



At Anzio our TDs had no commanding observation or field of fire such as this 3" piece enjoyed at the north end of the Maginot Line.

TD Reconnaissance at Anzio

By Capt. Lewis A. Clarke, FA

OBSERVATION

The 701st TD Bn was attached to 1st Armd Div. At least one gun company of the battalion was always employed in an indirect fire role, reinforcing the fires of division artillery. Since the battalion fire direction center was tied in by wire not only to the gun companies but also to at least a half dozen artillery battalions, there was an excellent opportunity for adjusting and massing fire on any target of opportunity that could be observed.

Initially the most difficult problem was to obtain a satisfactory field of view over the enemy's terrain. The ground was flat. Buildings habitually drew enemy mortar and artillery fire and were likely at any time to become untenable for the observer. ("To become untenable" as here used means "to be reduced to a pile of rubble.")

The solution finally adopted was to establish three OPs. One of these was set up in an abandoned American tank on the left side of the sector and about 500 yards from enemy infantry. Another was established in a house in the center of the sector, 1,500 yards from the most advanced enemy elements. The third was established in one of a group of houses on the right of the sector, about 300 yards from the German positions. These OPs were respectively named and became known as "X-ray," "Yoke," and "Zebra."

The first and last of the three OPs could be approached or vacated only under cover of darkness; "Yoke" was accessible by daylight. In all three OPs, observation was conducted through BC telescopes, either over the cupola of the tank or through a hole in the roof of a house. Two of these 'scopes had been obtained through supply channels; the third, and by far the best, had been captured from the Germans in the attack on Mt. Porchia.

Communications

Between each OP and the Reconnaissance Company command half-track communication was established by 609 radio. Extended microphone and earphone cords up to 150 feet were used at the OPs with each radio, not as an expedient but as the only means of obtaining satisfactory communication. Because of heavy enemy shell and mortar fire, wire even just a few hundred feet in length could not be maintained from these forward OP positions. Operation of remote control units was therefore impracticable. And, since the radio would not transmit with sufficient volume from inside either the tank or a house, it was necessary to dig in the radio outside, with the antenna fully extended behind a tree or building. By using extended microphone and earphone cords in

EDITOR'S NOTE

The TD Reconnaissance Company mentioned here was on the Anzio Beachhead from 1 Mar to 25 May 44. As Capt. Clarke was its commander for nearly all that time (13 Mar to 7 May), he knows first-hand the matters outlined here.

connection with radios so placed, reliable communication was obtained over distances up to five miles.

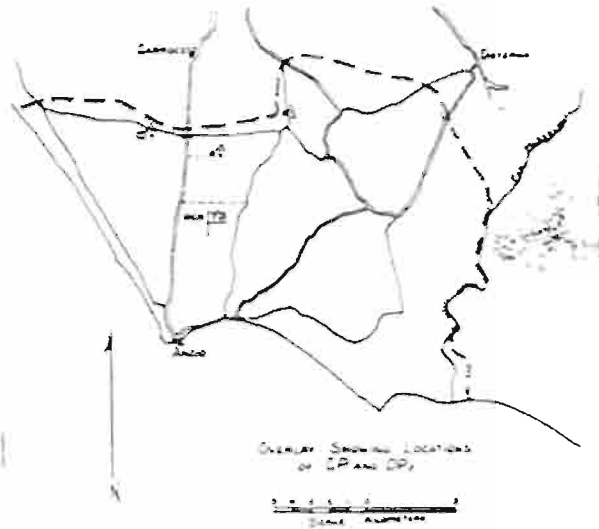
Upon location of a target the observer reported the mission to Reconnaissance Company headquarters, which relayed by wire to battalion FDC, which applied the latest metro corrections and sent the initial data with concentration number to a gun company. When the gun company was ready to fire, it contacted the observer directly on Reconnaissance Company's channel. Upon completion of the mission the gun company FDC computed and sent to the observer the adjusted data. Where conditions of visibility or the nature of the target required 155-mm or 8-inch fire, Reconnaissance Company headquarters (through battalion switchboard) contacted the appropriate FDC and acted as relay. On more than one occasion Field Artillery telephoned, requesting that a Reconnaissance Company observer adjust artillery on a target that could not be seen by their own observers.

Personnel

Since under conditions existing at Anzio forward observation was hazardous and subjected personnel to considerable strain, it was thought desirable to develop a system which might be continued over a long period of time without inflicting undue or unbearable hardship on a few individuals. Each reconnaissance platoon organized two OP teams which rotated among the three OPs according to the following roster:

April	6	7	8	9	10	11	12	13	14	15	16	17	18
"X"	1	1	2	2	4	4	3	3	5	5	6	6	1
"Y"	2	4	4	3	3	5	5	6	6	1	1	2	2
"Z"	3	5	5	6	6	1	1	2	2	4	4	3	3

It will be noticed from this schedule that each OP team received a 3-day rest after two days' duty at "X-ray," a two-day rest after two days at "Zebra," and a one-day rest after two



days at "Yoke." At first glance the system may seem unduly complicated, but it worked in a most satisfactory manner.

