Employment of Radar by XV Corps Artillery

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RECOGNITION OF THE VALUE of radar as a means of locating targets for field artillery came to the XV Corps as early as 1 March 1944, when the Corps Commander, LtGen Wade H. Haislip, and I were en route from Anzio to Naples aboard an American destroyer.

The skipper invited us to make a tour of the ship during which we visited the radar station. There I noticed several closely grouped echoes on the horizon and asked about them. The commander said they were reflections from objects upon a small island which we were passing. It then occurred to me that it might be possible for a radar to pick up targets on a battlefield. This possibility lingered in mind despite discouragement from some sources and finally, early in October 1944, BrigGen James F. Brittingham, Artillery Officer of the Seventh Army, furnished the XV Corps Artillery with a 584 for ground use.

Our tests progressed in actual battle under various conditions of weather and terrain October 1944, until April 1945. They primarily concerned the employment of radar for general field artillery use, rather than counter mortar missions. The SCR-584 was to provide battlefield intelligence, to locate moving ground targets for corps artillery, and adjust friendly artillery fire. In February 1945, nine per cent of the Corps Field Artillery missions were based on radar.

By careful pre-planning we had the radar sets where they could check upon the rearward movements of the Germans and we capitalized on this form of intelligence with some amazing results, including intelligence missions around 30,000 yards (although normal radar intelligence extended from our front lines to about 25,000 yards).

The radar sets of the XV Corps were kept in operation until the end of the war. When we started, the Corps front was along the La Vezouze River near Luneville, France. The last actual mission, fired as a result of radar intelligence, was at the crossing of the Danube River in the Donauworth area, on 26 April 1945.

The results of using radar in a ground role were checked from many sources, especially from prisoners of war and from examination of targets which had been overrun. On one occasion, the Sixth Army Group Commander, Gen Devers, observed the destruction of a battalion of German artillery along a road running northeast from Zweibrucken, affected by a 240mm howitzer and based on radar information. Many other individuals from the supported division and from corps artillery units made observations of the results. Most of these were not recorded in my diary and verification is impracticable now except by a search through voluminous after-action reports. On one occasion I took steps to have two radars in widely separated locations observe a given portion of a road. The picking up and evaluation of targets by the two sets completely confirmed the reliability of radar in the ground role.

In late October and early November, on the La Vezouze Front, a German main supply road was located through a village named Leintrey which was located on a prominent hill. Time and again the radar picked up movements on the road at or near this village and we

fired on the targets with a gun, a battery, or a battalion. After we captured Leintrey, French civilians told an officer of the 173d F. A, Group that the Germans had searched every house in the village in an effort to find a concealed radio set which they thought was giving the Americans information of movements on the road.

In the Gros-Rederchering area, the radar picked up what appeared to be a considerable tank concentration moving down the road towards the 44th Inf. Division. This target was plastered by both divisional and corps artillery weapons. Prisoners of war later stated that this was a movement of tanks in preparation for a counterattack, but that the artillery fire had been so destructive the plan had to be cancelled.

On a semi-dark night the radar picked up a patrol in "No Man's Land" and reported it to infantry regiment on that front. It was ascertained at the regiment that this was a patrol (whose dispatch had not been reported to the radar). The regiment requested that the patrol's progress be tracked. In the course of tracking, radar picked up what appeared to be a stalking German patrol.

Alerted by radio, the friendly patrol leader attacked the enemy patrol and captured some prisoners, in addition to inflicting other casualties.

In the Sarreguemines area, the radar picked up what was evaluated as a battalion forming to attack the 63d Infantry Division. Heavy artillery fire was placed on this concentration, and it was learned later from prisoners of war that a counterattack had been forming but that the artillery fire had been so devastating that it was never launched. In the same area, photographic interpretation showed that the Germans were using a road leading north from Sarreguemines extensively during the night. A radar was moved, to take this road under observation. The first night many "juicy targets" were attacked as a result of the radar; the second night the targets were fewer; and the third night they were almost nonexistent. A few days later another photograph, taken after snow had fallen, showed that this road was no longer being used by the Germans.

AS the XV Corps was preparing to cross the Rhine River, and was in a "silence policy" period of artillery fire, one of the radars picked up some extensive movement of what appeared to be armor on a road well back from the river and on the extreme left of the Corps zone of action. The officer at the radar set correctly deduced that this was American armor, since it was in much greater quantity than any German armored movement which had been noted for some time, and that it was probably from an American element of Gen Patton's Army which had forced a crossing earlier. This radar intelligence resulted in getting the Third Army units moved back into bounds so that our artillery support and our attack of enemy targets between the river and road on which the armor had been moving would not result in damage to friendly troops.

The emergence of radar in the ground role from a "screwball experimental dream" to an accepted, dependable, and much desired intelligence agency was amazingly rapid and wide spread in the divisions of the XV Corps. So great was the need for an agency that could see the enemy during periods of low visibility and complete darkness; so urgent was the necessity to find a means with which to warn the front-line infantryman that something was approaching him from "No Man's Land"; and so quickly were factual results from radar disseminated, that almost overnight there was a clamor from the divisions for radar coverage on their fronts. From all sides I was offered assistance in laying communications to my radar sets. END

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