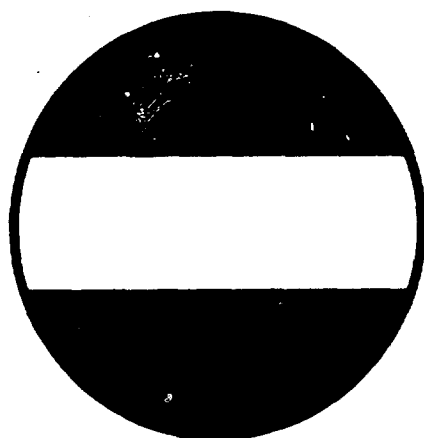


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THE TANK DESTROYER HISTORY

Study No. 29



Historical Section . Army Ground Forces

1946

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The Army Ground Forces

TANK DESTROYER HISTORY Study No. 29

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By
Lt. Col. Emory A. Dunham

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Historical Section - Army Ground Forces
1946

HEADQUARTERS ARMY GROUND FORCES

WASHINGTON 25, D. C.

314.7(1 Sept 1946)GNHIS

1 September 1945

SUBJECT: Studies in the History of Army Ground Forces

TO: All Interested Agencies

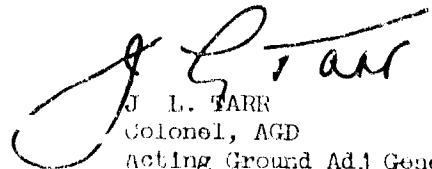
1. The history of the Army Ground Forces as a command was prepared during the course of the war and completed immediately thereafter. The studies prepared in Headquarters Army Ground Forces, were written by professional historians, three of whom served as commissioned officers, and one as a civilian. The histories of the subordinate commands were prepared by historical officers, who except in Second Army, acted as such in addition to other duties.

2. From the first, the history was designed primarily for the Army. Its object is to give an account of what was done from the point of view of the command preparing the history, including a candid, and factual account of difficulties, mistakes recognized as such, the means by which, in the opinion of those concerned, they might have been avoided, the measures used to overcome them, and the effectiveness of such measures. The history is not intended to be laudatory.

3. The history of the Army Ground Forces is composed of monographs on the subjects selected, and of two volumes in which an overall history is presented. A separate volume is devoted to the activities of each of the major subordinate commands.

4. In order that the studies may be made available to interested agencies at the earliest possible date, they are being reproduced and distributed in manuscript form. As such they must be regarded as drafts subject to final editing and revision. Persons finding errors of fact or important omissions are encouraged to communicate with the Commanding General, Army Ground Forces, Attention: Historical Section, in order that corrections may be made prior to publication in printed form by the War Department.

BY COMMAND OF GENERAL DEVERS:


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Colonel, AGF
Acting Ground Adj General

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Historical Study



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19 MAR 45

PREFATORY NOTE

The historical record of Tank Destroyers is replete with fast, interesting action and achievement. Brevity being essential, a synoptic narrative history has been presented in one volume with salient reading and statistical detail incorporated in a separate volume - The Appendices.

For example, Major General Orlando Ward's sparkling and penetrating discourse on Tanks and Tank Destroyers is recorded in Appendix Chapter V. Here he says, in part:

"It was unfortunate that The Tank Destroyers, with what is now an obsolete weapon, were first engaged against real enemy armor when the enemy had the initiative. The modern Tank Destroyer, either towed or self propelled, might have changed the tale. --- What commander would want to change 'the young man's spirit', the boldness, the dash, the courage written all over the records of Tank Destroyer action at a time when their weapons were expedient pending production of a weapon fulfilling the tank destroyer concept?"

The list of Board projects, numbering over three hundred, will be found in Appendix Chapter IX. The import of the recommendations made suggests a voluminous history all by itself.

The compiler of this history joined the Tank Destroyer Tactical and Firing Center at Temple, Texas, shortly after its activation. He has remained "on the ground" at Camp Hood throughout Tank Destroyers activities. While an effort has been made to keep the history entirely objective, any deviation therefrom is due to weighing the compendium of objective material and to observing action in propinquity.

The author acknowledges his indebtedness to previous Tank Destroyer Historical Officers, especially to Colonel H. J. McChrystal and to Colonel Wendell Westover, for much of the tabulated historical data.

This Tank Destroyer history is submitted as an objective treatise from inception to 1 September 1945.

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CHAPTER I

ORIGIN OF THE TANK DESTROYERS

Like mercury spilling on a laboratory floor, the tanks and other armored forces of Germany rolled across the plains of Poland in 1939 and again in 1940 rifled through the fortified hills and panoplied valleys of France. Like mercury this armored force dissolved, so to speak, the best armament Poland, France, England, Yugoslavia and Greece could produce. The countries of the world looked on, at first with incredulity, and then with alarm approaching panic. Passive, static and cordon defense had failed to halt or stop the tank supported by planes and infantry. German armor was uncontained.

Prior to 14 May 1941, the accepted United States military doctrine of anti-mechanized warfare was defensive in scope.¹ Such were the tactics in the maneuvers of August 1940, during which practically all antitank guns were employed passively and in cordon defense. In the light of failure of such tactics in Europe and in the August maneuvers of 1940, WD Training Circular No. 3, 23 Sept 1940,² directed that a minimum of antitank guns should be placed in initial fixed positions, and a maximum held as a mobile reserve. This was the first break in a strictly anti doctrine and led eventually to aggressive tactics more compatible with U. S. military tradition.

Some antitank guns existed in divisional artillery but for the most part antitank weapons were at this time allotted to antitank companies of infantry regiments. Such decentralization ran contrary to the principles favored by the War Dept. As late as April 1941, so far as was known by the War Department, of all the armies and corps (excluding the Armored Force), only the VI Corps had issued any instructions on antitank defense.³ "It is beyond belief," wrote Gen. Lesley J. McNair on 12 April 1941, "that so little could be done on the question in view of all that has happened and is happening abroad. I for one have missed no opportunity to hammer for something real in the way of antitank defense, but so far have gotten nowhere. I have no reason now to feel encouraged, but can only hope this apathy will not continue indefinitely."⁴

On 14 April the Chief of Staff, directed prompt consideration be given to the creation of additional highly mobile antitank - antiaircraft units, as corps and Army troops in addition to organic antitank weapons.

Just prior to receipt of the above directive, the Asst Chief of Staff G-3, War Dept. had held on 15 April 1941 the first of a series of antitank conferences.⁶ Offices represented in addition to G-3 War Dept. were: Chief of Infantry, Chief of Field Artillery, Armored Force, Chief of Cavalry, Chief of Coast Artillery, General Headquarters and the War Plans Division, War Department General Staff.

This conference resulted in approval by all for offensive antitank tactics, but was marked by disagreement over the organization and command of antitank units. On branch responsibility, the Chiefs of Infantry, Artillery, and Cavalry each thought his arm should exercise and develop responsibility for antitank defense. The Chief of the Armored Force did not want the burden of antitank defense, deeming it counter to the offensive character of the Armored Force. He recommended the creation of a provisional antitank arm which was the view favored by General Headquarters.

It was decided to retain the antitank companies in Infantry regiments, General Headquarters not concurring, to create divisional antitank battalions and to transfer 37mm antitank guns from the Field Artillery, the Chief of Field Artillery disapproving, and to form a central reserve of General Headquarters antitank battalions, though in smaller number than desired by General Headquarters.⁷

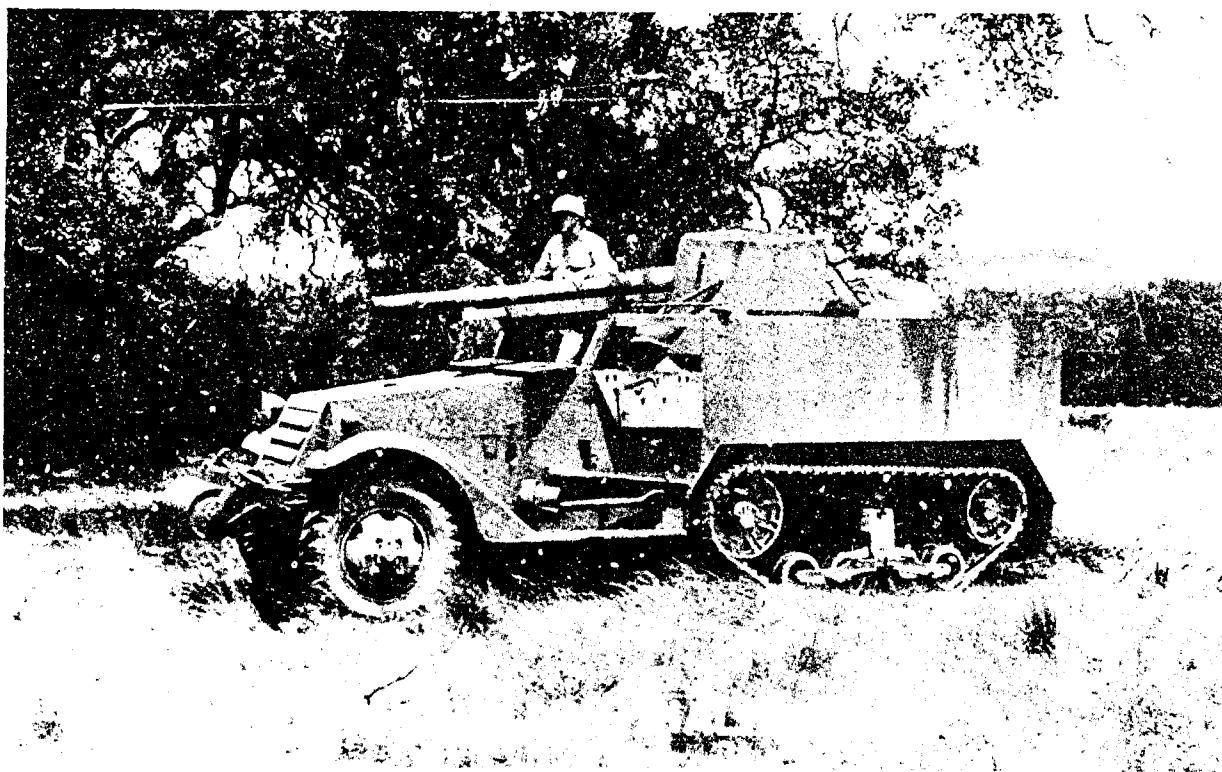
The subject of branch responsibility for antitank defense was still a big problem for the War Department General Staff⁸ when on 14 May 1941, General George C. Marshall, Chief of Staff, directed the Asst Chief of Staff G-3 to take immediate action on antitank measures to include an offensive weapon and organization to combat armored forces. In this directive, Gen Marshall indicated that defense against armored forces was a problem beyond the capabilities of any one arm and probably required the organization and use of a special force of combined arms, capable of rapid movement, interception and active rather than passive defense tactics. The Chief of Staff further directed that the question of another branch or arm was to be tabled, but a planning branch was to be organized to tackle and solve unsolved problems and measures against armored forces. The G-3 Section of the War Department General Staff was given the assignment and directed to work closely with the National Defense Research Committee, Inventors Council, G-2 and the development people in G-4.⁹ The following day the planning branch was established in G-3 War Department under Lt Col Andrew D. Bruce.¹⁰

Col Bruce held a third antitank conference on 26 May 1941 in which it was decided to leave antitank companies with the infantry regiments. Each divisional and higher headquarters was to appoint an antitank officer and new provisional antitank battalions were to be organized at once with weapons taken from the artillery. The most outstanding decision was to establish before the end of 1941 a "large antitank unit."¹¹ Provisional antitank battalions were activated by War Department letter 24 June, and antitank officers were appointed in divisions and higher units.¹²

An historic antitank conference called by the Asst Chief of Staff G-3, War Department, was held at the Army War College in Washington from 14 to 17 July 1941. The purpose of the conference was "to inform antitank officers of the antitank problems, the proposed test in maneuvers, the latest mechanized antitank doctrine, the latest developments in mechanized and antitank means and all duties of antitank officers in organizations." Attending the conference were representatives from General Headquarters, from G-1, G-2, and G-3 of the War Department General Staff, and the recently appointed antitank officers of armies, corps, divisions and service schools.¹³ Brigadier General H. L. Twaddle, Asst Chief of Staff, G-3, War Department, opened the conference with the declaration that, "stopping enemy tanks and other mechanized vehicles is the biggest job confronting our army today." Colonel Bruce, Chief of the Planning Branch, spoke on the AntiMechanized Problem. He referred to the studies that had been made of the problem for months past, as witnessed by training circulars, field service regulations and other publications, as well as numerous conferences with interested agencies. Colonel Bruce reported on the work of the Planning Branch and emphasized the fact that the broad aspects of the antimchanized problem were divided into two phases that should be solved simultaneously rather than successively: first, making use of what was immediately available and placing it in the proper organization; and second, the development of weapons, organization and tactics superior to foreign development. That portion of the tentative plan of the Planning Branch most vital in Tank Destroyer development was: first, to form divisional antitank battalions in each foot infantry division, motorized infantry division, and possibly, armored force division; and second, to form General Headquarters Antitank battalions and General Headquarters Destroyer battalions. Colonel Bruce discussed the controversial questions of limbered weapons, and guns pointing to front or rear, but in line with the new antitank offensive doctrine inspired by General Marshall, he favored a gun pointing to the front or in a turret.

The genesis of the original Tank Destroyer -- a 75mm gun mounted on a half-track -- was related by Colonel Bruce. During an interview with a French ordnance designer, Colonel Bruce learned that some units had successfully used an old 75mm gun mounted on a 5-ton truck and pointed to the rear. The desire for action on the part of the Planning Board necessitated the best use of available means and there were several hundred 75mm guns on hand. They were mounted on a half-track as a

substitute for an ideal tank destroyer in order to create a provisional tank destroyer unit for field test during the autumn maneuvers. Colonel Bruce exhibited the 75mm gun mounted on the halftrack to the personnel of the conference but explained that the tank destroyer unit as visualized by the Planning Branch was a fast moving vehicle armed with a weapon with a powerful punch, which could be easily and quickly fired, and in the last analysis having armored protection against small arms fire, so that the weapon could not be put out by a machine gun. Colonel Bruce further described the ideal tank destroyer as a "cruiser" rather than a "battleship" and such a description seemed apt in considering the closing remarks of General McNair when he said, in part, "the counter-attack long has been termed the soul of defense. Decisive action against a tank attack calls for a counterattack in the same general manner as against the older forms of attack. A counterattack, of course, may be delivered by other tanks, but the procedure is costly. There is no reason why antitank guns, supported by infantry, cannot attack tanks just as infantry, supported by artillery, has attacked infantry in the past. Certainly it is poor economy to use a \$35,000 medium tank to destroy another tank when the job can be done by a gun costing a fraction as much."



General McNair further called attention to the gravity of the task which faced the conference and directed that they thoughtfully and resolutely set out to find the answer, first by study and analysis, and then by practical application and test in the field with troops.

The policy of offensive action and centralized control of antitank guns stressed at the July conference was tried out in the Louisiana maneuvers held in September 1941. The umpire manual was carefully revised to give an accurate picture. New rules were prescribed for the laying of dummy mine fields.¹⁴ The antitank officers of field units were informed of developments in the July conference.

Provisional antitank battalions were available. They were attached to the 3rd Army on maneuvers, for use against the armored elements of the Second.

On 8 August 1941, a directive was issued by General Headquarters to the Commanding General of the Third Army on the tactical employment of antitank battalions.¹⁵ He was instructed to organize nine battalions into three "groups", each group to consist of three battalions and to have, in addition, fully motorized, a headquarters company, ground and air reconnaissance elements, and intelligence, signal, engineer and infantry units. Both offensive and defensive tactics were outlined in the directive with preference expressed for speedy and aggressive action to search out and assault opposing tanks before they assumed formation.

The antitank units were handled satisfactorily in the Louisiana maneuvers except for a tendency to dissipate their strength and to commit them to positions prematurely. They were again used as provisional battalions with their group organizations in the Carolina maneuvers in November 1941.¹⁶

For long-range planning, in accord with General Marshall's directive of 14 May, the Planning Branch, G-3, War Department, published a detailed memorandum on 18 August 1941. It was designed for an army of fifty-five divisions, then envisaged by the War Department, and proposed the equivalent of four antitank battalions per division; fifty-five (or one each) for the divisions, fifty-five for armies and corps, and one hundred and ten for General Headquarters. In the directive referred to hereinbefore, General Marshall had stipulated that the question of a new branch or arm should not be raised at that time. The old arms--infantry, field artillery, etc.--were therefore now given the responsibility for creating the new antitank battalion; and the antitank center, on the establishment of which all were agreed, was to be put under the authority of the chief of the armored force.¹⁷

The office of the Chief of Staff acted on the G-3 memorandum on 8 October 1941. The provisions for dividing antitank responsibility among chiefs of branches were rescinded. The antitank center, made independent of the armored force, was to be established under War Department control. Provision was made for organic antitank battalions in divisions, corps, and armies, and for the continuance, by the battalions already provisionally organized, of their association with the infantry, field artillery, or other arm in which they had originated.¹⁸

A War Department letter of 27 November 1941, officially ordered the activation, on or about 1 December, of a Tank Destroyer Tactical and Firing Center. Colonel Bruce was to command the new center. Earlier in the month--4 November--Colonel Bruce had been relieved from assignment and duty in the office of the Chief of Staff and assigned to command the Tank Destroyer Tactical and Firing Center, Washington, D. C. "pending the announcement of a permanent site."

The letter of November 27 made no provision for antitank battalions in divisions, corps or armies. The fifty-three antitank battalions whose immediate activation was ordered were all to be under General Headquarters, but might be attached to lower echelons for training.¹⁹

A War Department order of December further reduced the connections still existing between the antitank battalions and the several arms. "Antitank" battalions were redesignated "tank destroyer" battalions, the old termavoring too much of passive defensive tactics. All tank destroyer battalions, it was repeated, were allotted to General Headquarters. Antitank units in cavalry divisions and field artillery battalions and regiments in continental United States were to be inactivated. Infantry antitank battalions were to lose the name "infantry", be renumbered, and redesignated as "Tank Destroyer" battalions.

The net effect was to create a new homogeneous tank destroyer force, composed of battalions, only nominally connected with the older arms. Of these battalions only the 93d, under command of Lt. Colonel Richard G. Tindall, was complete from the first with full reconnaissance and other supporting elements. It was assigned on 30 January 1942, as school troops, to the Tank Destroyer Tactical and Firing Center.²⁰

SUMMARY: Passive, static and cordon defense doctrine against armored forces had failed miserably in Europe during 1939-40. The military doctrine and tactics of the United States were antitank or defensive in scope. Some method had to be found to counter the growing achievements of armored forces. A counterattack negating passive defense -- antidoctrine -- was introduced by General Marshall in advocating and directing an offensive weapon and organization to combat armored forces. It was beyond the capabilities of any one arm. A new force, under strong direction and responsible to General Headquarters, was necessary. Antitank organizations and the antidoctrine were retained in the infantry regiments but, in addition thereto, tank destroyer battalions capable of offensive and defensive tactics, were organized and the Tank Destroyer Tactical and Firing Center was chosen as the means of developing the organization, tactics and doctrine of the new provisional arm--tank destroyer.

CHAPTER II

ACTIVITIES OF THE TANK DESTROYER TACTICAL AND FIRING CENTER at Fort George G. Meade, Maryland

Lieutenant Colonel (later Major General) Andrew D. Bruce was relieved as head of the Planning Branch, G-3, War Department, and assigned as Commanding Officer of the Tank Destroyer Tactical and Firing Center, Washington, D. C. on 4 November 1941.¹ The selection of this officer for such an important duty appeared most logical in view of his four years of service on the War Department General Staff² and his efforts in the preliminary planning for antitank warfare.

On 27 Nov 1941 the War Department issued to the Commanding Officer of the Tank Destroyer Tactical and Firing Center a directive which provided detailed instructions for organization of the Center on 1 December 1941 with temporary station at Fort George G. Meade, Maryland.³ The new Center consisted of: a Headquarters, a Tank Destroyer Board, a Tactical and Firing Center, and a Tank Destroyer School. The Commanding Officer of the Tank Destroyer Tactical and Firing Center was also designated as the Commandant, Tank Destroyer School. The installation was an exempted activity operating under War Department control.

The following mission was assigned by the War Department:

(a) To formulate, develop and make recommendations to the War Department concerning tactical and training doctrine, improvement and future expansion of tank destroyer forces.

(b) To cooperate with chiefs of supply arms and services in developing tank destroyer materiel and in making recommendations to the War Department on this subject.

(c) To organize and operate the Tank Destroyer Tactical and Firing Center, Tank Destroyer Board, and Tank Destroyer School.⁴

Pending the selection of a permanent site, Colonel Bruce with his secretary and a meager number of officers arrived at Fort Meade on 1 December 1941 and proceeded to set up the new Tank Destroyer Tactical and Firing Center, using the limited facilities available.⁵ On 18 November 1941, the War Department had approved for the Center a tentative allotment of eighteen Regular Army officers of field grade, and fourteen reserve officers from Captain to Lieutenant Colonel.

The officers assigned to the Center under this allotment began arriving on 1 December 1941 and by 30 December a skeleton staff had been organized with all officers performing numerous tasks in addition to their regular duties.⁶ Civilian employees authorized by the War Department were used to assist with clerical work and an Adjutant General section was organized to act as an office of record and to handle administrative and personnel matters.⁷

Immediately, the Center was faced with the problems of: perfecting and expanding its own administrative organization; establishing liaison with War Department General Staff sections, and various branches of the service, particularly with Ordnance, and with such organizations as the National Defense Research Committee and the Inventors Council; selecting and testing expedient weapons; and locating a permanent site for the expanding Center.

