two rounds. Two rounds were fired into the rear of the tank, which started more fires. This tank was completely burned by the fire from these two positions.

The gun was moved to a new position of 300 yds range at an 8 degree angle off the front of the tank. Three rounds were fired into the front of the tank. These rounds made slight penetrations then ricocheted off the frontal armor. Two rounds were fired into the turret—one made a clean hole, the other made a hole about three inches in diameter. No fires were started. Two rounds were fired low on the track, these went through the bogic wheels on one side and came through and tore up the bogic wheel and track on the other side of the tank. Two rounds were fired into the front driving sprocket and the track was broken. All but one round fired from this position, which was a bad frontal angle, made clean holes, with the exception of the three fired on the frontal armor, which made only slight penetration.

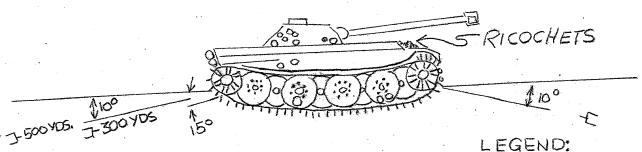
Effectiveness of Fire of 57mm Anti-tank Gun on Mk V tank (continued)

#### CONCLUSION:

From these three positions, one which presented a bad frontal angle it is evident that the Panther Mk V is vulnerable to the 57mm AT gun. There was no difference in the size of the holes made by the APC at the greater ranges. All but one one of the turret hits were clean—cut holes and not gouged out from the impact of the APC. All but two hits in the turret set off some of the ammunition and started small fires. The hull, the part of the tank between the track and the turret, is vulnerable, and the APC made a slightly larger hole than the diameter of the shell, also a larger hole than was made in the turret. The track and bogic wheels were easily broken. The rear of the tank and turret can be penetrated with the same satisfactory results as the sides of the turret and the hull.

Properly employed for flanking fire, it is believed that the 57mm AT gun is an effective weapon against any German Armor. Gunners must withhold their fire until about 500 yards or less, and not give away their position with premature firing at greater ranges. If a tank must be fired on the front, the gun is capable of breaking the track on its strongest part, the driving sprocket, and the tank can he stopped.

/s/ Louis J. WADLE /t/ LOUIS J. WADLE Captain, F.A. Assistant S--3



157 AT GUN POS.

O HITS ON TANK

ROUNDS THAT DID