At a time when artillery units were urgently requesting additional officers for use as forward observers the company, using only two officers, was able to maintain three OPs constantly for ten weeks. The sergeants did an excellent job in locating targets and in adjusting fire, and there was always sufficient officer and non-commissioned officer personnel with the company to handle other duties when necessary.

Distribution of work among six teams produced other benefits. Every man in the three platoons became familiar with the terrain to our front. Although a few men were wounded, there were no cases of battle fatigue, either from too much hazardous duty or from thinking about such duty too long in a rear area. OPs which were "too hot to handle" by the same personnel for long periods were manned constantly.

Locating targets

Finding the map location of targets was unusually difficult since observation was had only from low ground. It was not uncommon for Reconnaissance Company observers (or even for experienced artillery observers) to miss the map location of distant targets by as much as 2,000 yards. In such a situation the artilleryman would undoubtedly adjust with smoke and thus be able to correct his initial error within a few rounds. But where the tank destroyer observer made even a lesser mistake in the original map location of the target, the rounds would never be found. The lack of a satisfactory smoke shell proved always a serious handicap to the observer of tank destroyer fires. To gain accuracy in the initial location of targets, the following procedure was used:

The 0-3200 line of the BC Telescope was set on the factory tower at Carocetto. (This was shown on all maps of the area.) When a target was located the reading on the telescope was noted, and the angle between the factory tower and the target was marked on the map by using a protractor or small range fan. The observer's task was thereby simplified into locating the target along the ray which he had drawn on his map.

Sensings

Since the observer often did not know the location of the

artillery battery firing his mission, and since observation was had only from low ground, even the most experienced observers were compelled to be constantly mindful to establish the gun-target line on the ground and to obtain a range bracket before calling for fire for effect. All personnel were familiar with these rules, but some observers were careless in their application. Where a mission was completed without a satisfactory range bracket, or where an observer had "jumped" his range or deflection bracket, an officer from the company would discuss the mission with the observer after dark. The discussion usually developed into a campaign to convince the observer that the firing element was not guilty of the error involved. Additional help was given the observers by practice "firing" on a terrain plot which had been constructed in the company bivouac area.

Fire Direction Center

All observers from low ground have a tendency to underestimate the range error. Under such conditions, personnel at the FDC may attempt to think for the observer. This practice proved confusing to the observer. By changing a sensing of "200 short" to "400 short," unknown to the observer, the fire direction center in the long run will waste time and ammunition.

Locating Enemy Guns at Night

At both "Yoke" and "Zebra" the 0-3200 line of the BC 'scope was set on the factory tower at Carocetto before dark. Watches of all observers were synchronized. When an enemy gun or battery fired, the reticle of each scope was centered on the flash. The observer noted the reading of the instrument and the time. Since the location of each observer and of the factory tower was known to the fire direction center, the observer was required to make only a brief report indicating the reading of his instrument and the time; for example, "Flash 6215, time 2319." Observers from division artillery were also engaged in this work, with the result that sometimes several rays were obtained intersecting at an enemy battery position. Although the method is not foolproof, locations obtained in this manner, when checked with those of the sound and flash battalion operating on the beachhead, proved highly accurate.

AREA RECONNAISSANCE

On numerous occasions Reconnaissance Company was called upon to reconnoiter for indirect fire position areas for the gun companies. In doing this work, two factors were always important: the condition of the ground, and the minimum elevation.

After returning from such a mission, the officer or NCO in charge prepared an overlay showing areas where the ground was too soft for supporting the M-10, where enemy artillery fire fell most heavily, where the best minimum elevation with flash defilade could be obtained, and so forth.

Each reconnaissance platoon had one clinometer and a couple of minimum-elevation cards. These were used habitually in the selection of indirect fire position areas.

LIAISON

During the entire period, Reconnaissance Company maintained between one and three liaison groups with adjacent units. The work was a part of Corps' antitank warning system. Here again, personnel were rotated. A crew of four men were given such a job for a week at a time. Radio contact was maintained with Reconnaissance Company's headquarters. Positive reports of enemy activities were sent in when received; negative reports were submitted on every even hour. The

Company's first sergeant, communications sergeant, and others received turns at this work.

AIR OBSERVATION

During the time at Anzio, the leader of Pioneer Platoon flew over 40 missions with Division Artillery's Liaison Pilots. These flights were made for the purpose of adjusting guns on base and check points.