The establishment of liaison, with Aberdeen Proving Ground, the Armored Force, and the War Department agencies⁸ began at once. The necessity for speed in organizing the Tank Destroyer Tactical and Firing Center into an efficient agency for the supervision and development of Tank Destroyer units was emphasized by the War Department's

directive of 3 December 1941. This directive to the Commanding Generals of all armies and groups and the Chief of the Armored Force, ordered the inactivation, effective 15 December 1941, of all antitank troops in cavalry divisions, and of all antiaircraft - antitank platoons and antitank batteries in field artillery battalions and regiments in continental United States. The eight infantry antitank battalions then existing were redesignated "tank destroyer" battalions and were reorganized as heavy self-propelled battalions.⁹

The same War Department letter directed the activation, effective 15 December 1941, of twenty-eight light and sixteen heavy tank destroyer battalions, which were allotted to General Headquarters reserve.¹⁰ These organizations were to be formed, insofar as available equipment and personnel allowed, as follows:

Heavy battalions--three gun companies armed with twenty-four 3-inch antitank guns, self-propelled (substitute 75mm gun, self-propelled); twelve 37mm antitank guns, self-propelled; eighteen 37mm antiaircraft guns, self-propelled.

Light battalions, towed--thirty-six 37mm antitank guns, towed; eighteen antiaircraft machine guns, dual mount, caliber .50, self-propelled.

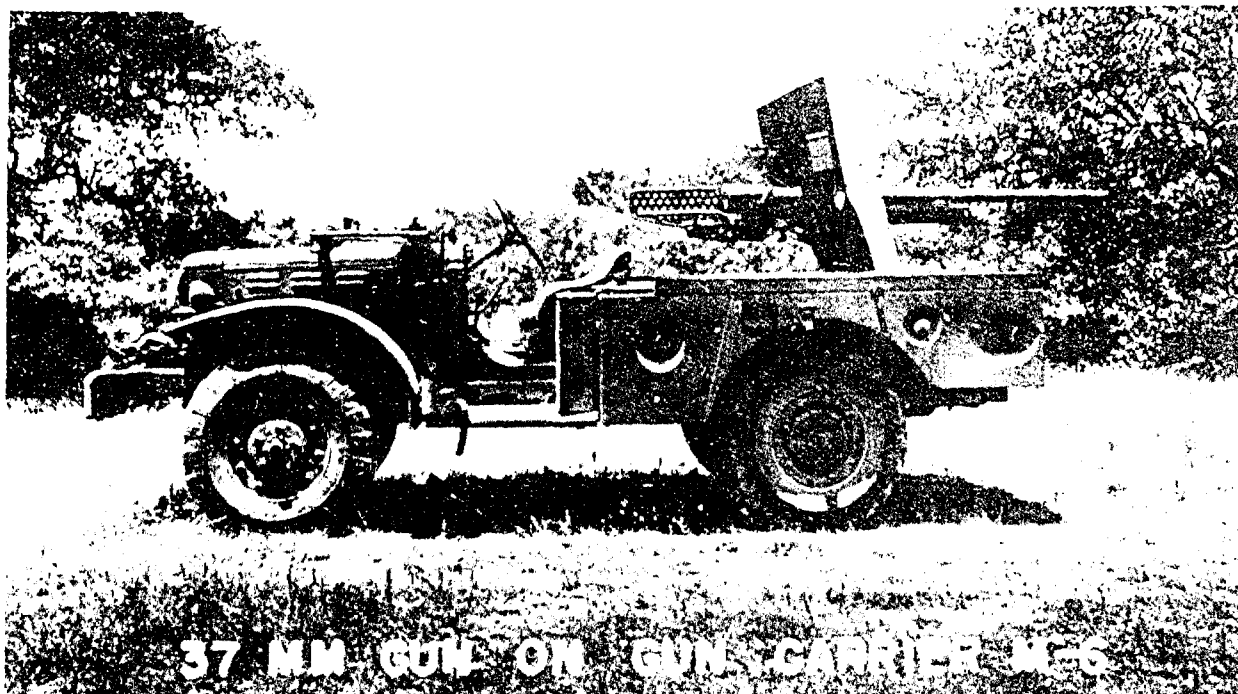
Light battalions, self-propelled--thirty six 37mm antitank guns, self-propelled; eighteen antiaircraft machine guns, dual mount, caliber .50, self-propelled.¹¹

Thus the Commanding Officer of the Tank Destroyer Tactical and Firing Center was confronted with two chief problems: first, that of building his own administrative organization for the rapidly expanding Tank Destroyer activities; second, the preparation of tables of organization and equipment, weapons, doctrine and training for tank destroyer battalions activated. These two problems necessitated simultaneous action.

Colonel Bruce immediately established his own staff sections and informally activated the Tank Destroyer Board, whose chief functions were the development of new weapons and equipment, the improvement of existing weapons, the formulation of tank destroyer tactical doctrine and preparation of tables of organization.

In addition to pushing the Center's administrative expansion, Colonel Bruce planned for the future needs of the Center, and tank destroyer organizations. On 11 December 1941, he recommended to the War Department that a tank destroyer group headquarters be activated at once and assigned to the Center. The tactical necessity for tank destroyer groups had been anticipated but initially the group was to be used as an expedient for facilitating administration of the Center and its school troops.¹² The request for activation of a tactical group headquarters for experimental purposes was disapproved by the War Department on the basis that it did not appear to be urgent and, because it was thought a sufficient allotment of personnel was already available for the Center.¹³

Colonel Bruce had earlier visualized the necessity for the establishment of a replacement training center for tank destroyer personnel in addition to a school and firing center.¹⁴ On 12 December 1941 the War Department, stated that it did not concur in the recommendation for establishment of a replacement training center as part of the Tank Destroyer Tactical and Firing Center, and directed that existing replacement centers be used. This memorandum suggested a unit training center for newly activated organizations.¹⁵ The suggestion in regard to unit training center was noted and such a center was activated on 9 March 1942.



Under the War Department directive organizing the Tank Destroyer Tactical and Firing Center, it was realized that training for officers and enlisted men in existing service schools was an absolute necessity. On 19 January 1942, from the limited number of officers and enlisted men available for the Center, it was recommended by the Center that twenty-five officers and two hundred thirty-two enlisted men be sent to service schools for special training.¹⁶ Thus the Center established the policy of thoroughly preparing personnel who were to become instructors.

Additional officer personnel was requested on 20 January 1942. This letter listed by grade and proposed assignment, specialists in such subjects as automobiles and supply, which were desired for assignment to the Center staff and faculty pending the activation of the Tank Destroyer School at the Center's permanent location.¹⁷ These officers were again included in the allotment of 287 officers and 1440 enlisted men requested by the Center on 31 January 1942 from the War Department. Tables of organization for the Tank Destroyer Tactical and Firing Center, Headquarters, Headquarters Company, School Troops Headquarters, Unit Training Headquarters, the Tank Destroyer Board, and Tank Destroyer School Training Regiment, were enclosed with the memorandum.¹⁸

A budget estimate calling for funds in the amount of \$127,991.53 for the period from 1 February 1942 through 30 June 1942, was submitted by the Tank Destroyer Tactical and Firing Center on 31 January 1942. The day before this estimate was submitted, the Center had been allotted \$31,500.00 of Special Field Exercise funds. This allotment was the chief fund of the Center from its activation until 21 May 1942 when \$116,169.00 was allotted by the Quartermaster General to cover 1 February - 30 June 1942. Such meager funds necessitated maximum ingenuity in procuring supplies.¹⁹

Another administrative problem confronting the Tank Destroyer Tactical and Firing Center at this time was that of ammunition allowances and tactical gasoline and lubricant estimates. Army Regulation 775-10 did not specifically consider tank destroyer needs and the War Department believed that allowances indicated for types of weapons in use by tank destroyer battalions would be sufficient. A further complication on ammunition was that during this period, immediately following Pearl Harbor, every branch of the service had representatives in Washington seeking equipment and ammunition. Ammunition allowance for tank destroyer units in excess of that provided in Army Regulation 775-10 was secured, however, following a series of conferences in Washington.²⁰ Required estimate of tactical gasoline and lubricants was submitted to the War Department on 29 January 1942.

The request by the Center of 31 January 1942 for additional personnel was acted on by the War Department 13 February 1942 and 20 February 1942. Personnel were allotted with some slight variation in number of commissioned officers and enlisted men. Various arms and services were included in the allotment and were to be determined by the Commanding Officer of the Center.

The second major problem of the Tank Destroyer Tactical and Firing Center was that of providing and improving available equipment for activated Tank Destroyer battalions, building up and revising the tables of organization for each of the three type battalions activated, and the preparation of a field manual establishing standard procedure of tactics, doctrine and training. While this problem itself was divided into several phases, they were all related to the one important proposition of equipping and making ready for combat the tank destroyer battalions activated by the War Department.

With respect to a tank destroyer weapon, the production of the M-3 tank destroyer-- the 75mm gun mounted on a halftrack-- continued. This expedient weapon had been developed during the late summer of 1941 by the Planning Branch, G-3, War Department.²¹ Eighty-six of these weapons had been produced by 1 December 1941 and fifty of them had been sent to the Philippines where they were used effectively as self-propelled artillery.²² The balance had been issued to the 1st Provisional General Headquarters Tank Destroyer Battalion (93rd Antitank Battalion.)

Another early expedient weapon which became a standard substitute was the motor mount M-6-- the 37mm gun mounted on a 3/4 ton truck. This mount was desired by the Center solely as a training expedient for use while a light armored car was developed for tank destroyer use.²³

The Tank Destroyer Board began at once a search of more than two hundred vehicles listed by the Ordnance Department for vehicles embodying characteristics of the "super-duper" tank destroyer as visualized by Colonel Bruce. The development of this ideal tank destroyer, the testing and improving of equipment supplied to tank destroyer battalions, as well as the work on tables of organization, and doctrine and training, were functions of the Tank Destroyer Board and are more particularly delineated in Chapter VIII.

The original tables of organization provided for a reconnaissance company, three gun companies and a headquarters company. Field tests and maneuvers had demonstrated that the original concept of providing a reconnaissance company with equipment which would furnish the company with a high degree of mobility, protective armament, light armor protection, and adequate means for rapid transmission of information, was correct. Any tendency to add armament or striking elements capable of a reconnaissance in force seemed undesirable at this time. Tanks were therefore eliminated from the provisional organization.²⁴ Maneuver experience had also demonstrated the necessity of organizing a security section, equipped with light machine guns and rifles, to operate with each tank destroyer platoon to reconnoiter gun positions and to protect the guns while in position.²⁵

The first published results of the study of tank destroyer tables of organization which had been going on since establishment of the Center at Fort Meade were released on 18 December 1941, when tentative tables of organization were sent to commanders of tank destroyer battalions. In an accompanying note, Colonel Bruce stated that these were not official tables and should be used only as a guide in organization. The charts provided for organization of the three types of battalions authorized by the War Department--light, towed; light, self-propelled; and heavy, self-propelled.

The need for a higher headquarters to facilitate tactical training of two or more battalions led to the development of a group headquarters organization.²⁶ Official Table of Organization 18-10-1, Tank Destroyer Group Headquarters and Headquarters Company, was issued by the War Department on 5 January 1942. It prescribed that two or more tank destroyer battalions were to comprise a tank destroyer group and the group headquarters and headquarters company was provided with personnel and equipment to enable it to function both as an administrative and tactical unit.²⁷

After much study and analysis on the subject of developing a single standard type battalion which would greatly simplify planning and organization, the Commanding Officer of the Center recommended to the Commanding General, Army Ground Forces, on 19 March 1942, that the heavy, self-propelled battalion should be adopted as standard.²⁸ This recommendation was approved and the table of organization for a single standard type tank destroyer battalion was published 5 June 1942.

Concurrent with the Tank Destroyer Board's other projects, Field Manual 18-5, Organization and Tactics of Tank Destroyer Units, was being written. It was completed during the early part of May 1942, and published on 16 June 1942. Although this manual has since been revised, tank destroyer officers most closely associated with the development of tank destroyer doctrine and tactics, some of whom have observed tank destroyer units in action overseas, believe that the basic doctrine set forth in this first edition of Field Manual 18-5 was, and is, correct.

The tables of organization, and organization and tactics of tank destroyer units, were founded for a large part on the notes compiled by Colonel Bruce and Lt. Colonel Richard G. Tindall, Commanding Officer, 93rd Antitank Battalion, during the summer and fall maneuvers of 1941. This Battalion was released from War Department control, assigned to the Tank Destroyer Tactical and Firing Center on 13 December 1941 and redesignated as the 893rd Tank Destroyer Battalion (heavy, self-propelled) on 15 December 1941.²⁹ On 30 January 1942, this Battalion became the first organization to be designated as Tank Destroyer Tactical and Firing Center School Troops.³⁰

From the date of its activation the Center had been confronted with the problem of deciding upon a site to recommend for its permanent location. Sites had been considered by the War Department near Waco, Paris, and Bastrop, Texas; Durham, North Carolina; Hopkinsville, Kentucky; and Clarksville, Tennessee. Recommendations had been made by the Assistant Chief of Staff, G-3, War Department, as early as 11 August 1941, that the Waco site not far from that at Killeen, be selected.³¹

Governing factors in selection of the site were availability and topographical fitness of land for tactical maneuvers and ranges, cost of land, water supply, availability of utilities, effect of general climatic conditions on training, adequate communication facilities (rail or road), central location, lack of congestion due to proximity of other large camps and proximity to recreational facilities.³²

Preference of Colonel Bruce for a site near Killeen, Texas, was expressed on 7 October 1941 in a memorandum to the Assistant Chief of Staff, G-3, War Department.³³ Despite the pressure of other duties, Colonel Bruce and other officers of the Center, accompanied by two representatives from the Chief of Engineer's Office, were able to

leave Fort Meade on 19 December 1941, to visit the proposed permanent camp site near Killeen, Texas. Although its selection had not yet been officially announced, Colonel Bruce, on 6 January 1942, felt sufficiently sure of the Killeen site to request that the Chief of Army Air Forces locate an observation squadron there for use in training.³⁵ On the next day, in a memorandum for the Assistant Chief of Staff-G-1, War Department, it was requested by the Center that its commanding officer be designated as commander of the camp to be constructed at Killeen in order to prevent a duplication of staffs at Center and post headquarters.³⁶ Favorable action on this request was taken by the War Department, 9 January 1942, and Colonel Bruce was designated by letter orders dated 17 January 1942 to command "the cantonment at Killeen, Texas."³⁷

On 30 January 1942, the cantonment was named "Camp Hood," in honor of General John Bell Hood, Confederate States Army, commander of the Texas Brigade in the Civil War.³⁸ This name was selected because it had the advantages of being short and easily remembered, of appeal to the Texans in whose midst the camp was located, and of association with a historic American commander.

On 11 January 1942, the Tank Destroyer Tactical and Firing Center was transferred from Fort George G. Meade, Maryland, to a permanent station at Killeen, Texas, commencing on or about 15 January. Temple, Texas, was designated as a staging area, pending availability of facilities at Killeen.³⁹

Although the Tank Destroyer Tactical and Firing Center and its then existing components were designated exempted installations operating under the War Department, the camp to be established at Killeen was designated as non-exempt and subject to normal echelon command.

A member of the Tank Destroyer Tactical and Firing Center staff was at once ordered to Temple, to make a preliminary survey of facilities there. He requested and received authority from the Commanding General, Eighth Corps Area, to rent office space; and made arrangements with civilians in Temple for the organization of a billeting board to fix rents and list available housing for military personnel.⁴⁰

The forward echelon of the staff and the area engineer arrived in Temple on 16 January 1942.⁴¹ The first enlisted detachment ordered to the staging area comprised eight men of the 893rd Tank Destroyer Battalion, who were ordered to Temple on 2 February 1942 to drive government vehicles.⁴² By 3 February 1942, a complement of seven officers of the Tank Destroyer Board had preceded the movement of headquarters and were established in temporary offices at Temple ready to continue development of tank destroyer tactics, organization and weapons.⁴³

The advance echelon at Temple immediately attached problems on improvement of roads within and surrounding the reservation, measures to safeguard the health of military personnel in the new camp, inspections of public eating places to insure a sanitary condition, and the institution of vigorous measures to suppress prostitution. Officials of Bell, Coryell and Lampasas counties met, conferred and acted upon the suggestions of the officers from the Tank Destroyer Tactical and Firing Center. The formation of the Central Texas Health District with funds appropriated by the three counties was a direct result of the initial efforts of the officers of the Tank Destroyer Tactical and Firing Center at Temple, Texas.

Activities of the Center closed at Fort Meade at 1200, 14 February 1942 and the advance echelon opened Center headquarters at Temple, Texas, at the same date and hour.⁴⁴

SUMMARY: The administrative organization of the Tank Destroyer Tactical and Firing Center was projected at Fort George G. Meade, Maryland, during the period

1 December 1941 to 14 February 1942. This was accomplished concurrently with administrative and training organization designed to equip and train tank destroyer battalions activated within fifteen days after the activation of the Center itself.

The problems confronting the new Tank Destroyer Tactical and Firing Center were numerous, viz: lack of trained and experienced personnel; no antecedent special school for basic training; lack of equipment; lack of tables of organization; and lack of needed facilities, the selection of which constituted a major problem in itself.

CHAPTER III

ACTIVITIES OF THE TANK DESTROYER COMMAND at the Staging Area, Temple, Texas

The Tank Destroyer Tactical and Firing Center began the second phase of its activities with the opening of its headquarters in Temple, Texas, at 1200, 14 February 1942.

Its mission, as stated in the War Department directive of 27 November 1941, which ordered its activation, was a triple one:¹

- (a) To formulate, develop, and make recommendations to the War Department concerning tactical and training doctrine, improvement, and future expansion of tank destroyer forces.
- (b) To cooperate with chiefs of supply arms and services in developing tank destroyer materiel and in making recommendations to the War Department on this subject.
- (c) To organize and operate the Tank Destroyer Tactical and Firing Center, Tank Destroyer Board, and Tank Destroyer School.

The principal activity of the Center at Fort Meade had been the planning prerequisite to functioning according to mission in toto with greater emphasis placed on organization for the future expansion of tank destroyer forces. At Temple, Texas the Center's principal activity while continuing mission as stipulated in paragraph (a) above, was more particularly directed to the second and third missions.

Temporary offices were established in various buildings in the Temple business district. Conferences were initiated by the staff sections of the Center and the Eighth Corps Area Headquarters at Fort Sam Houston, San Antonio, Texas. These conferences were for the purpose of discussing supply, service command personnel needs, temporary installations in Temple, the acquisition of Camp Hood reservation, the building of the cantonment, sites for ranges, temporary base camps and an airfield.²

When Colonel Bruce arrived in Temple on 16 February 1942, thirty officers of his staff had preceded him and the Center was organized and functioning. Two days later Colonel Bruce was promoted to Brigadier General with grade and date of rank from 16 February.³

Among the growing number of pressing problems which demanded immediate attention were: billeting of military personnel; completing the acquisition of the reservation area and moving therefrom approximately 200 families; construction of the cantonment; construction of ranges to meet expanding requirements; preparation for training of tank destroyer units in temporary field camps pending the completion of the construction; and establishment of subordinate headquarters to direct training. All of the above problems were necessary in that they furthered the accomplishment of the Center's pressing mission of developing tank destroyer units trained and equipped for combat missions.

The problem of locating and listing quarters for personnel was critical. Facilities in the area were limited, and it was difficult to hold rents at a reasonable level. On 22 February 1942, an officer was appointed to consult with a civilian rent committee and control the lease arrangements of military personnel.⁴ Under the policy of requesting civilian participation unexpected housing was developed and rents were much more favorable than under later developments under the Office of Price Administration.

The division engineer of the Eighth Corps Area had established a real estate branch in Gatesville, Texas, and proceeded to acquire the needed land by securing options from owners. This method proved too slow and it was necessary to obtain a "take order" through the Federal Court in Waco, Texas for securing the lands needed.⁵ The families in the area, many of them representing four generations, were somewhat dazed when confronted in January with the fact, first: that their land was to be taken and, second, that they would have to move within a period of four months. In a few cases great reluctance was indicated and even open avowal that they would not move. General Bruce, while being firm about the matter, was at all times kind and reasonable and wisely refrained from any show of military might. He simply referred the problem to the Federal Marshal at Waco, Texas and the Federal Marshal, using civilian processes with which the inhabitants were acquainted, readily achieved the results desired by the military. In this manner, friction was avoided between the military and any of the inhabitants and a spirit of cordiality was developed between them.

Plans had been prepared by the Quartermaster General for housing at Camp Hood.⁶ While there were no building requirements peculiar to the organization and equipment of the tank destroyer battalion, General Bruce recommended that the housing requirement be the largest of the three types -- that the heavy, self-propelled battalions be adopted as a standard for all tank destroyer construction.

Since General Bruce had been put in command of the cantonment at Killeen, he was enabled to go direct to the area engineer, Major Gerald R. Tyler, and achieve action without delay. The original plans for the Camp Hood cantonment called for housing for 2,262 officers and 33,612 enlisted men. Initial construction was started 7 April 1942.

On the 24th of February the first step was taken toward solution of the problem of ranges and training aids by the appointment of a board of officers to consider the type, number, location, approximate cost and other details connected with the construction of field facilities on the reservation.⁷ The board submitted its report on 14 March, recommending that nineteen different types of ranges and other training aids be constructed at a total cost of \$230,662.27. This construction was approved and expenditure ratified by letter of 1 April 1942 from the Commanding General, Army Ground Forces. Temporary ranges were constructed and used until the completion of these permanent facilities.⁸

With the knowledge that housing facilities would not be available for tank destroyer units for at least six months, reconnaissance was made in the reservation for field camps. Sites were chosen for the 893d Tank Destroyer Battalion which arrived at Camp Hood 31 March 1942, and for the 753d Tank Battalion (medium) on 14 April 1942, which organizations were assigned as school troops.⁹ Field camps were largely constructed of salvage material from old abandoned CCC camps in the Eighth Corps Area.

The expansion of the Center's administrative organization to set up subordinate headquarters and to care for the tank destroyer training and development program projected for Camp Hood was accomplished on 9 March 1942. The following organizations were activated:¹⁰

Headquarters and Headquarters Company, Tank Destroyer Tactical and Firing Center.

Unit Training Center, commanded by Colonel (later Brigadier General) Richard G. Tindall, consisting of Headquarters; Headquarters and Headquarters Company, First Tank Destroyer Group; Headquarters and Headquarters Company, Second Tank Destroyer Group.

Tank Destroyer School Training Regiment, commanded by Lieutenant Colonel (later Colonel.) George S. Beatty.

Tank Destroyer Board, president, Colonel Fay Ross.

Headquarters and Headquarters Company, School Troops (activated without personnel).

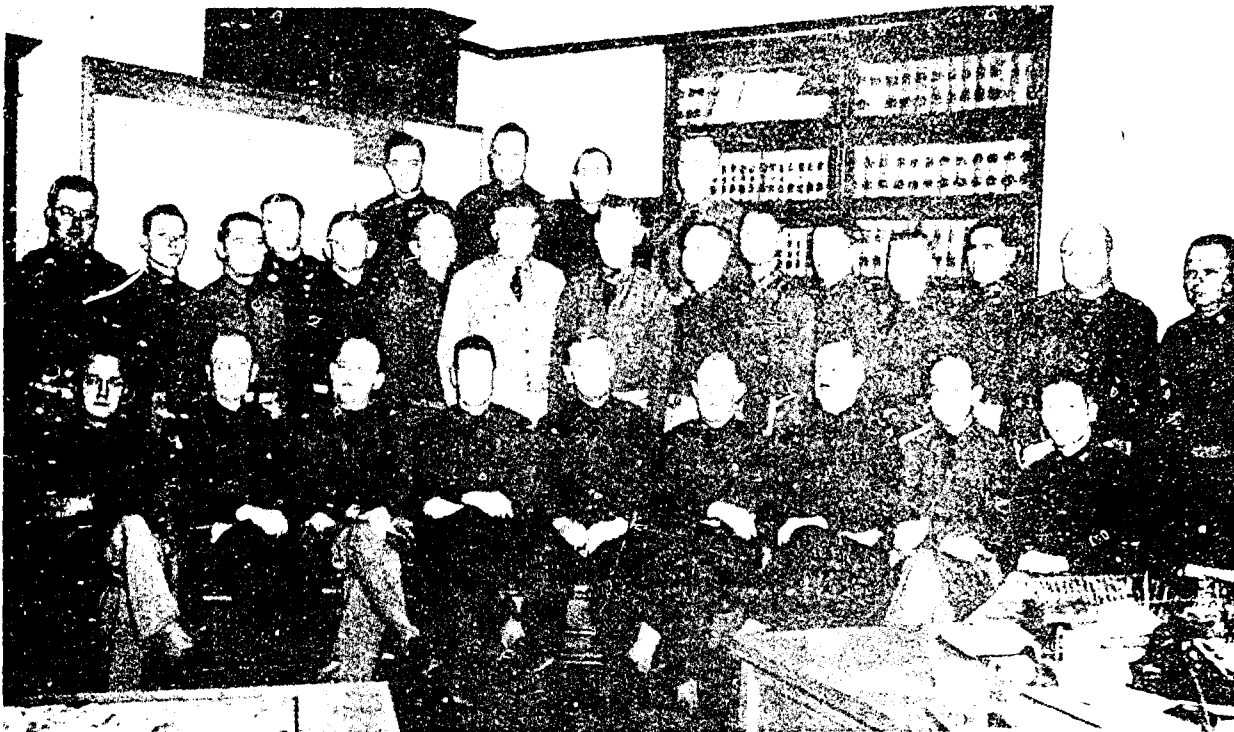
Although not mentioned in the activation order of 9 March 1942, the Tank Destroyer School was activated on that date and its activation confirmed and made of record on 15 July 1942.¹¹ Colonel (later Brigadier General) Hugh T. Mayberry was relieved from assignment to Headquarters, Tank Destroyer Tactical and Firing Center, on 11 March 1942, and was assigned to the Tank Destroyer School Training Regiment for duty as assistant commandant, Tank Destroyer School.¹² The Center had requested by letter on 9 May 1942 to Army Ground Forces that the officer directly in charge of the Tank Destroyer School--the Assistant Commandant--be designated as Commandant. This position had been held by the Commanding General of the Tank Destroyer Tactical and Firing Center.

The mission of the Tank Destroyer School Training Regiment was the messing, housing and supplying of Tank Destroyer School personnel, both temporary and permanent. The mission of the School Troops was to furnish demonstration units to the School, Unit Training Center and Board. In the same letter requesting that the Assistant Commandant of the School be designated as Commandant, authority was requested by the Center to redesignate the Tank Destroyer School Training Regiment as the Tank Destroyer School Service Regiment, in line with its functions as a housekeeping organization. Accordingly the School Training Regiment was redesignated as the School Service Regiment on 22 May 1942,¹³ and Colonel Mayberry was assigned as Commandant of Tank Destroyer School on 27 May 1942.¹⁴ On 14 March 1942, The Tank Destroyer Tactical and Firing Center was redesignated the Tank Destroyer Command and placed under the Army Ground Forces.

The Tank Destroyer School was organized into a headquarters and five academic departments-- tactics, communications, pioneer, automotive and weapons.¹⁵ Using officer personnel of these departments and the Unit Training Center, and assistant instructors and demonstration units from the 893d Tank Destroyer Battalion and the 753d Tank Battalion, the School conducted officers' orientation courses on the reservation near Gatesville, Texas, from 4 May to 30 May and from 4 June to 30 June, 1942.¹⁶ These courses, designed to educate inspector-instructors for existing tank destroyer units and to orient officers without tank destroyer experience who were assigned to the Tank Destroyer Command, were the first training of any type conducted under the supervision of the Command.¹⁷

While the Tank Destroyer School was conducting its first officers' orientation courses at Gatesville, plans were made for the instruction of officer candidates. On 26 June 1942, in a memorandum for the Commanding General, Army Ground Forces, the War Department announced its approval of the immediate establishment of a Tank Destroyer Officer Candidate School at Camp Hood.¹⁸ The Tank Destroyer Officer Candidate School was activated by the Tank Destroyer Command and assigned to the Tank Destroyer School on 16 July 1942.¹⁹ On the same day, the Tank Destroyer School activated the Officer Candidate School Regiment; School Headquarters; the Academic Division, consisting of headquarters and eight departments--reproduction, automotive, communication, officer candidate school department, pioneer, publications, tactics, and weapons; Academic Regiment; and Student Regiment, consisting of the Student Officer Battalion and the Student Enlisted Battalion.²⁰

The necessary organization having been effected, the first Tank Destroyer School Officer Candidate course began on 20 July 1942, with 150 students reporting to Gatesville, Texas, where the first two officers' orientation courses were held.²¹ In



accordance with War Department direction a new class began each week, the first four reporting to Gatesville.²²

While the Tank Destroyer School was conducting its second officers' orientation course, tank destroyer battalions began arriving at Camp Hood for training. On 27 May 1942, nine battalions were ordered to proceed to Camp Hood for training as soon after 1 June as practicable.²³ When the first of these detrained at Copperas Cove, Texas, on 8 June 1942, the Unit Training Center was ready to begin carrying out its mission of technical and tactical training for tank destroyer organizations.²⁴

Following its activation on 9 March 1942,²⁵ under the command of Colonel Richard G. Tindall, and the organization of its headquarters, in Temple, Texas, the project of the Unit Training Center had been the preparation of a mobilization training program for tank destroyer units. Without such a program specifically designed for tank destroyer units, the standardized training of such units was impossible. Tank Destroyer Mobilization Training Program 18-1 was completed in March and published by the War Department on 1 April 1942.²⁶

On 9 May 1942, the Tank Destroyer Command recommended to Army Ground Forces that the organization of the Unit Training Center be made more flexible and that the control of unit training be centralized by placing all battalions in the Unit Training Center and authorizing for the Center five or six groups, the number and the designation as tactical or training groups to be dependent upon future needs.²⁷

Accordingly, the organizational chart for the Tank Destroyer Command which was approved on 23 May 1942, by Army Ground Forces, authorized six group headquarters under the Unit Training Center, which might be either training or tactical.²⁸ Two

training groups were organized by the Center in June 1942 and the tank destroyer battalions which arrived during the summer of 1942 were attached to these groups, which were charged with both administrative and instructional supervision of organizations under their control.²⁹

Prior to the arrival of the first battalions in June 1942, officers of the Unit Training Center and the Tank Destroyer Command staff made a series of trips to the reservation to locate tactical firing and bivouac areas; and on 5 June 1942, the Unit Training Center established forward echelon headquarters in the field. Rear echelon headquarters remained in Temple.³⁰

Training periods of two or three months each were allotted to the battalions, depending upon the unit's tactical and technical proficiency one month after its arrival at Camp Hood. Technical training was emphasized for all units during the first month of training. Tactical training predominated in the second month's work for battalions scheduled to remain in the Unit Training Center only two months. Units which remained three months reviewed the first month's subjects during the fifth and sixth weeks of their stay in order to correct their deficiencies and spent the last six weeks on more advanced tactical and technical training.³¹

In July 1942, the Unit Training Center, with the permission of the Tank Destroyer Command, introduced training in infiltration under fire. In this course, live ammunition was fired over advancing troops for the first time in United States Army training.³²

Without any change in its organization or training mission, the Unit Training Center was redesignated as the Advanced Unit Training Center on 17 August 1942.³³ This change in name was made to distinguish it from the Basic Unit Training Center, which was activated on 28 November 1942.³⁴ to provide for the activation of new tank destroyer battalions and to prepare existing battalions for advanced unit training.

Until the completion of the Camp Hood cantonment allowed it to move into permanent quarters on 21-22 August 1942, the Advanced Unit Training Center continued to train tank destroyer battalions bivouacked in field camps on the reservation.³⁵

Both the Tank Destroyer School and the Advanced Unit Training Center were served by organizations under the control of Headquarters and Headquarters Company, School Troops. Activated without personnel on 9 March 1942,³⁶ this headquarters received its first three officers on 30 April 1942;³⁷ and on 2 May, Colonel (later Brigadier General) Harry F. Thompson was assigned and assumed command.³⁸

Acting staff appointments were made on 7 May 1942 and on 20 May the headquarters moved into a field camp near the bivouac area of the 893d Tank Destroyer Battalion and the 753d Tank Battalion, both School Troops, to be in a position from which it could coordinate Tank Destroyer School demonstration troop requirements for the second officers' orientation course. Troop requirements for the first course were handled by direct contact between the Tank Destroyer School and the two battalions involved.³⁹

As a result of the first officers' orientation course, the Headquarters and Headquarters Company School Troops were forced to expand rapidly. Company "C", 49th Quartermaster Regiment (Truck) arrived at Gatesville, 12 June 1942,⁴⁰ followed the next day by the 49th Ordnance Company (MM). These units had been procured through the efforts of the Command's representative in the Requirements Division, Army Ground Forces. Further addition to School Troops was the 809th Tank Destroyer Battalion which arrived understrength and without equipment on 29 June 1942.⁴¹ Due to the state of training of these units and lack of equipment, they forced on School Troops the

additional mission of training. Instructors and vehicles were provided by the 893d Tank Destroyer Battalion and the 753d Tank Battalion for this training.

To meet the demands of an anticipated increase in the number of tank battalions assigned as School Troops, the Seventh Tank Group was assigned on 1 July 1942.⁴²

In keeping with its expansion, Headquarters and Headquarters Company, School Troops, was redesignated as Headquarters and Headquarters Company, Training Brigade, on 15 July 1942.⁴³ Before its units began moving from field camps into the cantonment area on 2 September 1942,⁴⁴ the Training Brigade was augmented by the assignment of the Second Tank Destroyer School Band on 15 August 1942;⁴⁵ the 374th Engineer Battalion (General Service) on 17 August 1942;⁴⁶ and the 744th Tank Battalion (Light) on 21 August 1942.⁴⁷

The rapid expansion of the Command's activities resulted in the procurement by the Commanding General of the Command of necessary Service Command facilities. A Camp Hood Quartermaster was designated on 3 March 1942, and placed on detached service at Camp Bowie, Texas, to organize and train personnel of a Quartermaster section and to forward supplies to designated railheads in the area.⁴⁸

The Camp Hood Quartermaster detachment arrived 7 April,⁴⁹ established a warehouse at Temple and operated railheads at Gatesville and Copperas Cove to handle troop movements and supplies for units on the reservation.⁵⁰ Other Post activities organized were: a post ordnance detachment activated 4 April 1942,⁵¹ Camp Hood Finance Officer 6 April 1942⁵² and Post Engineer's section 7 April 1942. The 1848th Corps Area Service Unit, Camp Hood Station Complement (CASC), was activated 13 April 1942.⁵³

By 3 June 1942, the 1848th Corps Area Service Unit had been expanded to include all sections and agencies⁵⁴ and General Bruce at his request was relieved as Post Commander and Colonel Charles M. Thirlkeld, F.A., who had acted as executive officer since 22 May 1942, assumed command of the cantonment on 21 July 1942.⁵⁵

The Tank Destroyer Command made its first request for a tank destroyer replacement training center on 8 May 1942, with a recommendation to Army Ground Forces that a tank destroyer section be established in each of the replacement training centers at Fort Riley, Kansas; Fort Sill, Oklahoma, and Camp Wolters, Texas. The letter stated that existing and proposed facilities of the Tank Destroyer Command were insufficient for the training of loss replacements for existing tank destroyer units and those to be activated and that the current programs of established replacement training centers did not properly prepare personnel for service in tank destroyer units.⁵⁶

It was recommended that the proposed tank destroyer sections be organized initially to train 2,000 tank destroyer replacements each and that both commissioned and enlisted instructors for these sections be trained and furnished by the Tank Destroyer Command.

Trainees from these sections in excess of those required for loss replacement were to be forwarded to the Unit Training Center to be used as filler replacements for newly activated units.

On 23 May 1942, Headquarters, Army Ground Forces, approved an organizational chart for the Tank Destroyer Command. The principal components of the Command were the Tank Destroyer School, School Service Regiment, School Troops, Unit Training Center, and the Tank Destroyer Board. Liaison with the ordnance and armored force boards was shown as a function of the Tank Destroyer Board. Under the Unit Training Center were six group headquarters, which might be headquarters of either training or tactical groups.

The Tank Destroyer Command staff was headed by an executive officer and consisted of personnel, intelligence, operations and training, supply and fiscal, and adjutant general's sections. Other special staff functions were performed by the corps area service command.⁵⁷

On 2 June 1942, the Tank Destroyer Command made the following recommendations to Army Ground Forces:⁵⁸

That tank destroyer battalions attached to division be assigned to divisions.

That tank destroyer battalions not specifically assigned to divisions be placed under a group commander and assigned to task forces in training, or to corps or armies.

That tank destroyer groups held in General Headquarters reserve in the zone of the interior be placed under the control of the Tank Destroyer Command, operating under the direct orders of Headquarters, Army Ground Forces.

That tank destroyer replacement training for loss replacements be provided by organizing a tank destroyer section in the replacement training center at Camp Wolters, Texas, effective 1 August 1942.

That the Tank Destroyer Command organizational chart of 23 May 1942 be amended to show General Headquarters tank destroyer units as assigned and the Tank Destroyer Replacement Training Center as components of the Command.

In support of the recommendations regarding assignment of tank destroyer battalions, it was stated that the necessity for some control to be exercised over all tank destroyer units was becoming increasingly evident. Tank Destroyer commanders needed the assistance of higher headquarters in matters affecting their units. In many cases, the battalions attached to divisions were not considered on the same basis as assigned organizations and, consequently, suffered in the procurement of personnel, supplies, and training literature.

It was further stated that the assignments recommended would not make tank destroyer units organic parts of the organizations to which assigned and would not preclude their reassignment on other missions when needed. This action was believed to carry out the original concept of General Headquarters as contained in its memorandum for the Assistant Chief of Staff, G-3, War Department, dated 2 September 1941, in which General Headquarters submitted its recommendations on the organization of an antitank force.⁵⁹ It had been previously proposed on 7 January 1942 that tank destroyer battalions be assigned to divisions. This proposal was disapproved by the War Department at that time.⁶⁰

In support of the recommendations pertaining to the Tank Destroyer Replacement Training Center, it was stated that the training programs of existing replacement training centers did not train replacements sufficiently in tank destroyer requirements.

It was believed that on or about 1 August 1942, the plan of activating all tank destroyer units at Camp Hood, in accordance with the concept of the General Headquarters memorandum of 2 September 1942, would be realized. When this plan went into effect, trainees would be received from reception centers and filler replacements would no longer be required. The establishment of tank destroyer sections in the replacement training centers at Camp Wolters, Fort Mill, and Fort Riley as proposed would provide loss replacements.

None of the recommendations contained in the Tank Destroyer Command's letter of 2 June 1942, ever received favorable action. The desirability of a separate replacement training center for tank destroyer forces, however, was recognized and led to the activation of the Tank Destroyer Replacement Training Center on 3 October 1942, at Camp Hood.⁶¹

While the Tank Destroyer Command was occupied with its internal problems of personnel, organization, training, and control of tank destroyer organizations, the problem of its command status within Army Ground Forces was under consideration by that headquarters.

On 10 July 1942, the Commanding General, Army Ground Forces, approved a memorandum for the Assistant Chief of Staff, G-3, War Department, recommending that the Tank Destroyer Command be redesignated as the Tank Destroyer Center and assigned as an element of the Replacement and School Command.⁶² This recommendation was approved by the War Department on 24 July 1942.⁶³

On 30 July 1942, a telegram from Army Ground Forces informed the Tank Destroyer Command that the Tank Destroyer School had been placed under the Replacement and School Command, operating through the Tank Destroyer Command.⁶⁴ To the Tank Destroyer Command, this change seemed to present more disadvantages than advantages, since the School now was under the control of the Replacement and School Command for administration but continued to operate its training program under the control of the Tank Destroyer Command.⁶⁵

Complete instructions confirming the telegram of 30 July 1942, and redesignating the Command as the Tank Destroyer Center were received in a letter of 14 August 1942 from Army Ground Forces.⁶⁶ Redesignation was accomplished on 17 August.⁶⁷

Despite the multiplicity of administrative problems, the Center never lost sight of its primary responsibility for the development of tank destroyer doctrine and materiel and for the general improvement of tank destroyer forces.

The Tank Destroyer Board's study of the question of developing a single standard type tank destroyer battalion, which had been directed by the Commanding Officer of the Tank Destroyer Tactical and Firing Center on 3 February 1942, resulted in the recommendation to Army Ground Forces on 19 March 1942 of tables of organization for such a unit.⁶⁸

The tables of organization submitted for this standard heavy battalion increased both officer and enlisted personnel and enlisted grades and ratings above those authorized for the existing heavy organizations. A number of modifications in materiel were recommended to increase fire power and flexibility of transportation and to insure a complete and unfailing radio communication within the battalion.⁶⁹

On 23 April 1942, it was learned that the War Department had approved in principle the Tank Destroyer Command's proposal for a standard type tank destroyer battalion. It was decided to confine all future instruction to the heavy battalion. It was also decided to send representatives to Washington, D.C., to try to prevent reduction in trucks, radios, and personnel in the proposed battalion.⁷⁰

Conferences were also held with the Signal Corps Coordination Board concerning the proper radio equipment for tank destroyer battalions. The radio nets essential to the tactical functioning of tank destroyer battalions were discussed and suggestions made for the issue of available sets for training and for the equipping of battalions under orders for overseas duty pending production of equipment designed especially to meet tank destroyer requirements.⁷¹

The request by the Tank Destroyer Command on 19 March 1942, for a single standard type heavy self-propelled Tank Destroyer battalion was acted on by the War Department first by a warning directive by the Adjutant General's Office on 31 May 1942,⁷² and then by the subsequent approval by the War Department on 3 June 1942 and the printing of the new tables of organization on 17 June 1942.

Field Manual 18-5, Tank Destroyer Organization and Tactics, was also published in June 1942, and distributed to tank destroyer battalions. Prior to its approval and distribution, on 19 March 1942, the Tank Destroyer Command had sent copies of the 893rd Tank Destroyer Battalion's training notes to all tank destroyer organizations to fill the need for a standard guide on organization and tactics pending the publication of the official manual.⁷³

Following the publication of the standard tables of organization and of the field manual, tables of basic allowances for standard type tank destroyer battalion were published by the War Department on 29 July 1942.

In accordance with verbal instructions of the commanding general, Army Ground Forces, the Tank Destroyer Command on 11 August 1942 made the following recommendations for the establishment of higher command organizations for tank destroyer units:⁷⁴

One tank destroyer brigade per type corps, each brigade comprising one brigade headquarters and headquarters company, two group headquarters and headquarters companies, and six tank destroyer battalions.

Two tank destroyer brigades per type army, comprising two brigade headquarters and headquarters companies, four group headquarters and headquarters companies, and twelve tank destroyer battalions.

Brigade headquarters were recommended for the supervision and coordination of training; for the operation of a local center for the immediate collection of antitank information; for the control of tank destroyer units in battle; to furnish an officer with the necessary assistants to act not only as a tank destroyer commander but as a staff officer for the corps or army commander; and for controlling task forces formed with tank destroyer units as the nucleus.

It was recommended that if any echelon in those listed must be deleted, the group headquarters and headquarters company be eliminated, and the brigade organization be retained for the reason that previous to this time tank destroyer units had lacked the means for sufficient training supervision.

The comprehensive organization of higher headquarters for tank destroyer units was never put into effect. But the needs which it was desired to meet were later recognized in the authorization of two tank destroyer brigades and a considerable number of tank destroyer groups.

One of the important lessons learned by the Tank Destroyer Command was the effectiveness of direct liaison with different agencies. The liaison officers were given full and complete orientation by the Commanding General of the Command with respect to the problem of tank destroyers. Each liaison officer knew specifically what the Commanding General visualized for tank destroyers and was thus enabled to paint the picture for the agency with which he served. This method also served to minimize red tape.