CONCLUSION

It is believed that the work of Reconnaissance Company during the period in question demonstrates that:

(1) Effective use can be made of such a company even where the front is stabilized.

(2) Efficiency and morale will be served best in the long run by permitting the largest possible number of men to engage even in specialized work.

(3) Reconnaissance Companies should beg, or borrow, a sufficient number of BC 'scopes, clinometers, and protractors, and several hundred feet of microphone and earphone cord.

(4) A white phosphorous smoke shell is urgently needed by Tank Destroyers for use in this secondary (reinforcing) role.

(5) Great emphasis in training should be placed upon locating targets, sensing fire, and operation of radios.

T.D. BATTLE LESSONS

1. Digging of gun positions and two-man foxholes is an SOP in our Towed T.D. Company. When subject to small arms and artillery fire it is impossible, however, for the men to leave their holes and man the guns without exposing themselves. To remedy this condition we've been digging shallow communication trenches between the holes and the gun positions.—*Pfc. Francis Neuwerth*

2. With the Ammo shortage as acute as it is something must be done to conserve. Here are some helpful hints:

a. Make sure that all ammunition is sufficiently covered in the gun pit. Rain and inclement weather will in most cases swell the casing and make it difficult for the shells to fit into the breech of the gun. An old shelter half or a tarp will prevent water or dampness from reaching the shells.

b. Another important point is the proper marking of all types of 3" ammo. For instance, concrete piercing is a converted shell and does not have a case designated as such. I suggest marking the case in paint or chalk. This prevents the gun crews from making the mistake of putting the wrong shell in the gun.

c. Every man should be informed on all types and kinds of ammo. He should know the effect of the different types and should be able to identify each shell in darkness. Classes on description, characteristics, methods of fire, and effects of ammo will help each man considerably.—*Cpl. H. Glantz*

3. Radio Communications.

a. *First echelon of the set.*—Too often we find that the driver and his officer or NCO in charge don't take proper care of the set. The radio isn't checked before operation, such as to see if the lead-in wire is securely fastened to both the mast base and the set itself, antenna sections screwed tightly together and taped, panel meter checked for filament and plate reading. The set is left exposed to all kinds of weather (we don't have covers, but a shelter-half or raincoat could serve the purpose). Moisture gets in and shorts out the set. Mikes should be put in glove compartment when not in use: once they become wet the carbon granules stick or the switch corrodes, affecting operation.

b. *Remote control.*—We have failed to make full use of this. During an artillery barrage when the radio cannot operate without danger to its operator, the RM-29 can be employed by adding an extension to it. Plug the extension in the set and carry the RM-29 to the nearest foxhole or shelter. Then by using a TS-13 or T-17 and HS-30 the radio is operated from the hole or shelter. Keep it as dry as possible.

c. *Cross-beaming by the enemy.*—During our training in the States this was stressed too much without a full explanation of just how it was done and how much equipment it took to do it. As a result some of our operators still worry about it and are afraid to leave their sets on.—*S/Sgt. Lanferman*

4. In laying wire to guns we find it saves time and troubleshooting to lay one line to each gun. In case of a short or break in line to one gun, you still have communication with the other sections. This also saves time in trouble-shooting. You still use the same amount of phones or RM-29s by putting the four ends in the one phone or RM-29.

—*T/S J. B. Wood*

5. I find that for a section post the best bet is a 3-man trench in V-shape with half overhead cover. In it should be a machine gun, bazooka, and rifle. It has to be dug so you can control the oncoming traffic, whether enemy or friendly. Communications means to be in contact with your whole organization, and should be maintained and checked at all times.

—*Sgt. J. A. Coveart*

6. Experiences with the 3-inch gun.

a. Keep only 3 men and commander on gun when firing. Others should be under cover or in fighting holes, until called for.

b. Put a strong top on ammo pit, and straw or planks on bottom.

c. When using telephone for communication lay 3 wires over different routes to keep communication intact.

d. When in position, contact units on flanks and inform them of your position and find out what they have for support. Make sure they have the same password you have.

e. When time allows, dig communication ditches between gun, ammo pit and crew dugouts.—*Sgt. R. Lopez*

7. During the fighting for Aachen we were on a holding position on the outskirts of a small town only a few kilometers from Aachen. The only action we encountered at this position was enemy patrols at night. There was an exceptionally thin line of infantry on the line, which enabled the Jerrys to maneuver quite freely. They would come in firing their auto weapons wildly, joined by machine guns firing wild from pillboxes. They were the first patrols that we encountered and they made us quite nervous at first—which of course was their intention, we figured out after a few nights of it. My conclusion on patrols is: if your men are alert and prepared to meet such tactics, you need not fear this type of patrol.

—*Sgt. Welch*