The movement of elements of the Tank Destroyer Command from temporary headquarters in Temple and from field camps on the reservation into permanent quarters began on 14 August 1942, with the opening of Tank Destroyer School headquarters at Camp

Hood.⁷⁵ The Command moved its headquarters into permanent offices on 20 August, the Unit Training Center moved on 21 August and the Training Brigade began moving on 2 September 1942.⁷⁶

The camp was not formally opened until 18 September 1942; and its facilities were not complete when these movements took place. Construction was, however, sufficiently advanced for the Center to occupy its permanent quarters and carry on all its operations at Camp Hood.⁷⁷

SUMMARY: At the Temple, Texas, staging area, the Tank Destroyer Command successfully organized its subordinate elements and supervised the beginning of their operation on the Camp Hood reservation well in advance of the completion of construction there. Before the Center moved its headquarters to the cantonment, the Tank Destroyer School had already given instruction to 496 officers and had begun the training of approximately 600 officer candidates; the Unit Training Center had already trained and shipped out six tank destroyer battalions and had begun the instruction of seven more.

All this had been done with speed, and by the use of expedient methods and material, which necessarily resulted in the saving of both time and expense to the government.

An outstanding achievement of the Command during this period was the "entente cordiale" developed with the civil authorities of the entire area, through the policy of requesting their participation in solutions to problems of housing, rents, and the acquisition and the possession of the reservation.

While the Tank Destroyer Board continued its work on the development of material during this period, its principal contributions to the improvement of tank destroyer forces were the completion of Tank Destroyer Field Manual 18-5 and the formulation of the tables of organization and tables of allowances for a standard type tank destroyer battalion. Recommended to Army Ground Forces by the Tank Destroyer Command, both the field manual and the tables of allowances and organization were approved and published by the War Department in June 1942.

With the completion of its organization and the solution of its personnel and construction problems, the Tank Destroyer Center was ready to concentrate on its basic mission of training when it moved to Camp Hood.

CHAPTER IV

ACTIVITIES OF THE TANK DESTROYER CENTER AT CAMP HOOD 21 August 1942 - 26 May 1943

The Headquarters of the Tank Destroyer Center was officially opened at Camp Hood, Texas, on 20 August 1942.¹ A limited number of buildings were ready for occupancy to permit the Center to begin functioning. By 1 October 1942, additional housing had been completed, thereby enabling all elements of the Training Brigade to move into camp.

On 18 September 1942, Camp Hood was officially opened and dedicated. Among the distinguished guests were Colonel John B. Hood, Jr., son of General Hood in whose honor the Camp was named, Under Secretary of War Robert P. Patterson, who delivered the opening address.² In his address, the Under Secretary of War enumerated the many difficult problems initially confronting the tank destroyers and he highly commended their intensive training and their accomplishments.³ The shoulder sleeve patch, the first identifying insignia for tank destroyer use, was designed by General Bruce and his staff and was officially presented to the tank destroyers for their use by the



Under Secretary of War, at which time he praised the motto "Seek, Strike, Destroy" as symbolic of tank destroyer tactical function. In order to simplify the design, the motto was removed from the shoulder patch which illustrated a black cougar on a disk of golden orange, crunching a tank between his jaws.

Other distinctive insignia for the tank destroyer forces were later authorized in March 1943. These included the collar and lapel insignia, a color of arm and hat cord, and guidons. The collar insignia and guidons featured the half-track, 75mm gun motor carriage M-3, which was the first standard tank destroyer weapon. The tank destroyer colors, --black and golden orange--were used in the guidon and hat cord. The guidon was black with the M-3 in golden orange. The hat cord was black with parallel stripes of golden orange.

The center was now confronted with the problems of expanding the training program, further improving the tactical and training doctrine, and pushing the development of materiel to replace the expedient weapons then in use by tank destroyer battalions.

Commensurate with the increased responsibility of commanding the enlarged Tank Destroyer Center, Brigadier General Bruce was promoted to the grade of Major General on 23 September 1942, to rank from 9 September.⁴

Expansion of the training program was indicated on 28 August 1942,⁵ when three battalions were set aside for the Tank Destroyer School to train initial cadre in weapons, motors, and communications for use in a Tank Destroyer Replacement Training Center then being considered by the War Department.⁶

The establishment of the Tank Destroyer Replacement Training Center provided standard training for tank destroyer replacements, but the need for a uniform standard of basic training of newly activated destroyer units was apparent. Experience of the Advanced Unit Training Center had disclosed that organizations arriving for advanced training required further work in basic subjects to enable them to absorb advanced instructions.⁷

This led to the development of the Tank Destroyer Basic Unit Training Center, which for temporary lack of facilities at Camp Hood, was activated at Camp Bowie, Texas, on 28 November 1942.⁸

The activation of the Tank Destroyer Replacement Training Center and Tank Destroyer Basic Unit Training Center, imposed the problem of acquiring approximately 35,000 acres of additional land and building another cantonment to house 35,000 troops. This, while requiring considerable attention from the Commanding General of Tank Destroyer Center and his staff, was somewhat simplified by the assistance of Post Headquarters.

A third expansion of training activities; the result of a directive by Army Ground Forces, 21 October 1942,⁹ was the organization of a Tank Destroyer Center Inspecting Team under Colonel Herbert J. McChrystal.¹⁰ While the mission of the inspecting team was reporting upon the state of training and efficiency of all tank destroyer units in the Army Ground Forces, the team performed much constructive work in its specific recommendations for corrective action in training, supply, personnel and equipment.

A closer supervision of tank destroyer battalions in training at Camp Hood was made possible by the activation of the Fourth, Fifth and Seventh Tank Destroyer Groups on 1 September 1942, and their assignment to the Advanced Unit Training Center.¹¹

Two more groups were added on 13 October 1942, with the activation of the Eighth and Ninth Tank Destroyer Groups.¹² Another echelon of command was established on 24 November 1942, when the First and Second Tank Destroyer Brigades were activated.¹³

The personnel problems of the Center were incidental to expansion authorized by the War Department. At the request of the Center, six officers were allotted for the Inspection Team and Liaison 14 October 1942¹⁴ - 7 November 1942.¹⁵

A request for 62 additional officers for the Tank Destroyer School on 22 October 1942,¹⁶ approved through Tank Destroyer Center to Replacement and School Command and approved by Replacement and School Command, resulted in only 17 additional positions allotted by the War Department to Center for duty with the Tank Destroyer School. With the School directly under the jurisdiction of the Replacement and School Command, this allotment to Center was somewhat confusing, but was remedied 8 January 1943.¹⁷ On that date, 400 branch immaterial officers were allotted to School and a total of 160 officers for Tank Destroyer Center.¹⁸ It was set out in an indorsement to this letter that 579 officers - branch immaterial, 1 officer - Medical Corps, and 6 officers - Adjutant General's department, were allotted for the Tank Destroyer Replacement Training Center.¹⁹

To provide a source of officers for activation of new units and lost replacements, an officer pool was organized under the Tank Destroyer Replacement Training Center. This pool, starting with 79 lieutenants, 23 October 1942,²⁰ had increased to a total of 1,079 when officially activated on 26 April 1943.²¹ The main source of these officers was the Tank Destroyer Officer Candidate School.²²

The direct jurisdiction over the School, Replacement Training Center, and Officers' Pool held by Replacement and School Command, interposed in some instances unnecessary delay from the viewpoint of the Commanding General, Tank Destroyer Center. On 27 November 1942²³ the Center requested Replacement and School Command to delegate authority to the Commanding General, Tank Destroyer Center, to assign and reassign officers of the School and Replacement Training Center. It was pointed out that the policy of rotating troop age officers in the School and Replacement Training Center, and the plans for activation of tank destroyer battalions, groups and brigades in 1943 under the direction of the Center, would require many reassignments of officers. In a further attempt to simplify administrative procedure and facilitate execution of duties, authority was also requested from Replacement and School Command on 27 November 1942, to issue necessary travel orders involving School and Replacement Training Center personnel.²⁴

While both of these requests were refused on 14 December 1942²⁵ by Replacement and School Command on grounds of standard procedure for all sub installations, a further study of the problem was made by Replacement and School Command and resulted in a change of command status on 15 March 1943.²⁶ On that date the Commanding General was authorized to assign officers and to transfer enlisted cadre of the Tank Destroyer School and Replacement Training Center. This change of status simplified the administrative problems of the Center and facilitated the activation of tank destroyer units.

The increase of personnel and processing of their records became a problem. In order to facilitate the personnel administration of all units, the 90th Machine Records Unit was activated on 8 December 1942 and assigned to the Tank Destroyer Center.²⁷

Since the development of tank destroyer organizations was relatively new, lack of information and misinterpretation of tank destroyer doctrine, tactics and equipment was prevalent throughout the Army. In order to disseminate information of

tank destroyer development, Army Ground Forces on 18 November 1942, directed the Tank Destroyer Center to conduct a series of tank destroyer indoctrination courses at Camp Hood for commanders and staff officers.²⁸

These courses were to include methods of tank destroyer training and employment, demonstrations illustrating tank hunting methods, problems of tank destroyer battalions versus tank battalions, and a command post exercise to illustrate the employment of a reinforced tank destroyer group. Each course was to be of five days duration. Two officers from each Army, corps, division, command, center or force headquarters were directed to attend. The officers selected were to be general officers or general staff officers.

The first "Tank Destroyer Indoctrination Course" was conducted from 30 November to 4 December 1942. Three further courses, renamed the "Tank Destroyer Special Observers' Course" were conducted on the following dates: number two, from 14 December to 18 December 1942; number three, from 11 to 15 January 1943; and number four, from 25 to 29 January 1943. The total attendance for the four courses were 250 visiting officers and included seventeen major generals, sixty-six brigadier generals, fifty-two colonels, fifty-nine lieutenant colonels, twenty-nine majors, sixteen captains, and eleven lieutenants.²⁹

In a weekly staff report for the period 25 - 30 January 1943, the G-3, Tank Destroyer Center reported to the Chief of Staff that tank destroyer orientation courses had been attended by representatives of all major units of Army Ground Forces, along with Army Air Forces, the United States Marine Corps and the Tank Automotive Center.³⁰ Supplementing this effort to clarify tank destroyer doctrine, a letter was issued by General Bruce and enclosed therewith was the Center's Information Bulletin No. 7 of 19 May 1943.³¹ Distribution of this letter and bulletin was made to all tank destroyer units and down to divisions in Army Ground Forces as well as the Eighth Service Command.

General Bruce said, "It will be noted that our tactics continue to be epitomized in our shoulder sleeve insignia and in our motto. Panther-like, we seek information of enemy tanks and of suitable firing positions; panther-like, we strike and destroy by gunfire from favorable positions. This does not mean that we seek out tanks with guns nor chase them, nor pursue them, nor charge them."

The Tank Destroyer Board, the organization, function and activities of which are recorded in Chapter IX, kept abreast of tank destroyer expansion and development.

The viewpoint of the Commanding General of Tank Destroyer Center was reflected throughout the activities of the Board. He felt that Ordnance and other creative agencies of the War Department were capable of designing many types of tank destroyers and that as architects they could design and plan. However, in order to make the tank destroyer efficient, and in order to attain the perfection indicated by test and trial, constant tangency with those agencies was necessary.

It was during this period that the Board, starting with a vehicle having Christie suspension, necessary for speed, and the 37mm gun, -- worked through the T-49, having a 57mm gun -- then to the T-67, having a 75mm gun, and eventually to the T-70 with the 76.2mm or 3 inch gun.

An outstanding accomplishment of tank destroyers was illustrated during this period of developing a tank destroyer weapon. Partly psychological, it marked the beginning of the end for German armor. The German Mark III and Mark IV tanks of 1939 and 40, weighing 25 and 32 tons, had great mobility. The 37mm gun could destroy them, so the Germans produced the Mark V, the Panther, a 46 ton tank armed with either a 75

or 88mm gun. Our 75's could destroy them, so the Germans went to the Tiger Mark VI, a 66 ton, 56 caliber, 88mm gun. Then, anticipating our 3 inch tank destroyer, they again immobilized with the 75 ton Royalty-Jager Panther and 75 ton Ferdinand. German armor immobilized itself, to meet the threat of more and more proficient tank destroyers.

In a move to standardize vehicle equipment, the War Department appointed a special armored vehicle board on 13 October 1942.³² This board, generally known as the "Palmer Board" after its senior member, Brigadier General Williston B. Palmer, was composed of members of the armored force, ordnance, tank destroyers, and cavalry.

With respect to a tank destroyer, the "Palmer Board" concluded that the tank destroyer was essentially a gun carriage and not a tank and that a suitable tank destroyer gun motor carriage was critically needed. Their visualization of a tank destroyer was identical with that of General Bruce as described in 1941.³³

On 22 July 1942, Army Ground Forces informed the Tank Destroyer Center that a decision had been reached to make the 3 inch self-propelled gun the standard weapon for tank destroyer battalions. This eliminated the 37mm gun in the light platoons of tank destroyer companies.³⁴

On 9 November 1942, the Commanding General, Tank Destroyer Center, submitted recommendations to Army Ground Forces for changes in the tank destroyer battalion tables of organization which eliminated the light platoons, equipped with the 37mm gun; and provided for three heavy platoons, armed with the 3 inch gun, in each gun company.³⁵

This substitution necessitated an increase of personnel and equipment right at the time that the Army Ground Forces issued an overall directive for a reduction of 15 per cent of total personnel and 20 per cent of total motor transportation.²⁶

However, the Center submitted a revised table of organization on 1 December 1942,³⁷ which was issued by the War Department on 27 January 1943. This Table of Organization authorized a total of 673 for personnel and 158 for motor vehicles, all gun companies to be equipped with 3 inch self-propelled gun.

Another important project which was carried out by the Tank Destroyer Board was the development of a towed tank destroyer battalion. The testing of such an organization was directed by Army Ground Forces on 1 January 1943.³⁸ Extensive field tests were conducted during January and February, using 36 3 inch M-1 and personnel from the 801st Tank Destroyer Battalion.

A tentative table of organization was developed for the towed battalion and a report of the tests was submitted to Army Ground Forces on 12 March 1943.

On 31 March 1943, ten self-propelled battalions of the Advanced Unit Training Center and five of the Basic Unit Training Center were converted to towed battalions upon a directive from Army Ground Forces.³⁹ This change was made on a tentative basis, for training, and the battalions operated under the provisional table of organization prepared by the Tank Destroyer Board.

On 7 May 1943, Table of Organization 18-35, Tank Destroyer Battalion, Towed, was officially issued by the War Department and the towed battalion authorized as a new tank destroyer unit.⁴⁰

While the Tank Destroyer Board was increasing the scope of its activities, the Tank Destroyer School's teaching program was expanded to provide better trained personnel for tank destroyer units.

The first officer candidate class, which had started in the limited facilities at Gatesville, was graduated on 16 October 1942.⁴¹ By 28 December 1942, the Officer Candidate School had increased to its peak enrollment of 2,005 students with the entrance of the 23rd class.⁴²

The addition of courses to its schedule of instruction brought the Tank Destroyer School to its maximum attendance of 4,810 students on 31 December 1942. On this date, twelve officer candidate school classes, nine officers' courses, and twenty-four enlisted courses were in progress.⁴³

The publications department of the Tank Destroyer School, which had been activated on 9 March 1942, with part personnel, began operation on 28 December 1942, when a director was appointed.⁴⁴

This department acted as a coordinator of all materials published by the School, assisted instructors in drafting graded tests, edited manuscripts for instructional manuals, wrote and edited articles for service journals and other publications, conducted a weekly radio program, and maintained contact with other service schools to exchange instructional material.⁴⁵

The training program of the Tank Destroyer Center was further augmented by the expansion of the Advanced Unit Training Center upon its movement to Camp Hood.

The original organization of the Advanced Unit Training Center had included a headquarters and headquarters company and two training groups, organized to train three battalions each.⁴⁶ Projected plans for the expansion anticipated an increase of four training groups to provide training supervision for 18 battalions, which would preserve the ratio of one group for each three battalions.⁴⁷

On 1 September 1942, four tactical tank destroyer groups were activated and assigned to the Advanced Unit Training Center but no authorization was received for the activation of more training groups.⁴⁸

The demands of Army Ground Forces for tank destroyer battalions with unit training completed resulted in many of the first battalions' receiving less than two months' training.⁴⁹ By 29 October 1942, it was possible to schedule three months' training for the battalions then at Camp Hood and for all that arrived after that date. The three months' schedule included five weeks of firing, one week on the battle conditioning course, and six weeks of tactical training.⁵⁰

As the training program expanded, improvements were made wherever possible to add realism. One of the most valuable phases of weapons training--subcaliber firing at moving tanks--was introduced in March 1942. Buttoned-up light tanks, equipped with periscopes and reinforced to protect the drivers, were used to afford the tank destroyer gun crews rapidly moving targets. The ability of the tanks to maneuver provided marksmanship training closely approaching combat conditions.⁵¹

By 13 April 1943, forty-two tank destroyer battalions had been trained and released by the Advanced Unit Training Center.⁵² The number of groups and battalions under the Advanced Unit Training Center reached its peak on 25 May 1943, when a total of eight groups and twenty-eight battalions was in training.⁵³

Because of the over-all expansion in training, it was necessary to increase the number of troops in the Training Brigade, first on 21 August 1942 when the 744th Tank Battalion (light) was assigned,⁵⁴ and subsequently on 15 December 1942 when the 113th Cavalry Regiment (mechanized) was attached.⁵⁵ The addition of the latter



organization provided the tank destroyers with experience in maneuvering against mounted reconnaissance.

The 13th Ordnance Battalion, which was assigned on 26 October 1942, at first entailed additional training responsibility for the Tank Destroyer Center but later was able to assume maintenance and supply responsibilities for the Training Brigade, thereby rendering a most valuable service.⁵⁶

Two additional service organizations were included in the Training Brigade troops. The 374th Engineer General Service Battalion, assigned on 17 August 1942,⁵⁷ constructed many of the training facilities at Camp Hood and North Camp Hood. The Provisional Truck Battalion, activated on 4 February 1943,⁵⁸ furnished transportation for the Tank Destroyer School, Board, and other units of the Center when called upon.

SUMMARY: By 25 May, when the command of the Tank Destroyer Center passed from General Bruce to Major General Orlando C. Ward,⁵⁹ the organization and expansion of the Center had been accomplished.

Sound tactical and training doctrine had been formulated; Tank Destroyer battalion, group, and brigade organizations had been developed and improved. The Tank Destroyer Center, Board, School, Advanced Unit Training Center, Replacement Training Center, and Basic Unit Training Center had been established at a permanent site with excellent range and maneuver areas and housing facilities for 80,000 troops. A suitable weapon--the T-70--to replace the expedients used since the organization of tank destroyer units had been developed. The battalions trained by the Center, despite

their being armed with unsatisfactory and makeshift expedients, had given an excellent account of themselves in combat.

All this had been accomplished in only 18 months, with a speed necessitated by the urgent need for a force capable of destroying enemy armor in order to allow the successful operation of the army combat team.

The building up of the Training Brigade to include Tanks, Mechanized Cavalry, and Tank Destroyer revealed the fact that General Bruce appreciated fully the vital necessity for integration of arms and the ability of commanding officers to cope with this vital problem.



CHAPTER V

ACTIVITIES OF THE TANK DESTROYER CENTER

27 May 1943 - 24 October 1943

When Major General Orlando C. Ward assumed command of the Tank Destroyer Center on 25 May 1943,¹ organization and expansion had been achieved. How well was indicated when, four days later on the occasion of the formal opening of North Camp Hood, Lt. General Lesley J. McNair said:

"I know of no war training agency which was conceived, planned, built and put into full operation with greater speed, skill and soundness than Camp Hood."

The attention of the Center was thereafter focused on its training and developing mission. With major administrative problems out of the way, the new Commanding General was able to concentrate his attention on the improvement of training. General Ward, former commander of the First Armored Division during the North African campaign, was thoroughly acquainted with the exploits, good and bad, of tank destroyers in battle. He was well qualified for the job ahead with tank destroyers, both because of a realistic knowledge of battlefield conditions and his sincere belief in the capabilities of tank destroyers.²

His principal emphasis was on perfection in gunnery and the correlation of all practice firing with combat firing. His objective was to produce perfect gun teams, - teams perfected in training, automatically perfected in battle action. As a corollary to this emphasis on individual teams, General Ward believed in the efficacy of battle plays -- maneuvers which could both be practical on the drill field and in actual combat.

Battle plays for tank destroyers were tested by the Center and recommended to Army Ground Forces on 28 August 1943. These consisted of a few basic formations for unit movement and of maneuvers for entry into action.³ Army Ground Forces was favorably impressed by tank destroyer battle plays,⁴ but no official reaction was received by the Center; consequently, while used to advantage for instructional purposes within the Center, they were not taught as a part of official tank destroyer doctrine.

To accentuate realism of battle field requisites, General Ward requested Army Ground Forces on 27 May 1943 to secure for the Center officers with recent battlefield experience. Although ten officers were requested by name, only two were assigned to the Center during the summer of 1943.⁵

To impress all personnel with the characteristics of good combat firing position and to link training on the range with battlefield conditions, signs were placed at and near all ranges indicating good and bad combat positions. This resulted in a very definite "terrain appreciation" for officers and enlisted men, many of whom needed the definite illustration to clarify a misty conception so easily acquired from words.⁶

Concurrently, the Center increased its emphasis on training for secondary missions as indirect fire and beach defense. This change came about with the recognition of the versatility of tank destroyer organizations and the fact that the day of the blitzkrieg warfare had dimmed.⁷

Training was increased on the battle conditioning course and made more realistic by the addition of instruction in night infiltration and by the use of live fragmentation grenades by personnel undergoing the course. Other innovations were the training of medical personnel in removing wounded under fire and the introduction of a course in woods fighting.⁸

Also awaiting action in December 1943, was a recommendation of 22 September 1943 to the Chief of Staff, War Department, through Army Ground Forces, that eight liaison planes with essential personnel be included in the tables of organization and equipment of the tank destroyer group.⁹ Tests of air-ground liaison had been conducted and liaison planes had been used in training by the Center since 25 May 1942.¹⁰ Suggestions for the organic assignment of air liaison elements to tank destroyer organizations had been made as early as 18 July 1942.¹¹

In support of the 22 September recommendation, it was pointed out that the location of tank threats and the maintenance of contact with located enemy armor was essential to successful antitank action. Tank destroyer missions not practicable for, nor of prime interest to, air support commands were listed, and the successful performance of such missions by liaison planes during the Tunisian campaign was cited. This list included the following tasks: Route reconnaissance and marking; march control and guidance, reconnaissance of close-in terrain; reconnaissance governing employment; oblique photos for weapons employment, terrain studies, and camouflage discipline; command reconnaissance; air observation posts for conduct of fire; command and lateral liaison; acting as an additional agency in the tank warning net; and spotting for vehicular and emergency personnel recovery. The use of liaison planes for these purposes had been tested and found practical by the Tank Destroyer Center.¹² It was further pointed out that these missions could best be performed by air elements organically assigned to tank destroyers. In reply the Army Ground Forces indicated generally conforming recommendations had been made by them to the War Department and that the Center would be advised as soon as War Department had completed its study and rendered a decision.¹³

Integration of arms in battle was considered by General Ward, as by General Bruce, -- a paramount issue. Thus added to the other arms of the Training Brigade, the 1st Battalion of the 51st Armored Infantry 4th AD was secured as additional school troops on 12 July 1943,¹⁴ and the 264th Field Artillery Battalion was secured 4 November 1943.¹⁵

Only a few major administrative changes were made in the organization of the Tank Destroyer Center while General Ward was in command. Pursuant to verbal orders from Army Ground Forces, the Basic Unit Training Center was redesignated as the Individual Training Center on 13 August 1943, and the Advanced Unit Training Center reverted to its original designation as the Unit Training Center.¹⁶ This redesignation was in keeping with the mission of the elements involved, the Individual Training Center being primarily concerned with the individual training of personnel of newly activated tank destroyer organizations and the Unit Training Center with the preparation of organizations for combined training in maneuvers conducted by higher headquarters.

Two months later, on 15 October 1943, the Individual Training Center was inactivated, in accordance with War Department directions.¹⁷ Seven colored tank destroyer battalions were the only organizations then in training under its supervision, and these units were transferred to a tank destroyer group to complete their basic instruction under the direct control of the Tank Destroyer Center.¹⁸

The activation of an Army Specialized Training Program basic training center at North Camp Hood was anticipated, and the Provisional Headquarters Company, Basic Training Center, was established there on 16 October 1943 in order to retain in one organization the enlisted personnel of the former Headquarters Company, Individual Training Center, for use at the new installation.¹⁹ Since the expected Army Specialized Training Program center did not materialize, this provisional headquarters unit was disbanded on 5 November 1943, pursuant to verbal instruction from Army Ground Forces.²⁰

One change in the administrative organization of the Tank Destroyer Board and two changes in that of the school were also made during this period. On 18 August 1943,

the officers comprising the tactics section of the Tank Destroyer Board, which was principally concerned with the preparation of field manuals and other publications setting forth tank destroyer doctrine and organization, were transferred to the publications department of the School; and the School then assumed the responsibility for preparing all tank destroyer training literature and visual aids.²¹

Personnel accounting not only of troops at the Tank Destroyer Center but of all tank destroyer organizations was simplified by an Army Ground Forces directive of 8 June 1943, which designated field artillery as the branch of all enlisted men assigned to tank destroyer units.²² Prior to issuance of this directive, administration of tank destroyer organizations was complicated by the fact that both officers and enlisted men had retained for personnel accounting purposes their designations as members of the branches from which they had been transferred to the tank destroyers.

The Commanding General of the Center was empowered to exercise general court-martial jurisdiction over all ground force personnel under control of the Center on 1 October 1943.²³ This had been expedient for the Center since 18 May 1942.²⁴

The use of personnel of the Women's Army Auxiliary Corps at the Center occasioned many communications during this period, and illustrated a major problem of the Service Command with its attendant problem for Army Ground Force units. On 1 June 1943, the 164th WAAC Post Headquarters Company which had been attached to the Center and further attached to the Training Brigade since 13 April 1943, was disbanded and reorganized as the WAAC Detachment, Tank Destroyer Center. The new organization was assigned to the Center, further assigned by the Center to the Training Brigade, and attached to the Replacement Training Center.²⁵

On 3 June 1943, the commanding officer of the WAAC Detachment reported to Army Ground Forces that her command--three officers and 160 enrolled women--had replaced 110 enlisted men in the Replacement Training Center and thirty-one enlisted men in the Basic Unit Training Center.²⁶ By indorsement, the Replacement and School Command stated that the replacement of nineteen additional enlisted men would be necessary in accordance with the War Department's policy that WAAC's would be used to release an equal number of male military personnel.²⁷ Both the Basic Unit Training Center and the Replacement Training Center replied that it was impossible to effect any further displacement of enlisted men since the nineteen women not replacing men were needed to operate the WAAC Detachment headquarters and mess. All other WAAC's performed duties which would otherwise have necessitated an increase in the enlisted strength of Basic Unit Training Center headquarters companies.²⁸

Subsequently a separate WAC Detachment for both the Tank Destroyer Center and the Tank Destroyer Replacement Training Center was organized pursuant to War Department directive 25 September 1943.²⁹

The lesson pointed to in the WAC Detachment was that housekeepers also need housekeepers. This was solved by the Center and its subordinate units by rotating personnel from regular duties to their own housekeeping duties.

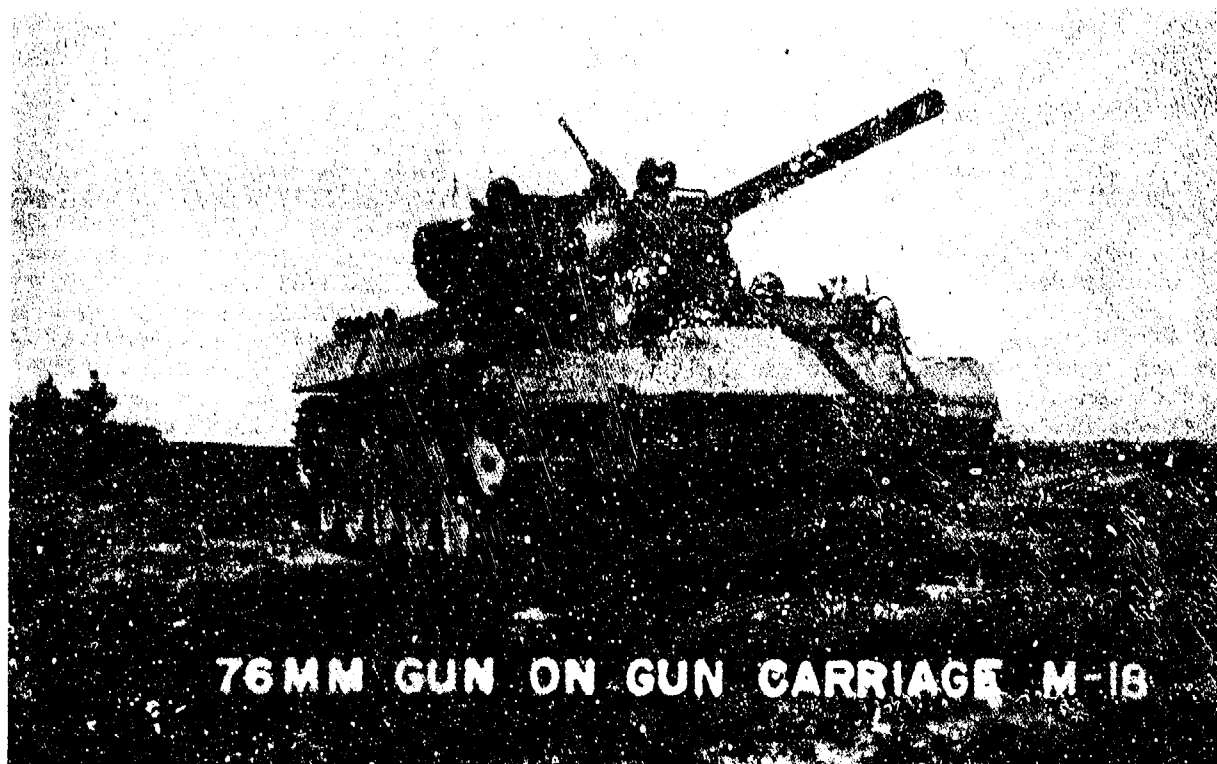
The personnel of the WAC Detachment were capable, adaptable and they performed admirably in their mission of releasing manpower for combat missions.

The sole changes in the administrative organization of the Center itself during General Ward's command were in the staff sections. An inspection team to check on motor maintenance by organizations under the control of the Center was established in the G-4 section early in July, and a liaison sub-section was organized by G-4 in October 1943.³⁰

A signal officer's section was added to the Center's special staff in July 1943, to inspect the signal equipment of tank destroyer organizations and to conduct experiments with communications apparatus.³¹ As originally organized, the section was composed of the signal officer only, but it was later increased by five officers placed on special duty from the Officers Replacement Pool, North Camp Hood.³²

An Inspector General's section for the Center was authorized by Army Ground Force late in July 1943, and was accordingly organized by the Center. An Inspector General was already on duty, and additional personnel were secured from the Advanced Unit Training Center, Basic Unit Training Center, and Replacement Training Center.³³

A reduction in the number of civilians employed by the Center and an increased efforts to secure items of equipment from government sources rather than by purchases were necessitated by a cut in the Center's budget for the fiscal year 1943-1944. The Center requested \$430,160, but its budget as approved amounted to only \$276,100. The reduction was not as drastic as appears from these figures, however, as part of the money requested was later included in special field exercise funds. In order to effect the required decrease in the use of civilian employees, increased use was made of enlisted personnel.³⁴



As production models of the T-70 became available, the Board put this weapon through every possible practical test before its final standardization. In order to secure personnel for these tests, sixty-five officers and sixty enlisted men were placed on special duty with the Board, the majority of the officers being drawn from the Officers Replacement Pool. Extensive testing was begun in September 1943.³⁵

Field Manual 18-5, as originally published on 16 June 1942, was fundamentally sound; but its use uncovered several faults for the correction of which a revision of

the manual was considered necessary.³⁶ This work was begun by the tactics section of the Tank Destroyer Board. The section, after its transfer, collaborated with the School's tactics department in completing the revision.

Since it was impossible to include the details of platoon employment in Field Manual 18-5 without its becoming too bulky, four other field manuals were prepared. These treated the self-propelled gun platoon, the towed gun platoon, the reconnaissance platoon, and pioneer platoon.³⁷

A notable meeting was held in October 1943 at Camp Hood to discuss the desirability of combining elements of the Tank Destroyer School and the Field Artillery School. The meeting was attended by General Orlando Ward and members of his staff and General Balmer of the Field Artillery School and members of his staff. Conclusions were very definite and submitted to Army Ground Forces in a letter of 12 October 1943.³⁸

This letter forcefully pointed out that a combination of the Schools would not result in added efficiency, that the technique and tactics of tank destroyers were entirely different from that of supporting artillery -- that direct fire with high velocity cannon was a specialty and that there was already "too much of a tendency to compartmentize instruction."

This analysis by highly experienced artillerymen, reflecting that tank destroyers were specialists in their own right, was significant when considered in the light of the opinion of the Chief of the Armored Force in 1941, when he did not want the responsibility of tank destroyers, deeming their mission counter to mission of tanks.³⁹

SUMMARY: The Center's principal activities under General Ward were; training designed to improve gunnery, team work, battle plays and practice firing under combat conditions. The development of equipment and the formulation of tactical doctrine were subjected to all manner of tests to the end of proving them for battlefield use. Tests were made of indirect fire methods,⁴⁰ and field artillery type controlled instruments, whose addition to the equipment of tank destroyer battalions⁴¹ was necessitated by the growing prominence of the secondary mission of tank destroyer battalions, viz, indirect fire and beach defense. The revision of FM 18-5 was undertaken to bring tank destroyer doctrine into conformity with the lessons of combat in Africa as interpreted by higher headquarters.

CHAPTER VI

ACTIVITIES OF THE TANK DESTROYER CENTER

25 October 1943 - 26 June 1944

Major General John H. Hester, a veteran of two combined operations in the Southwest Pacific, assumed command of the Tank Destroyer Center on 24 October 1943. He continued the training policies of his predecessor; while stressing perfection in gunnery and teamwork, he added emphasis on initiative and leadership, pointing out the vital importance of combat leaders knowing, not only the technical aspects of their profession, but also intimately the men of their command.

Due to non-activation of additional tank destroyer units, General Hester was immediately confronted with the problem of recasting the Center's organization. On 3 September 1943, the Center recommended to Army Ground Forces plans for its future.¹ The inactivation of both the Individual Training and the Unit Training Centers was recommended, with the Headquarters of Tank Destroyer Center expanded to assume the attenuated instructional activities of these units. The Tank Destroyer Board and School were to continue as well as the Replacement Training Center. It was further recommended that all activities be concentrated at South Camp Hood, with the Replacement Training Center consolidated with the School and the School divorced from the Replacement and School Command. The Training Brigade was to be expanded to provide school troops for combined training of tank destroyer units which would be returned to Camp Hood for refresher training and redeployment. All control was to be placed under the Tank Destroyer Center and Army Ground Forces.

Although the Individual Training Center was inactivated on 15 October 1943, no further action had been indicated on the reorganization plans of the Tank Destroyer Center by 15 November 1943. The inactivation of the Individual Training Center and the uncertainty of the future of tank destroyers had a disturbing effect on morale, particularly on the young officers. Attempts were made by the Tank Destroyer Center to get a reassuring statement of policy from Army Ground Forces and the War Department.

On 25 October 1943, a letter from General McNair to the commanding general, Tank Destroyer Center, stated his views on the situation.² In substance, he said that curtailment of tank destroyer activities was not in the least peculiar to them alone for all branches except the Air Force were halting their expansion. He further expressed confidence in the T-70 Tank Destroyer as bidding fair to becoming an outstanding weapon of the self-propelled type - that for the first time we had weapons which were suited for tank destroyer purposes, and that they had inflicted serious damage to German armor. While giving assurance of no fundamental change at Camp Hood, he emphasized that the scope of all activities depended on Troop Basis and the rate of shipment of units overseas.³

In November 1943, General McNair announced that Army Ground Forces had reached sufficient strength to attain preconceived strategical objectives. Affecting the Tank Destroyer Center, this resulted in a schedule for the completion of the training of all tank destroyer battalions at Center during January 1944, and a reorganization of the Center 13 February 1944.⁴

The net effect of this reorganization with respect to units of the Center were: the inactivation, effective 18 February 1944, of the Tank Destroyer Unit Training Center and the Training Brigade Headquarters and Headquarters Company; and the disbanding of the 90th Machine Records Unit on 15 March 1944. The mission of the first two units had been accomplished, and attenuated personnel processing and records was to be accomplished through the 8th Service Command Machine Record Unit at Dallas, Texas.

With respect to the Center itself, personnel was reduced to a Headquarters comprising twenty-one officers and forty-seven enlisted men. With respect to administration, command, and training the reorganization tended to integrate tank destroyer activities. The Center, School and Replacement Training Center were placed under the Replacement and School Command with the Commanding General, Tank Destroyer Center exercising normal command functions as delegated by the Commanding General, Replacement and School Command. Whereas the Center and Board were formerly under the Army Ground Forces, and the School and Replacement Training Center formerly under the Replacement and School Command, the revised status left only the Board under Army Ground Forces, but comments and concurrence by the Center were to be included in Board proceedings. The net effect of the new policy gave the Center integrated control-- at least "viva voce,"-- without denying former prerogatives.⁵

The sharp reduction of tank destroyer units throughout Army Ground Forces at this time emphasized the diminishing threat of German armor which had continued to immobilize itself with heavy and heavier armor. The original plans for activation of tank destroyer units called for one battalion per division; one group and three battalions per army corps; and two groups, six battalions, and one brigade per army. Based on plans in July 1943, a grand total of seven brigades, 32 groups and 177 battalions was anticipated.⁶

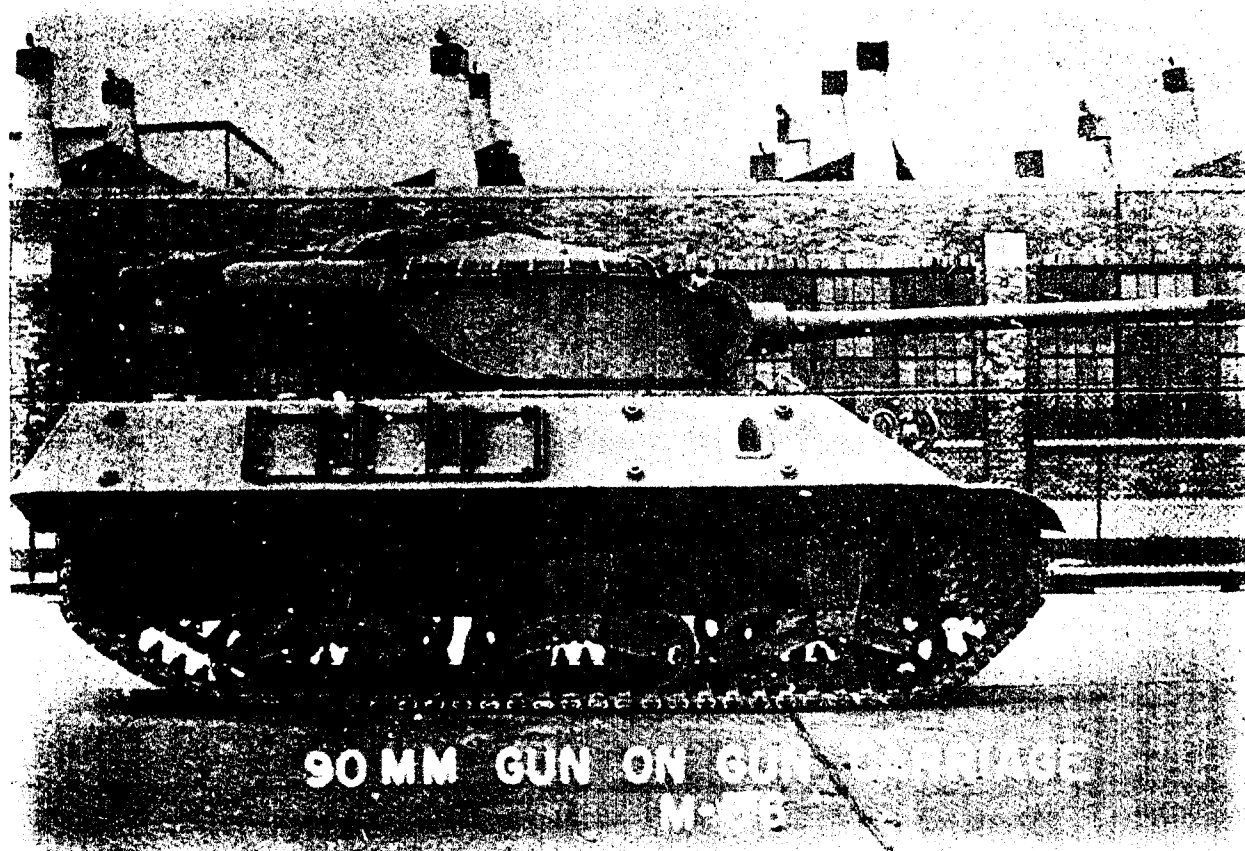
Under the reorganization of Army Ground Force units in February 1944, plans called for a reduction to 78 battalions,⁷ and on 21 February 1944 the Headquarters and Headquarters Company, 2d Tank Destroyer Brigade, was inactivated, thus leaving one tank destroyer brigade in existence.⁸ With numerically curtailed responsibilities for training, equipping, and inspecting tank destroyer units, the Tank Destroyer Center's revised allotment of 21 officers and 47 enlisted men was redesignated along two clear-cut functional lines--viz: The organization, doctrine and training section,⁹ and the equipment and materiel section,¹⁰ both activated 1 March 1944. The organization, doctrine and training section, ODTA-- was responsible for tank destroyer doctrine and training, review of training literature and visual aids, and inspection of all tank destroyer units of Army Ground Forces.¹¹ The equipment and materiel section, E&M,-- was responsible for: equipment; tables of organization and equipment; G-4 functions; and coordination with Tank Destroyer Board activities on equipment.¹²

The efforts of the ODT section were now centered on inspections of tank destroyer units. General Hester had visited Army Ground Forces in April 1944¹³ for the purpose of clarifying the team's purpose and action. With permission from Army Ground Forces, the procedure of inspecting officers was altered from that of the perfunctory inspector to that of observers anxious to disseminate the correct and latest doctrine and technique. Explanation and constructive suggestions were effected without delay. This procedure focused attention upon tactical and technical proficiency of the unit and sufficient investigation of maintenance to determine whether the unit could operate successfully in combat. Evening conferences of instructional nature, presenting composite experiences of combat, were held with officers of units to give them battle vision.

The E&M Section of the Center was composed largely of personnel formerly assigned to the G-4 section of Tank Destroyer Center, and included ordnance and signal officers. This Section participated in the Fiscal, G-4 and Signal Section conferences held in Washington during May and June. All purchasing and handling of fiscal funds for the Tank Destroyer Board, Tank Destroyer Replacement Training Center and the Center were accomplished by the E&M Section in addition to routine supply and equipment needs of units.

The recommendation by the Commanding General of the Center for the consolidation of all tank destroyer activities at South Camp Hood,¹⁴ was not approved by the

War Department and an Infantry Replacement Training Center was established at South Camp Hood,¹⁵ with a future anticipated strength of 30,000 troops. The Center had sought to have the Infantry Replacement Training Center minus its antitank companies, located at North Camp, from the standpoint of consolidating its own activities, thereby being closer to ranges and effecting considerable saving in mileage for track vehicles. Further, if antitank companies of the Infantry Replacement Training Center were left with the Tank Destroyer Center at South Camp, coordination in the anti-tank effort was visualized.¹⁶



One notable development affecting tank destroyers during this period was the mounting of a 90mm gun on the M-10 chassis. German tanks had continued adding armor and a gun with considerable more penetration was required by tank destroyers. On the 29th of December 1943, Army Ground Forces directed the Tank Destroyer Board to undertake and report on service test of this 90mm GMC T-71. Subsequently, on 18 February 1944, after extensive tests, the Tank Destroyer Board recommended through the Tank Destroyer Center that the 90mm GMC T-71 be considered suitable for use as a Tank Destroyer.

SUMMARY: The period of expansion for all Army Ground Forces had passed. Tank Destroyers, like others, were sharply curtailed in units and scope of activities. The reorganization of the Center effected centralized control and added to administrative efficiency. The Center, with an organization doctrine and Manning Section and Equipment and Materiel Section, established efficient Training Inspection Teams. These teams secured a greater degree of perfection in TD units by helpful and on-the-ground corrections of deficiencies.

CHAPTER VII

ACTIVITIES OF THE TANK DESTROYER CENTER

27 June 1944 - 18 March 1945

Brigadier General Ernest J. Dawley, Commandant of the School and a veteran of the Mediterranean campaign, assumed command of the Tank Destroyer Center, 26 June 1944, upon Major General John H. Hester's reassignment and departure.¹ Like his predecessors in command, General Dawley enunciated the value of teamwork, precision and realistic battle conditions in training. He, however, sought to develop more speed in gunnery and hitting power. Precision came first with him but speed developed to the acme of swiftness, he felt, was essential to reduction of casualty attrition in tank destroyers.

The paucity of reports and official news of tank destroyers on the battle-fronts, linked with the fact that reports were usually written by commanders often unfamiliar with tank destroyers' capabilities and limitations, led to a further effort by Tank Destroyer Center to establish a greater knowledge of tank destroyers and their use throughout the Army.² Thus on the 26th of June 1944, a Group and Division Commanders Conference was held at Camp Hood. The conference covered the following phases (a) organization of towed and self-propelled battalions, (b) tank destroyers in secondary mission of indirect fire, (c) direct fire at moving targets, (d) destruction of pillboxes, (e) direct fire at surprise targets simulating a tank attack, (f) night firing and (g) preparation of tank destroyer direct fire position.³ Due to the success in mission and the enthusiasm shown at the first conference,⁴ an Army and Corps Commanders' Conference patterned along similar lines, was held 29 July 1944.⁵ These conferences effected a more complete understanding of capabilities and limitations of tank destroyers and their employment with the combined arms.

An outstanding achievement of the Tank Destroyer Center during this period was the result obtained to effect further coordination of arms. The importance of this has been reflected throughout the history of the Center in its attempt to build the Training Brigade with all arms represented. The Center effected the assignment of a tank destroyer battalion to the Armored Force at Fort Knox, for use as school troops, - another tank destroyer battalion was assigned for school troop duty with the Infantry School at Fort Benning.⁷ Further coordination of arms was effected during August 1944 between the Field Artillery School and the Tank Destroyer School, wherein one tank destroyer platoon (Sp) was assigned to school troop duty with the Field Artillery School and one platoon of 105mm howitzers was assigned to school troop duty with the Tank Destroyer School.⁸

On 18 September 1944, a telephone directive from the War Department was received by the Center to the effect that the Armored and Tank Destroyer Schools were to be combined, using facilities at Fort Knox. The Commanding General of the Center, upon being requested to comment, vigorously opposed this consolidation at Fort Knox, pointing out that the range facilities and training aids at Camp Hood were superior to any other known station and that such facilities at Fort Knox were limited and unsatisfactory for tank destroyer use. He further recommended that if for reasons of economy a consolidation was essential, then a consolidation be made with the Field Artillery at Fort Sill where facilities were available, though not equal to those at Camp Hood.⁹ Subsequently, on 1 November 1944,¹⁰ Army Ground Forces directed a consolidation at Fort Knox of only the Officers Candidate Schools of Cavalry (Mechanized), Tank Destroyers and Armor. The Tank Destroyer allotment for Class No. 70, 1 November 1944, was 11, and did not materially affect the status quo of Tank Destroyer Center except for loss of a few additional officer instructors to the School at Fort Knox.

During General Dawley's period of command, no major changes in administration occurred for Center, but the War Department, perceiving the dwindling threat of armor and the bold and aggressive stature of the Tank Destroyer Center and its elements, was, in its overall planning, forced now to consider the future of tank destroyers. The question of whether it was to be a separate arm or a protege of an established arm, was important.

Thus the Commanding General of the Center was directed, 19 October 1944, by Army Ground Forces to make recommendations regarding the status of tank and tank destroyer units in the post-war army. His letter of 4 November 1944, given in toto in appendix of Chapter VII, established cogent reasons for his recommendation that tanks and tank destroyers each be set up as a separate arm by law. His logic was based on the antithesis, divergence and contrast in missions of the several arms and subject elements.

The future of tank destroyers was at stake, and the backlog of opinion, beginning with the Chief of the Armored Force in 1941, and following through successive commanders of Tank Destroyer Center as well as the Palmer Board (see Chapter VI) indicated unified support for the idea that the mission and technique of tank destroyers was divergent from that of other arms.

Collateral with the question of the future of tank destroyers was a review of tank destroyer achievements with respect to: materiel, equipment, doctrine and training, and organization, in order to aid Army Ground Forces in establishing a program to act as a guide in postwar development. Such a review and report had been directed on 22 September 1944 by Army Ground Forces.¹¹

It was thus that the Commanding General and his staff and sub-sections assumed two major objectives during the last quarter of 1944 and the first quarter of 1945. Supervision of training designed for perfecting in combat those tank destroyer units still in the United States was a continuous major objective and to that was added analysis, digest, review and report of tank destroyer developments and achievements. The functional design of Tank Destroyer Center headquarters with an organization, doctrine and training section, and an equipment and materiel section, appeared ideal for the two major missions, although combined study and interwoven effort was involved.

A preliminary report on equipment was made by the Center on the 25th day of October 1944,¹² which included recommendations by the Center on: items to be eliminated, items to be replaced, items to be modified, and items to have standard nomenclature list change.¹³

The final report on review of developments was made 2 December 1944.¹⁴ This review and report included one appendix covering tank destroyer developments and dealt specifically with mission, organization and equipment of Tank Destroyer Center units. It was based on analysis of facts received from battlefronts in all sectors and recommendations made were designed for specific improvement of tank destroyer action in theatres of operation. With respect to mission, it was recommended that the present mission as defined in Field Manual 18-5 was so broad and so all inclusive that an extension thereof or change in the future could not be foreseen. As to organization, the report covered the two types of tank destroyer units; namely, the self-propelled and the towed type. Emphasis was given to the self-propelled mount with an explanation that the towed gun was an expedient. Analysis of battlefield reports indicated that the existing organization of the self-propelled battalion, consisting of a headquarters company, a reconnaissance company and three gun companies, was basically sound and would remain sound. The report also dealt specifically with the advantages and disadvantages of tank destroyer equipment, including the gun motor carriages,

armament transport, ammunition, fire control equipment, communications equipment and miscellaneous accessories. It was clearly indicated that the M-18 was the ideal type of gun motor carriage desired because of maneuverability and mobility. One of the lessons learned, however, through a study of past achievements and battlefield reports, was the necessity for more gun power which, considered from the standpoint of highest velocity possible, indicated that the ideal maximum caliber consistent with mobility, rate of fire and capacity for volume of fire, was the 90mm gun motor carriage, M-36. The minimum ideal appeared to be the 76mm GMC, M-18. These calibers were indicated through the visualization of improvement of ammunition, both through propellant charges minimizing flash, and types of projectiles similar to the sabot type and the tungsten core type.

Another lesson indicated was the necessity for the improvement of the gun motor carriage through the provision of a canopy turret cover, to provide protection against aircraft and fragmentation. From tests it appeared that this turret cover should be at a height above the edge of the turret to permit all around vision. Another factor developed from the study of review of battlefront reports was the need of stabilization of the gun turret permitting accurate fire in landing operations and during movement. The need for effective blast deflectors and blast mats continued to be a problem without a satisfactory solution."

In connection with redeployment and the possible reorganization and re-equipment of infantry divisions, thereby enabling them more quickly to achieve objectives of primary mission, the Army Ground Forces requested the Center for recommendations as to the inclusion of tank destroyer units in infantry divisions.¹⁵

The Commanding General of the Center, - Brigadier General E. J. Dawley, strongly recommended that a tank destroyer battalion be included as an organic component of the infantry division.¹⁶ The Commanding General of the Center pointed out in his recommendation that combat experience indicated an absolute necessity for the inclusion of tank destroyer battalions as an organic component. The increase in size of the infantry division thereby, was, in the opinion of the Commanding General of the Center, offset by the fact that if tank destroyers were essential to infantry in combat, it was elemental that tank destroyer units be available to the divisions in training periods to establish cooperative and coordinated action.

From a study of battlefield reports it was remarkable that tank destroyer doctrine as conceived and developed by Tank Destroyer Center in 1942 was so basically right in its vision and prescience that it stood all tests of combat missions. Probably the most valuable lesson learned by Tank Destroyer Center through the review of activities, battlefield reports and study for redeployment was that a specific plan of training and doctrine once established through careful study and analysis should not be changed by fluctuating opinions induced by local or limited horizons. The original Field Manual 18-5 as conceived and published by the Tank Destroyer Center caused some criticism because of the aggressive and bold spirit indicated. After a study of battlefield reports and the varied uses made of tank destroyer units, boldness and aggressiveness on the part of tank destroyers in direct support of infantry was demanded by commanding generals on many occasions.

In the January 1945 issue of Tactical and Technical Trends, MIS, War Department, Washington, D. C., the chapter on German self-propelled weapons outlined current German doctrine for employment of Panzer Jaeger (tank destroyers) as follows: "In attack, tank destroyers use fire and movement to the utmost. Their constant readiness to move and fire makes them, according to the Germans, an ideal mobile reserve. The tank destroyer platoons accompanying the infantry engaged sighted enemy tanks by surprise. Positions behind hedges were considered most favorable, and when possible, positions in defilade or on reverse slopes. In defense, the main task of tank

destroyers is destruction of tanks which have broken through. The Germans believe that an efficient warning net is, therefore, important."

Thus German doctrine conformed in substance with the three directives which successively governed our own tank destroyers.¹⁷ Analysis further revealed that there was not much difference between the original Field Manual 18-5 and the revised edition of 18 July 1944. However, the one essential difference was that of emphasis. The original emphasized aggressive maneuver, - the revised emphasized caution and position. The term "fire and movement" which keynoted the original manual was omitted in the revised edition. The language of the original was bold and vivid, that of the revised was guarded and conservative. The revised version, after opening with the statement: "Action of tank destroyers is characterized by an aggressive spirit," itself then partially submerged that spirit by emphasis on static position. The only two italicized sentences in the revised version were ones which suggested static position. The revised version enunciated the importance of towed tank destroyers, and even stated: "Towed guns are more suitable for advanced positions than self-propelled guns." In contrast, the original Field Manual said in preface that tank destroyers may be either self-propelled or towed, but in its tactical section makes no mention whatever of the towed gun.

The review of achievements in planning for redeployment revealed the Tank Destroyer Center still considered the 3 inch towed gun an expedient. The War Department on the 5th of February 1945 advised the Tank Destroyer Center that all towed battalions in theatre of operations had been converted to self-propelled battalions with one exception.¹⁸ At the same time the War Department requested the Tank Destroyer Center for recommendations regarding the continuance of instruction in towed guns in the Tank Destroyer Replacement Training Center and School. The Center recommended that the towed guns be continued for instructional purposes because of economy in conduct and adjustment of fire of towed weapons and also because of the ability of the instructor better to observe and instruct student gunners. Another reason cited was that the towed gun could be disassembled by the students whereas Ordnance prohibited the disassembly of self-propelled guns. It was thus that the Center was taught one outstanding lesson which was "Teach and train unit personnel in minute detail but be sure the overall picture is attained so that supported units may know tank destroyer capabilities and limitations." The second major objective of Tank Destroyer Center during the period of 1 November 1944 to V-E Day was that of perfecting for combat those tank destroyer battalions still in the United States. The mission of the Center was to assist these units in attaining the acme of perfection in training and equipment.

An inspection team composed of officers from the Center made several trips to each tank destroyer battalion to observe their state of training, witness tests and make recommendations. Presentations were made at evening conferences to bring before the personnel of units visited developments and doctrine and training with emphasis on secondary missions involving both direct and indirect fire.

Combat efficiency tests were reviewed in the light of overseas experience and revisions were made accordingly. Training and the testing and perfection of equipment were simplified for the Center through the delegation by Headquarters Army Ground Forces of command responsibility to the Commanding General, Tank Destroyer Center, on the matters pertaining to the Tank Destroyer Board,¹⁹ on the 13th of December 1944, and also the delegation of command responsibility to the Commanding General, Tank Destroyer Center, on matters pertaining to Tank Destroyer School and Tank Destroyer Replacement Training Center on 28 December 1944.²⁰

Considerable time and effort were spent during January and February 1945 by the officers of the Organization, Doctrine and Training Section on problems in

attack on fortified positions. The technique of assault on field fortifications was developed and patterned along a line designed to be the most effective in assisting the front line infantry in securing their objectives.²¹ Frequent visits were made by tank destroyer officers to different infantry replacement training center battalions at Camp Hood to observe their training methods and further to perfect coordinated tank destroyer support of infantry. A solution was sought to the problem of coordinated attack and teamwork with the infantry in the destruction of pillboxes and bunkers. This involved the use of tank destroyer companies, platoons, sections and even single guns rather than entire tank destroyer battalions in direct support of infantry units.

SUMMARY: Evidence supported the fact that tank destroyers were specialists in a technique and in training basically different from other arms. The tank destroyers had achieved superior weapons and a sound doctrine and the Center, through conferences with high commanders at Camp Hood attempted to demonstrate limitations and capabilities of tank destroyers, to the end of establishing proper uniform employment. While successful "in esse," the disappearance of German tanks left the tank destroyers without adversary according to their first mission, and therefore nullified the great need experienced in 1941 - 42 and 43.

With abated mission and exploitation, the tank destroyers continued improvement in training and equipment of units with emphasis on indirect fire, destruction of pillboxes and other secondary missions. Training was improved by inspecting teams effecting direct on-the-ground corrections. Equipment was studied, tested and changes made for added efficiency in battle.

CHAPTER VIII

ACTIVITIES OF THE TANK DESTROYER CENTER

19 March 1945 - 1 September 1945

Brigadier General A. O. Gorder, Commanding General of the Tank Destroyer Replacement Training Center, assumed command of the Tank Destroyer Center 18 March 1945,¹ upon Brigadier General Ernest J. Dawley's reassignment.² General Gorder's viewpoint and policy were similar to those of General Dawley. He emphasized perfection in training, teamwork, accuracy and precision. His vision of speed was rhythmic action resulting from "doing all things decently and in order." While commanding the Replacement Training Center, he was most active in training inspections and was particularly concerned with intelligent performance on the part of the trainees. He insisted that the men know the why, how and wherefor of their duties.

The commanding generals and combat commanders in the ETO were requested to submit their recommendations on the status of tanks and tank destroyers in the post-war army, coincident with the same request of the Commanding General of Tank Destroyer Center.³ Copies of the opinions of commanding generals in ETO were sent to the Commanding General, Tank Destroyer Center, on 8 May 1945. General Eisenhower stated that the consensus was that, if separate branches were set up in the post-war army, there should be a separate branch for armor but not for tank destroyers, and that towed tank destroyers should form a part of the artillery.⁴ Generals Bradley, Devers, Patch, Haislip, Brooks and others favored a new arm for armor to include tank destroyers. Still other general officers favored armor as a separate arm, but tank destroyers as a protege of artillery.

There was one reply on the question by Lt. General Gerow, Commanding General of the V Corps, 1st Army,⁵ which enunciated certain principles which each of the commanding generals of Tank Destroyer Center had considered paramount. General Gerow said, in part, "The Post War Army should not contain a new or separate arm composed chiefly of tanks. The principal functions relating to any primary weapon and units built around it are development of the weapon and employment of the unit and its weapons as an element of the combined arms. In all of these functions, coordination with other weapons and integration with the combined arms is a paramount requirement which is insufficiently considered in the isolation which builds up around a separate arm, particularly in peace time."

Each of the commanding generals of Tank Destroyer Center, in building the Training Brigade and School troops of Tank Destroyer Center to include all possible arms, had emphasized the importance of coordination of weapons and integration with combined arms. They felt that theirs was a primary weapon, having very definite and fixed missions different from other elements, and that specialized effort and training were essential in building the unit which perfected its weapon and the use thereof in the execution of its mission.⁶

General Gorder's viewpoint was that the question of coordination with other arms and the integration of combined arms was of first importance, and separate arms or branches might militate against ideal integration.⁷

Albeit tank destroyers engaged tanks and tanks did not engage tanks in their primary missions, the consensus by ETO commanders, as revealed by analysis of their recommendations,⁸ was that the tank destroyer was just another tank.⁹ The similarity of tank destroyers and tanks was emphasized, but the question of divergent missions and specialized training was not touched upon except by General Gerow and implied by General Eisenhower in his reference to "if there are to be separate branches."

Early in April 1945, events indicated a speedy termination of hostilities in Europe. The Center, with practically all tank destroyer tactical units foreign bound, initiated plans for future training and redeployment of tank destroyer units.¹⁰ The School and Replacement Training Center were alerted to plan for refresher training for tank destroyer battalions returning for redeployment against Japan.¹¹

Japan's armor was negligible, but reports revealed an intricate and effective system of field fortifications, the destruction of which required direct fire by high velocity weapons with the accuracy of tank destroyers. Questionnaires were submitted to all officers of Tank Destroyer Center recently returned from the Southwest Pacific and recommendations were sought for correct participation by tank destroyers.

One lesson indicated was increased emphasis on tank destroyer cooperation with infantry in achieving front line objectives. The pillboxes and cave openings of the Japanese offered a very small aperture as a target and direct hits were necessary to destroy them. The M18 with its accuracy and power proved most effective at Ie Shima,¹² but close coordination with infantry was elemental.

The ODT Section worked with different battalions at the Infantry Replacement Training Center at Camp Hood to effect a standard of coordinated effort on the problem presented by Japanese field fortifications.¹³ Recommendations sought from officers of The Infantry School were interwoven in tank destroyer procedure.¹⁴

In the meantime, the War Department felt growing concern over the large number of casualties experienced by units attacking Japanese fortifications. Leyte, Ie Shima and Okinawa were extremely costly in wounded and dead. Japanese field fortifications were mainly natural terrain barriers developed into intricate subterranean strongholds from which the Japanese could emerge and attack American units in the rear and on each flank. Cave openings were self-supporting and were so ably concealed that assault teams, after taking a frontal slope and/or reverse slope would find that they had bypassed strongpoints from which a murderous fire all but wiped them out.

The Tank Destroyer Center, perceiving the gravity of the problem, and believing the tank destroyers with their accuracy and high velocity weapons could offer some solution, set up a special team to work on the problem. Lt. Colonel V. W. Pyland, a veteran tank destroyer officer of the European campaign was placed in charge. The ODT Section assisted in the tactical set-up. The Tank Destroyer Board performed tests of weapons.¹⁵

On the 18th of May 1945, representatives of the Army Ground Forces were called to Washington for a conference on the problem presented by Japanese viscid defense.¹⁶ Representatives of the Armored School, the Infantry School, the Infantry Board, Field Artillery School, Rocket Board and Artillery Board were present as was Colonel Pyland representing the Tank Destroyers. Verbal instructions were given to all to test and develop a technique to frustrate and checkmate Japanese field fortifications.¹⁷

Officers of different arms attending this conference made a trip to Dugway Proving Ground, Utah and returned to Fort Sill and thence to Camp Hood. A conference was held on 22 May at the Tank Destroyer Center Headquarters and the name "Sphinx" was suggested as a secret code name for the project.¹⁸

Subsequent to this conference, with the help of officers from the ODT Section, the E&M Section and the Tank Destroyer Board, Colonel Pyland supervised the construction of field fortifications in the Elm Mountain area of Camp Hood. These

fortifications were made to resemble Japanese strongholds as far as possible. Replicas of Japanese camouflage methods were attempted and all other artifices and devices known were used to duplicate Japanese construction. The Tank Destroyer Board was designated by the Commanding General of the Center to assist in the project and render weekly reports on tests.¹⁹ The 76mm M18, the 90mm M36 and 2.36 inch rockets were the weapons tested for closing cave entrances and for the demolition of field fortifications. Different types of fuses, ranging from superquick to .15 seconds delay, and different types of projectiles were used to establish the type most effective against cave entrances. Different types of observation instruments were used to establish the most efficient observation for both forward observers and distant observers. The 90mm M36 demonstrated superiority in the demolition of cave entrances. The 76mm M18 produced excellent results but not as good as the 90mm. The best results from fuses were the T-105 or the M-78 fuse. The new observation telescope, 20 power, T133, was found to be superior from the gun position.²⁰ In a letter of 23 May 1945,²¹ the War Department indicated the high priority and the great importance attached to this test by giving a list of references covering the fundamentals of demolitions, training films, field manuals pertinent to assault, training literature on new weapons such as the portable flame throwers, mechanized flame throwers, recoilless rifles, chemical mortars and radar.

Closely following this action, the War Department directed on 29 May 1945²² that the Commanders of the Tank Destroyer Center, Armored School, Infantry School and Field Artillery Board, undertake at once under the highest priority, a test of standard weapons and material and newly developed materiel against Japanese fortifications. The purpose of these tests was to determine which weapons were the most suitable for the reduction or neutralization of Japanese field fortifications.²³

The scope of the tests directed indicated to the Commanding General of the Center the possibility of a combined arms test. The Elm Mountain area did not appear adequate and after an aerial and ground reconnaissance, the Manning Mountain area was selected for an anticipated combined arms tactical test.²⁴ This area provided a series of ridges and hills of finger-like arrangement, more nearly duplicating Japanese field fortifications in depth and mutual support.

While tests were conducted in the Elm Mountain area, large numbers of German war prisoners were put to work in the Manning Mountain area - digging caves, constructing pillboxes and spider holes, to duplicate the many hundreds of strongpoints usually developed by a Japanese front line regiment, with its supports.

On 11 June 1945, General Gorder appointed a board of officers to conduct tests and determine the best tactical methods to apply in the reduction of Japanese field fortifications by assault teams composed of Infantry, Artillery, Engineers and Tank Destroyers. Brigadier General Kenneth G. Althaus, a veteran of the 10th Division Combat Team under General Patton, was president of this board.²⁵ The board first met on 13 June 1945 with effort concentrated on the efficacy of test ideas and plans as presented by officers assembled.

On 15 June, General Gorder submitted recommendations to Headquarters, Army Ground Forces, on a combined arms test for the reduction of Japanese field fortifications.²⁶ This recommendation, which was made pursuant to a letter from Headquarters, Army Ground Forces,²⁷ advocated that the test be held at Camp Hood, Texas, and indicated the troops which would be needed for the test. After receipt of recommendations from the Commanding General of Tank Destroyer Center for the all-out combined arms test, Major General A. W. Waldron, Headquarters Army Ground Forces, together with a large staff of Army Ground Force officers, visited Camp Hood to inspect the area suggested and to confer on the tactical problem involved. The visit of General Waldron

and his staff to Camp Hood was closely followed by the directive on 26 June 1945, authorizing a test of materiel against Japanese field fortifications.²⁸ In this directive a combined arms test was ordered for the period 15 to 25 July 1945, and North Camp Hood was designated as the station for the control and test troops of the Tank Destroyer Center "Sphinx" Detachment.

Brigadier General Kenneth G. Althaus, then Commandant of the Tank Destroyer School, was named to command all troops engaged in the test and was responsible for the conduct of the test, in accordance with War Department directive. Colonel Stephen S. Hamilton, Inf., Captain John M. Harbison, Inf., and 1st Lieutenant Theodore S. Bell, Inf., all veterans of the 77th Division in action on Leyte and Okinawa, were made available as technical advisors to General Althaus during the project. Control officers were also made available from Infantry, Armor, Tank Destroyers, Field Artillery, Chemical Warfare Service, Signal Corps, Engineers, Ordnance, and Air Forces. Control troops were made available for technical and special requirements.

The test troops for the project consisted of: 1 Infantry Battalion, 1 Tank company (composite), 1 Tank Destroyer company (composite), 1 Chemical Mortar platoon, 2 Field Artillery battalions, Artillery liaison planes, 1 Engineer company, 1 Ordnance company, Radar and Dodar detachments, Antiaircraft battery, and Air Forces composed of photographic reconnaissance and bomber units. Recoilless rifle teams for both the 57mm and 75mm recoilless rifles were made available, as were personnel for using the new sniperscopes and snooperscopes.

The control group was utilized for controlling each phase of the test, appraising the results of the weapons employed, and taking necessary action to insure that battle conditions during the tests were realistic; and for observing safety regulations.

The troops were assembled at North Camp Hood prior to 10 July and attached to the Tank Destroyer Center. Due to the limited troop resources, it was necessary in some cases to form composite units for use as test Troops. This was true of the Provisional Tank Destroyer Company, the Provisional Tank Company, the Provisional Headquarters Company, the 53rd Infantry and other smaller units.

The various test phases included:

a. Aerial reconnaissance.

- (1) To determine how much of an enemy defensive area can be discovered during all phases of the fight by this method. It is particularly important to determine the usefulness of low obliques of reverse slopes.
- (2) To test the ability of troops to orient themselves for an attack on a reverse slope by means of these photos.

b. Bombing.

To determine the amount of damage to cave installations that can be expected by bombing based on information obtained from: (1) photo reconnaissance and (2) ground reconnaissance during the fight.

c. Defoliation.

- (1) To determine the ability of present weapons to defoliate and their comparative efficiency.

- (2) The amount of defoliation normally needed to disclose positions sufficiently to plan a coordinated effort.

d. Ground reconnaissance for the gathering of specific information.

- (1) To determine the best technique of assisting and protecting reconnaissance patrols by various means such as: smoke, diversionary attacks, protective barages, darkness.
- (2) To determine the value of information obtained by these patrols.

e. Coordination of action.

To determine the best means of integrating the fire of supporting weapons with the movement and assault troops so that close-in assault groups arrive at their objectives with a maximum of protection furnished them during their movement, during the accomplishment of their missions, and during the critical period of holding their objective until the area is consolidated.

- f. The final objective of all Sphinx activities is expressed in paragraph e above, and is considered the primary purpose for the holding of a combined arms exercise.

General Althaus formed his staff from officers supplied by headquarters, Tank Destroyer Center. He was immediately confronted with the problem of training and coordinating the effort of approximately 3500 troops, many of whom had never served together before in their own unit and a few of whom had had experience in a combined integrated arms test.

Intensive training was prescribed for the different units upon their arrival and continued until the period of the combined tests. General Althaus perceived that the project was a tremendous task for both the officers and the enlisted men. In order to secure the coordinated effort necessary, he held a series of meetings with all officers and enlisted men assigned to the project. He explained the situation and the magnitude of the task confronting them and emphasized the secret classification of the project. He also pointed out that the Tank Destroyer Sphinx Detachment, in securing a solution to the problem, would undoubtedly save many American lives.²⁹ Through these measures, he produced the highest "esprit de corps." The men kept their secret and they trained and performed like veterans.³⁰ Another stimulant used by the Commanding General of Tank Destroyer Center Sphinx Detachment was the display of a "county fair" method of new and improved weapons. The capabilities and limitations of the newer weapons and their coordinated use was explained. New equipment such as the sniper scope, and periscope, head viewer, recoilless rifles, and the use of radar for locating enemy armament, bolstered the morale of all personnel and added to their enthusiasm to do the job according to its magnitude.³¹

The reconnaissance phase was completed by the 3rd Tactical Air Command prior to 15 July and the actual assault by combined arms began on the 20th. The intermediate five days had been given to testing of separate arms with their improved weapons. It was during these five days that some of the arms learned a valuable lesson with respect to their limitations and capabilities. The Air Corps had thought that they could defoliate an area by ordinary bombing. The Artillery believed that they could defoliate effectively by concentrations. The Engineers believed that they could defoliate with the use of "snaken." However, after the Air Corps tested defoliation with napalm, the other arms quickly perceived the superiority of this method.³² The Commanding General

of the Tank Destroyer Sphinx Detachment had carefully worked out the integration of the combined arms test with the control officers of each branch. Thus when the combined arms test began on the 20th of July, it was a continuous problem with each arm entering the picture of action in its proper place to pave the way for the continual assault of the infantry squads. The consensus of the control officers, General Waldron of Army Ground Forces, General Gorder, and all other officers present, was that cave openings, pillboxes, and their support and depth were methodically destroyed, thereby enabling the infantry assault team to attain objective after objective with a minimum of exposure.³³

The problem was completed the 24th of July. Immediately thereafter a writers' group which had been detailed by the War Department began the preparation of the final report to the War Department. This report on the Sphinx Project contained 16 separate reports and was printed by Headquarters Army Ground Forces on 5 August 1945. The subject matter of the report was embodied in a training circular issued by the War Department 11 August 1945,³⁴ as a guide for assault against Japanese type field fortifications.

The achievement by the Tank Destroyer Center through its Sphinx Detachment was considered by the Army Ground Forces and War Department as a superior accomplishment. Major General A. W. Waldron of Army Ground Forces highly complimented the Commanding General of the Sphinx Detachment and Tank Destroyer officers for the superior work done and the valuable and effective solution achieved.³⁵

While the primary objective of the Sphinx Project was to obtain a solution to the problem of reduction of Japanese field fortifications, the test revealed also the terrific hitting power achieved when all arms were integrated in action. The "1-2 1-2" effect of the boxer and fighter was illustrated in the action and General Gorder of the Center felt that this in itself was a superior achievement.

Albeit the surrender of Japan appeared certain during the early part of August, the Tank Destroyer Center continued training activities along the predisposed lines of April and on official V-J day, 2 September, they still possessed "a young man's spirit" and were convinced that their doctrine was sound to the end of victory in integrated combined arms action.

SUMMARY OF TANK DESTROYER ACTIVITIES: In conclusion, it is fitting to summarize the Tank Destroyer Center's evolution and major accomplishments.

When the German army defeated Poland in three weeks and overran the Low Countries and France with astounding swiftness, the other armies of the world were stunned. It was clear that the French static defense, in which other armies had placed confidence, was impotent against the German air-armor-infantry team.

A defeatist attitude permeated the opposing armies and threatened the United States Army. Suggested antidotes for German armor were defensive in attitude, admittedly expedient in nature and put forth without confidence. In our own army the solutions were static, apathetic--gun defense intended to subject enemy armor to some slight attrition as it penetrated the antitank net. They held no promise of stopping and destroying German tanks but merely the hope of exacting sufficient toll to reduce the initial strength of the attacking enemy armor. This, then, was the pathetic weakness of our situation until General Marshall directed immediate and conclusive planning of defense against armored forces, to include offensive action and organization.

In consequence of this directive, tank destroyers were born and with them was reborn an aggressive spirit and the confidence that guns could destroy enemy tanks.

The original tank destroyer concept bolstered our courage though many leaders clung to the tank versus tank idea. It was so new and imparted so much confidence that a muted wave of enthusiasm and assurance swept through our Army. The belief that we could stop, destroy and defeat German armor grew through all ranks until, by the test of combat, it was confirmed.

Energizing this confidence was the Tank Destroyer Center. Physically, it converted 160,000 acres of varied terrain into a training reservation which provided a unique combination of ranges that permitted simultaneous firing from opposing directions of the largest tank destroyer weapons; tactical areas conveniently located and served by a well-developed road net; and two self-sustaining environments with total housing facilities for 85,000 troops.

Productivity of the Center has been measured in terms of the graduation from Tank Destroyer School courses of 5187 officers and 17,062 enlisted men; the commissioning of 5299 second lieutenants from the Officer Candidate School; the processing of 42,000 enlisted men by the Replacement Training Center; the training of tank destroyer organizations including two brigade headquarters, twenty-four groups, and 100 battalions; the development by the Board of the M18 tank destroyer, admittedly the finest weapon of its type in the world, together with satisfactory direct fire telescopic sights (in conjunction with the Armored Force Board), and other important developments.*

Tactical doctrine was kept abreast of combat experience by minor modifications of the original sound concept. Technique of direct fire was constantly studied and tremendous advances made both in the application of this fire and in its accuracy. Indirect fire, the chief secondary mission of tank destroyers, was incorporated in all training. Advanced training aids, such as the battle conditioning courses, sub-caliber mounts, sub-caliber firing at moving tanks, and realistic ranges including battlefield firing conditions, were developed.

The tank destroyer units trained at Camp Hood contained more heavy guns than the total of all the divisional field artillery pieces possessed by the American Expeditionary Force in World War I. The total tank destroyer fire power represented was further enhanced by the ability of the self-propelled guns to repeat fire from rapidly changed positions.

The organization and growth of the Center was accomplished under the guidance and control of the Tank Destroyer Center Headquarters and its general staff, which centralized tank destroyer thought, development, tactics, and technique for the Army.

It created, with filial credit to the United States Army, the necessary answer to the German Panzer threat. Tank destroyer development influenced British army tactics; the Russian self-propelled antitank artillery supported the tank destroyer concept and proved it on the battlefield; the Germans themselves created similar Panzer Jaeger units. Our own tank destroyer combat experiences, despite many violations of doctrine imposed by higher headquarters due to exigencies of the situation, and the use of expedient weapons, more than vindicated the courage and convictions of the original tank destroyer advocates. The world-wide effect of the tank destroyer concept and especially its influence upon the confidence and aggressive spirit of our Army, represents a major contribution by Tank Destroyer Center to our successful conclusion of this war.

Just as tanks and other terrible devices of warfare have produced the psychological effect of terror, so did the tank destroyers produce a psychological effect in hastening the conclusion of World War II. The first effect was felt with the

* See Appendix Chapter VIII

advent of tank destroyers with constantly increasing armament; the Germans delved for security against them by increasing the armor of tanks to such an extent that they practically immobilized their armored forces. The use of mines had been dedicated to the purpose of immobilizing and stopping tanks until fire could be brought to bear upon them but such procedure was negative in theory. The aggressiveness of tank destroyers with their mobility and maneuverability forced German armor to immobilize itself. The second psychological effect was the creation of an aggressive spirit and confidence on the part of the armored forces of the United States Army that tanks could be stopped and destroyed and their exploitation foiled by tank destroyers and gun fire. An outstanding material achievement of the tank destroyers was that of speeding up by months, if not by years, the marriage of the artillery gun to truck and tractor. This was a whole era ahead of towed artillery.

The material damage wrought by tank destroyers in action is still a matter of recapitulation by the statistical section of the War Department but an insight into the effectiveness of tank destroyers as opposed to tanks, vis a vis, is given by the two histories of tank destroyer units which have been received by the Tank Destroyer Center. These two histories were - that of the 5th Tank Destroyer Group,³⁶ which was attached to the 15th Corps, and that of the 704th Tank Destroyer Battalion,³⁷ which was attached to the 4th Armored Division. The history of the 5th Tank Destroyer Group lists a grand total of 1155 tanks and self-propelled guns destroyed in their action with the 15th Corps during the period 31 July 1944 to 10 May 1945. The 704th Tank Destroyer Battalion lists 73 tanks, and 195 guns, artillery, vehicles, pillboxes and strongpoints destroyed in their action from 17 July 1944 to 9 May 1945. The casualties as listed for the period of operations for each of these two units indicated an attrition of enemy armor and personnel of approximately 10 to 1.

The history of the 5th Tank Destroyer Group emphasizes throughout the motto of the tank destroyers - "Seek, strike, destroy" - although the action recorded reflected authorized offensive action beyond that emphasized by tank destroyer doctrine. On page 9 of that history, it was indicated that two German tank attacks against the 15th Corps were thwarted by the mobility and maneuverability of tank destroyers.

Unless requested by higher authority, the commanding generals of Tank Destroyer Center never raised the question of a separate arm for tank destroyers but each of them believed that the tactics and technique of the tank destroyers were so different from that of other arms that they required specialized training.

AL history records the race between armor and armament with first one in the ascendancy and then the other. Armor will continue improvement in mass and movement and should tank destroyers become a part of armor, the problem will then arise as to substitution and restitution to armament, thereby restoring equilibrium between armor and armament -- this equilibrium universally considered effecting some guarantee of peace.

CHAPTER IX

THE TANK DESTROYER BOARD

Coincident with the opening of Tank Destroyer Tactical and Firing Center at Fort Meade 1 December 1941, the Tank Destroyer Board was informally initiated. Major General Bruce, then Lt. Colonel, designated Lt. Colonel Ray C. Montgomery and Major Thomas G. Shaffer as Board members.¹

These two officers, forewarned by the record of events during November, were then in the execution of duties aligned with the missions of the Tank Destroyer Tactical and Firing Center. Colonel Montgomery established liaison with Aberdeen Proving Ground and Major Shaffer with Ordnance Department. Each of these officers was searching and analysing vehicles and weapons, trying to find adaptable basic characteristics for a Tank Destroyer weapon.²

Personnel of the Tank Destroyer Board had increased to seven members upon arrival at the staging area in Temple, 3 February 1942.³ While not officially activated until 9 March 1942,⁴ the Board was organized by Colonel Fay Ross, designated as President on 14 February 1942.⁵ An administrative section, a tactical section and a test section were established.

The activities of the Board were directed to: the development of new weapons and equipment, the improvement of existing weapons, the formulation of tank destroyer tactical doctrine and tables of organization, the preparation of training literature and aids, and the tests of vehicles and other equipment developed by the manufacturing services.⁶

The big problem confronting the Board initially was the development of an ideal tank destroyer. Colonel Bruce had described it as a "fast moving vehicle mounting a weapon with a powerful punch which could be easily and quickly fired" and "with armored protection against small arms fire."⁷

The magnitude of this problem was indicated when, in studying a list of approximately 200 vehicles undergoing tests by Ordnance in February 1942, none of the vehicles embodied the characteristics desired.⁸

General Bruce knew what he wanted, and he early imbued members of the Board with a concrete visualization of the ideal tank destroyer and from that time on there was no compromise on characteristics.⁹ This necessitated beginning from scratch and building a tank destroyer, using thirteen definite characteristics,¹⁰ the most important of which was mobility in all cases superior to that of hostile tanks. This implied speed, not only on highways, but across country, and this implied maneuverability and this implied flotation. These three essentials formed the basis of the proposed tank destroyer primary weapon.

As early as 2 December 1941, the Tank Destroyer Tactical and Firing Center published for its command a list of self-propelled antitank weapons.¹¹ This list included 8 gun motor carriages, all in experimental stage, and designated as the T2, T21, T22, T23, T24, T25, T26, T27, T28, T29, T30, T31, T32, T33, T34, T35, T36, T37, T38, T39, T40, T41, T42, T43, T44, T45, T46, T47, T48, T49, T50, T51, T52, T53, T54, T55, T56, T57, T58, T59, T60, T61, T62, T63, T64, T65, T66, T67, T68, T69, T70, T71, T72, T73, T74, T75, T76, T77, T78, T79, T80, T81, T82, T83, T84, T85, T86, T87, T88, T89, T90, T91, T92, T93, T94, T95, T96, T97, T98, T99, T100, T101, T102, T103, T104, T105, T106, T107, T108, T109, T110, T111, T112, T113, T114, T115, T116, T117, T118, T119, T120, T121, T122, T123, T124, T125, T126, T127, T128, T129, T130, T131, T132, T133, T134, T135, T136, T137, T138, T139, T140, T141, T142, T143, T144, T145, T146, T147, T148, T149, T150, T151, T152, T153, T154, T155, T156, T157, T158, T159, 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The chief obstacle to a start on the new tank destroyer was due to previous failures in tests by Ordnance of individually sprung wheel suspension.¹³ The volute spring and bogie suspension then common to nearly all U.S. Army tracked vehicles would not permit the speed and maneuverability desired; as, with increased speed, vibration became destructive.¹⁴

Thus it was the middle of March before action was attained by General Bruce, conferring with Mr. Davidson of General Motors Corporation, on a vehicle design embodying Christie suspension. Subsequently a Christie suspension was devised and developed for a vehicle of track laying type, by Mr. Schilling, engineer for General Motors.¹⁵ This gun motor carriage was first designed to mount the 37mm gun, but before Ordnance could designate it as the T42, it was redesigned to mount a 57mm gun and designated 3 April 1942 by the Ordnance Department as the T49.¹⁶

With the development of a tank destroyer weapon on its way, other problems of the Board such as Tables of Organization and Equipment, and doctrine and training, were somewhat simplified because their solutions were inherently dependent on the type of primary weapon to be achieved.

To meet the need of the 28 light and 6 heavy battalions activated 15 December 1941,¹⁷ Colonel Bruce and members of the Board published, for battalion commanding officers, tentative tables of organization 13 December 1941.¹⁸ These tables of organization and charts were based on the experience gained in the fall maneuvers of 1941.¹⁹ The soundness of the original tentative tables of organization in providing a reconnaissance company, three gun companies and a headquarters company, is pointed to in all subsequent tables of organization and equipment. At this early date, the tables of organization and equipment were influenced by the concept of the visualized ideal tank destroyer with speed and mobility. Tanks, being too slow, were eliminated from the tables of organization and equipment.²⁰

The Board continued studies on tables of organization and equipment, and subsequent to a directive by the Commanding General, Tank Destroyer Center, submitted recommendations on 19 March 1942 that the heavy self-propelled battalion be adopted as standard.²¹ After approval by the War Department, for a single standard type tank destroyer battalion, tables of organization and equipment for this single type battalion were published on 8 June 1942.²²

Equipollent with the need for a new tank destroyer weapon and tables of organization and equipment was the need for textbooks prescribing the use and tactical employment of tank destroyer equipment and personnel.

Reference to the list of projects (appendices, Chapt. IX) discloses that Projects No's. 6 to 10 inclusive, and Projects 13, 14, 16 and 17, were adopted by the Board in December 1941, and January and February 1942, to make available the new theory, practice, tactical use and employment of tank destroyer units and their equipment.

Special emphasis and concentration were directed on Project No. 10, Organization and Tactics of Tank Destroyers, which was adopted as a project 20 December 1941.²³ The emphasis on this subject appeared of first importance because logistics, tables of organization, gunnery, and other training literature were incidental to and fabricated around the tactics and technique of tank destroyers.²⁴

Whereas early tank destroyer doctrine and tactical employment were created from data of provisional antitank battalions in the maneuvers in 1941, and from reports of observers and from studies of the British and German antitank tactics, the new concept of tank destroyers called for offensive and aggressive tactics as opposed

to the old static and passive defense doctrine.²⁵

The principal characteristics desired of tank destroyer units were a high degree of armor piercing firepower, a high battlefield mobility, and facilities for rapid communication. Lightly armored to afford protection against small arms fire, they retained maneuverability. They were intended to operate in close coordination with other combat units but were capable of independent action.

It was recognized by the Tank Destroyer Board that the tank destroyer units would be most effective when employed to canalize and destroy enemy armored forces, to block encirclement or envelopment by hostile armored attack, and to provide security against hostile armored action in all types of operations. These functions were regarded as primary tank destroyer missions.²⁶

Preparation of Field Manual 18-5, Organization and Tactics of Tank Destroyer Units, was begun by the Board in January 1942. The doctrine formulated by the Tank Destroyer Board and included in this manual was based on the new concept of tank destroyers and the lessons learned in: the experiences of provisional antitank units in the 1941 maneuvers, the training notes compiled by the 93d Antitank Battalion, and reports and studies of British and German tank and antitank operations. The manual was completed in May 1942, and was published by the War Department on 16 June 1942.²⁷

In the light of battle experience in the Tunisian campaign, the Tank Destroyer Board began a revision of Field Manual 18-5 in May 1943. Cooperation with other combat elements and more elastic methods of employment were emphasized.²⁸ The tactical section of the Board was transferred to the Tank Destroyer School in August 1943, and the revision of the manual was completed by the School.²⁹ The relationship of the tank destroyer weapon, doctrine and training and tables of organization was well illustrated in the Board's effort to solve all three problems concurrently.

On 8 June 1942, the proposed tables of organization for the single type tank destroyer battalion were approved by the War Department. The authorization of self-propelled anti-aircraft weapons, adequate security sections, and strong reconnaissance platoons indicated a trend toward flexibility and self-sufficiency of tank destroyer battalions.³⁰

Observations in maneuvers and extensive tests at Camp Hood proved the 8 June 1942 tank destroyer battalion tables of organization inefficient in many respects. It was found that the battalion headquarters company lacked a sufficient number of cargo vehicles to insure constant supply of the battalion with ammunition. There was also a shortage of supply, administrative, and maintenance personnel. It was evident that additional armored vehicles were needed to provide protection against small arms fire. It was also apparent that an armored wrecker was needed for battlefield recovery of disabled vehicles. An increase of armored cars in the reconnaissance company was also desired. In accordance with these requirements, recommendations were made for changes that would increase the equipment and personnel of the tank destroyer battalion.³¹

On 22 July 1942, Army Ground Forces informed the Tank Destroyer Command that a decision had been reached to eliminate the 37mm guns from the tank destroyer companies. It was decided to make the 3 inch gun the standard weapon for tank destroyer units. These changes did not affect the reconnaissance company which retained the 37mm gun mounted in the Light Armored Car, M-8. New tables of organization were developed to provide personnel for the heavier weapons and to improve on the current tables.³²

On 9 November 1942, new tables of organization for the tank destroyer battalion were submitted which eliminated the light platoons and provided for the necessary increases in personnel and equipment.³³ However, a directive from Army Ground

Forces on 12 November 1942 ordered that all organizations be reduced fifteen per cent in personnel and twenty per cent in motor transportation.³⁴ This decision again necessitated the modification of the tables of organization. Administrative and supply personnel were reduced and many supply and tactical vehicles eliminated, the most important of these being the self-propelled antiaircraft vehicles. The tables were revised and new tables of organization submitted on 1 December 1942. These were approved and officially published on 27 January 1943.³⁵

Army Ground Forces directed on 1 January 1943 that tests be made of a tank destroyer battalion equipped with towed guns. The Tank Destroyer Board conducted a series of tests to determine the suitability of the 3 inch antiaircraft gun M-5 mounted on the 105mm howitzer carriage M-2 as a weapon for the proposed towed battalion. The tests proved successful, and the tables of organization for this unit were submitted. The organization recommended was essentially the same as the self-propelled battalion. The main difference were the elimination of the reconnaissance company, the inclusion of two reconnaissance platoons in the headquarters company, increased personnel in the gun crews, and enlarged security sections.³⁶

This new unit was approved as recommended by the Tank Destroyer Center, with minor modifications. The tables of organization were published on 7 May 1943. They provided for a headquarters and headquarters company which included two reconnaissance platoons. The three gun companies consisted of a company headquarters and three platoons of four 3-inch guns each, towed by half-track prime movers.³⁷

Concurrent with the development and improvement of tank destroyer battalion organization of the Board was developing tables of organization for higher headquarters to provide tactical and administrative control of battalions.

As early as the 1941 maneuvers, the need for such a headquarters was evident. Provisional antitank groups were employed by the Third Army in the Louisiana maneuvers of August and September, 1941, and a similar organization was tested by the First Army in the October and November Carolina maneuvers. Operating with the 93d Antitank Battalion, the first provisional General Headquarters tank destroyer battalion, in the Carolina maneuvers, were engineers, field artillery, cavalry, reconnaissance, and chemical warfare troops. These units were grouped together under a single headquarters termed a "Tank Attacker" headquarters. This was the nucleus of the group headquarters idea.³⁸

It was desired by the War Department, however, that only tank destroyer elements should be included in the groups. In view of these tests verbal instructions were issued by the Commanding General, Army Ground Forces, that a study be made to provide tank destroyer units with a headquarters higher than battalion. This would provide closer cooperation between units and would permit the group or any part of it to be available for attachment to other organizations. On 5 January 1942, the first official tables of organization for a tank destroyer group headquarters and headquarters company were published by the War Department.³⁹

The group headquarters company was made up of a company headquarters with sections for command and operations and for mess and maintenance. War Department policy at this time prescribed that a group headquarters be organized tactically; thus a number of administrative personnel and items of equipment were eliminated.⁴⁰ The revised tables were published on 26 May 1943.⁴¹

To facilitate further control of tank destroyer organizations, it was evident that a headquarters higher than the group would be necessary. This headquarters could be attached to army and corps headquarters to provide: supervision and coordination of training, a focal center for the collection of antitank information, tactical control

of tank destroyer units in battle, an officer with the necessary assistants to act as a staff officer for the corps or army commander, and facile control of task forces formed with tank destroyer units as a nucleus.⁴²

To fill these requirements, the Tank Destroyer Board developed a table of organization for a tank destroyer brigade headquarters. These tables were submitted to headquarters, Army Ground Forces, 11 August 1942, and were approved. The brigade headquarters organization was similar to that of group headquarters.⁴³

The intrarelationship of the three major problems confronting the Board during the early months of 1942 was met by a "modus operandi" by the Board imposing coordination not only throughout the Board personnel but with all sections of Tank Destroyer Center. While under Colonel Fay Ross and later Colonel Hazen L. Hoyt, as acting president, the three sections of the Board were comprised of specialists in research. The solution of problems (projects) of Board origin or those initiated by formal directive of higher headquarters, required a long range policy in order to obviate repetition of tests on corollaries.⁴⁴ Each problem was assigned to the best qualified person or group of persons on the Board. Exhaustive research and tests were required of them, round table discussions by all Board personnel held, and their findings submitted to other sections of the Center for comment and suggestions.⁴⁵

The Board, in an effort to make reports on projects short, accurate and clear beyond the power of descriptive words, established a photographic laboratory during March 1942. Thereafter all reports on tests and equipment included photographs illustrating the why and wherefor of conclusions reached and recommendations made.⁴⁶

With the opening of Camp Hood in September 1942, better facilities for testing were available and the Board was reorganized along more definite functional lines.

Colonel Ray C. Montgomery, who had continued to serve as liaison officer at Aberdeen Proving Ground⁴⁷ became president of the Board, 30 August 1942.⁴⁸ In his reorganization of the Board of September 1942, the administrative section was expanded to include a supply and shop sub-section and a mail and records sub-section. The tactical section was increased to include sub-sections on tactical employment, tables of organization, training literature and visual aids. The automotive section was redesigned to include a weapons section, a communications section, and a pioneer section.⁴⁹ Further minor changes in the organization of the Board were made from time to time as a matter of more closely following missions, and are recorded by charts in Appendices, Chapter IX.

Liaison with War Department and manufacturing agencies was maintained and direct expeditious action achieved by the Board.

With substantial progress on the three major pressing problems and with a proper organization, the scope of activities of the Tank Destroyer Center as analyzed through the list of projects contained in Appendices, Chapter IX, reveals that under the supervision and jurisdiction of the Tank Destroyer Center, the Board had assumed and been allowed to interpret its mission as permitting great latitude in initiating and developing tank destroyer materiel. Analysis of the list of projects shows many skips in numerical sequence. This was caused by the Board adopting a project which was later found to be either capable of incorporation in another project, or a solution which had been evolved by some other service board, or obsolete in the view of later developments.⁵⁰

During the early part of the year 1942, the majority of projects adopted by the Tank Destroyer Board were of Board origin; but after establishment of proper liaison with other War Department agencies, the list of projects shows that the majority were

initiated and authorized by Army Ground Forces or higher headquarters.

The list of projects undertaken and reported on reflected the many contingent problems arising from a proper solution of the major problems previously mentioned. The Records on each project reveal the thoroughness of research establishing positive conclusions offered by the Board. In studying the list of projects and the recommendations made, there was but one report, namely, Project No. 264, which carried a proviso which might have been eliminated through further research.⁵¹

Among the outstanding contingent problems confronting the Tank Destroyer Board in the early part of 1942 were those of sighting equipment, training films and communications.

When the 75mm GMC M-3 was developed, the panoramic sight was removed and replaced by the straight telescopic sight developed for the 37mm gun. This sight was modified by the use of a gridded reticle ballistically calibrated for the 75mm gun and was standardized as the M-33. This was found to be unsatisfactory because of its low power, limited field of vision and the type of reticle.

The most important change desired by the Tank Destroyer Board was the elimination of the many lines in the grid type reticle which obstructed the view of the target, and an increase of magnification in order to facilitate sighting on targets at distances greater than 1000 yards.⁵²

Since the desired characteristics of sights to be used by both the Armored Force and tank destroyers were the same, close cooperation was maintained between the two Boards.

Projects on the proper sighting equipment reflected continuous action and intermittent concentrations on the subject during 1942 and it was not until January 1943 that a reticle designed by the Armored Force Board was tested by both that Board and the Tank Destroyer Board and a single type reticle for all armored force and tank destroyer weapons was recommended. The sight adopted was a three power sight with eight lines spaced at 400 yards instead of 500 yards and was known as the antitank reticle.⁵³

The advent of the towed tank destroyer gun necessitated efficient sighting equipment for it. After extensive work, the T-108 sight, with three power magnification and seven degree field of vision, utilizing plastic lenses, was approved and adopted for use with the 3 inch gun carriage M-1.⁵⁴

Indirect laying by tank destroyers in the execution of their secondary mission further involved the sight problem. The panoramic sight was suitable for indirect laying but was unobtainable because of limited production.⁵⁵ The azimuth indicator, a development of the Armored Force Board, was tested by the Tank Destroyer Board and found satisfactory for measuring horizontal angles.⁵⁶

The Board met considerable difficulty in production of training films and film strips. Eighteen training films and eleven film strips had been authorized by the Army Ground Forces for Tank Destroyer Board action. The Army Ground Forces directed that all scenarios be completed by 30 June 1943.

The preparation of these scenarios was hampered by lack of skilled personnel. Writers were secured on a loan basis from the signal corps, but proved generally unsatisfactory as most of them were unqualified. During the seven months period from December 1942 to June 1943, there were eleven different scenario writers on duty with the Tank Destroyer Board visual aids section.⁵⁷

In spite of the lack of adequate and experienced personnel, eight film strips were produced and released by the Tank Destroyer Board. Six of these strips covered different phases of the 3 inch GMC M-10 and the others dealt with the care and cleaning of the 75mm GMC M-3 and bore-sighting. Film bulletins entitled "Seek, Strike and Destroy," "Training Under Fire," "Close Combat Firing," "The 3-inch Gun Motor Carriage, M-10," and "The T-70 Tank Destroyer - 'Hell Cat'" were also produced by the Tank Destroyer Board.⁵⁸

The communications section the the Tank Destroyer Board was charged with the responsibility of testing all signal and communication equipment. Particular emphasis was placed on the testing of radio facilities and electrical and visual signaling devices. Tests were performed by this section, for the purpose of determining the need and suitability of equipment for tank destroyer use. The performance, structural ruggedness, compactness, serviceability, and portability of equipment were also considered.⁵⁹

The responsibility of the communications section did not end with the testing of equipment. It was the function of this section to anticipate future communication requirements. Based on tests by this section, recommendations were made for the development of new equipment and accessories.⁶⁰ Among these developments was the Case, JS 137, a double tray crystal holder which fitted into the Power Unit PE 117 of the SCR 610 radio, permitting the entire complement of 120 crystals to be transported with the set at all times.⁶¹

This section was vitally interested in the development and test of tank destroyer vehicles as they pertained to stowage, operation, and maintenance of inter-phone and other signal equipment. Vehicle suppression, including track static, the position of control boxes, switches, extension cords, and the position of operators were all subjects of study. The communication equipment worn and carried by the individual crew members was tested to determine whether it could be easily operated and worn without discomfort.⁶²

From studies along these lines, recommendations were made for the standardization of Head Set HS 30, Lip Microphone T-45, and retractable cord assembly CD 801 for tank destroyer use.⁶³

Also included in the activities of the communications section were studies of signal maintenance problems, such as the training of maintenance personnel and tools and equipment for the proper care of signal equipment. A report on the study of radio maintenance plans for tank destroyer units conducted in July 1943, brought out the need for more adequate maintenance facilities.⁶⁴ Operational procedure and the organization of tank destroyer radio nets were also important features for development by this section.⁶⁵

An important achievement of the Tank Destroyer Board was that of the test of the antitank rocket launcher in July 1942. This rocket launcher, commonly called the "bazooka", utilized the rocket principle of propulsion by attaching a new tail assembly to the M-10 grenade. The special launching device was known as the rocket launcher M-1. After exhaustive tests, the Board recommended that the launcher be adopted at once and that issue be made to tank destroyer units immediately.⁶⁶

Because of the exhaustive tests made by the Tank Destroyer Board and the merit accorded the weapon, the Board was requested to prepare a tentative training circular for technical use of the rocket launcher.⁶⁷ Major John C. Hooker, Tank Destroyer Board, performed the tests on the launcher and prepared data for a training circular. The subject matter as presented by the Board was subsequently incorporated in a War Department Training Circular published on 15 December 1942.⁶⁸



Incidental to the major objective of the Board, but of real importance, was the development of supplemental vehicles for the tank destroyer units. During March 1942, the 37mm GMC T22, built by the Ford Motor Company, was recommended for issue to tank destroyer units for use in reconnaissance companies. This vehicle was standardized as the light armored car M8. A further modification of this vehicle - the removal of the gun turret and top plate - made it adaptable as a light armored personnel carrier.⁶⁹ This vehicle was standardized as the car, armored, utility, M20 for use in tank destroyer units.⁷⁰

The development of the tank destroyer primary weapon was a difficult problem. It was a story of enthusiastic tank destroyer men in action and of their refusing to pay obeisance to maxims and negatives seemingly supported by past failure. Other difficulties appeared in manufacturing conditions.

Much credit should be given to the Ordnance Department, when, in an effort to decentralize during the early part of 1942, it created the Tank Automotive Center with headquarters at Detroit. This Center was autonomous and through it the Tank Destroyer Board was able to obtain expeditious action in the design of the ideal tank destroyer. The problem of the tank destroyers in achieving their primary weapon was also simplified through direct approach to the manufacturing agencies in Detroit. Lt. Colonel W. E. Sherwood acted as liaison officer for the Tank Destroyer Board with the Tank Automotive Center at Detroit during the period of development of the tank destroyer primary weapon.⁷¹ He was in constant contact with ordnance, manufacturing agencies and the Tank Destroyer Board, and the day by day progress on the development of the tank destroyer primary weapon is reflected in three volumes of notes and

memoranda directed by him to the Tank Destroyer Center.⁷²



On 2 May 1942, an important conference was held at Aberdeen Proving Ground between General Bruce, the president of the Tank Destroyer Board, and representatives of Ordnance and of the Requirements Division of the War Department. During this meeting a 3 inch GMC T35 developed by General Motors Corporation and the Ford Motor Company was exhibited and tested with a view to standardizing it as a primary tank destroyer. General Bruce did not approve the standardization of this self-propelled mount, deeming it another expedient. The speed of the vehicle was 30mph and the weight was approximately 30 tons. In spite of these handicaps, this vehicle was standardized in two forms - the 3 inch GMC M10, a General Motors product with twin diesel engines, and the 3 inch GMC M10A1, a Ford Motor product with a V-8 tank engine. Both types were issued to the tank destroyer battalions.⁷³

Notwithstanding the substitutes and expedients offered the Tank Destroyer Center and the Board, work continued on the development of the T49 which possessed the characteristics necessary for mobility and maneuverability. The creation of the T49 offered definite indications of the basic characteristics desired; but, in line with the need for a heavier weapon, the Commanding General on 2 July 1942 recommended to the Commanding General, Army Ground Forces, a redesignation of the T49 and requested definitely that the 75mm gun M2A3 be used in lieu of the 57mm.⁷⁴

The development of this 3 inch gun motor carriage with Christie suspension was well under way by General Motors Corporation and a pilot model was available for tests on the 3rd of September 1942, at Aberdeen Proving Ground. During this test, General Barnes of the Ordnance Department called the attention of General Bruce and of

Colonel Montgomery to a new 76mm gun.⁷⁵ This gun embodied the same physical characteristics of the 75mm, and had the same breechblock, recoil and similar design of tube. Through a longer tube and the use of a larger cartridge case, a much higher muzzle velocity and a greater striking power were attained than with the 75mm gun, and that without an appreciable increase in weight. The 76mm gun was in reality a 76.2mm caliber weapon, equivalent to the 3 inch but much lighter in weight than the 3 inch. It had the additional advantage over the 75mm of using the same projective as the 3 inch.⁷⁶ General Bruce and Colonel Montgomery quickly perceived the superiority of this weapon.

The 75mm gun motor carriage with Christie suspension was designated 19 November 1942 as the T67.⁷⁷ Representatives of the Board met with the Ordnance Department and manufacturing representatives in Detroit on 22 and 23 December 1942 and the decision was made by General Bruce covering additional important characteristics which were to be incorporated in the GMC 76mm.⁷⁸ One of the most important of these decisions was the use of the torsion bar in lieu of springs in the suspension system. On 7 January 1943, the T67 75mm gun motor carriage project was brought to a close and the Ordnance Department designated the 76.2mm gun motor carriage the T70.⁷⁹

The Tank Destroyer Board had adopted as a project the T70 on 31 December 1942 and from that time on until the middle of 1944, continued tests to achieve the perfection desired. Between 31 December 1942 and 23 November 1943, the Board made sixteen complete reports on tests of the T70 and the recommendations covered in these reports were to effect 157 modifications and changes in the design of the vehicle.⁸⁰ Subsequent to the preliminary reports, twelve production models of the T70 were received by the Board during the latter part of 1943 and after the Board had submitted the vehicles and the weapons to every reasonable test, only fifteen modifications and changes were requested.⁸¹

The Buick Division of General Motors Corporation had been making its own tests on the experimental models of the T67 and T70. The performance of the vehicle was such as to inspire the nickname "Hellcat", and it was thus named by them.⁸² The 76mm gun motor carriage T70 was standardized by OCM Item 23202, as the M-18, 16 March 1944. During maneuvers, it was clearly discernable that the M-18 showed a tendency to over-run its own security section, and other tank destroyer vehicles. Upon a study by the Board of this problem it was found that by removing the gun and turret from the M-18, a utility vehicle was quickly achieved with the necessary speed characteristics to stay up with the M-18. This adaptation of the M-18 was known as the T41 and recommended by the Board as an auxiliary vehicle for the tank destroyers. This adaptation of the M-18 was designated by OCM Item 26106 on 1 February 1945.

During the latter part of 1944 and 1945, the Board efforts were directed toward improvement of the many items of equipment used by tank destroyers. The tank dozer was tested and found superior for excavating positions for emplaced destroyers, thereby effecting defilade, concealment and security. The tank dozer was a blade attached to the M10 or M10A1 destroyer and upon recommendation by the Board, two each tank dozers were added to the tables of organization and equipment for each M10 company in February 1943. One of the biggest problems confronting the Board in 1945 was the problem of muzzle blast. The subject was given over-all and concentrated attention by the Board and many conferences were held with scientists of the leading technical schools and with Ordnance Department and the Research Council. The project reports on this subject reveal some progress in improvement of ammunition and primer which would minimize smoke without increasing flash. Muzzle brakes first adopted by the Germans were tested and they too effected some relief from muzzle blast through the diverting of the gasses to the rear and upwards at an angle of 45 degrees.⁸³ The problem of dust and blast obscuration, which vitally affected the gunner's ability to observe and repeat fire, is still unsolved. This problem, along with that of stabilization of the gun

carriage, radar, and armored turret covers for both the 90mm and the 76mm gun motor carriages, were the objects of intense effort on the part of the Board during the final months up to V-J Day, 2 September 1945.

SUMMARY: The Tank Destroyer Board was initiated 1 December 1941 and in forty-five months reported on more than 300 projects and tests.

The Tank Destroyer Board compiled Tables of Organization and Equipment and the original Field Manual 18-5 - Organization and Tactics - which formed the basis for the tactical use and employment of tank destroyer weapons and personnel.

The Board contributed in a major way in the development and refinement of motor carriages, M-8, M-10, M-10A1, M-20 and M-36.

It first tested and recommended subsequent improvements in the rocket launcher M1 (bazooka), and then at the request of the War Department, compiled the text for the tactical use and employment thereof. This resulted in the War Department Training Circular No. 104, 16 December 1942.

The greatest single accomplishment of the Tank Destroyer Board was the development of the M-18, 76mm GMC Tank Destroyer and the M-39, an all-purpose vehicle. More than 157 modifications were effected on the original design of the M-18. In the development of the M-18, Mr. C. L. McCuen, Mr. W. J. Davidson, Mr. W. K. Haig, Mr. E. T. Ragsdale and other officials of General Motor Corporation deserve special mention for their cooperation and work with Ordnance and the Tank Destroyer Board. Major (later Lieutenant Colonel) W. A. Wood, Jr., of the Tank Destroyer Board effected many changes and modifications which resulted in superior performance by the vehicle. For his work in the development of the M-18, Colonel Wood was later awarded the Legion of Merit by the War Department.⁸⁴

WEAPONS AND VEHICLES:

M-18: The M-18 was designed specifically as a highly mobile, self-propelled gun for action against enemy armor. Its development for this requirement was "from the ground up," - it is completely new. In its design, the 3" (76mm) was selected, with a 15 lb. projectile at 2760 f/s muzzle velocity and a penetration of 4.5" of armor at 1000 yards. Since maximum gun power and high mobility were incompatible with armor of tank thickness, protection against small arms only was contemplated.

Results:

Gun: A 76mm (3"), utilizing a compact 75mm recoil mechanism; in open turret for maximum vision; direct sight of advanced design; azimuth indicator and quadrant for indirect laying; maximum range, 14,500 yards - highly accurate; projectile fits both 76mm and 3" guns and is fixed in cartridge case, complete round being 5 lbs. lighter for 76 than the 3", - since the cases differ, complete rounds are not interchangeable.

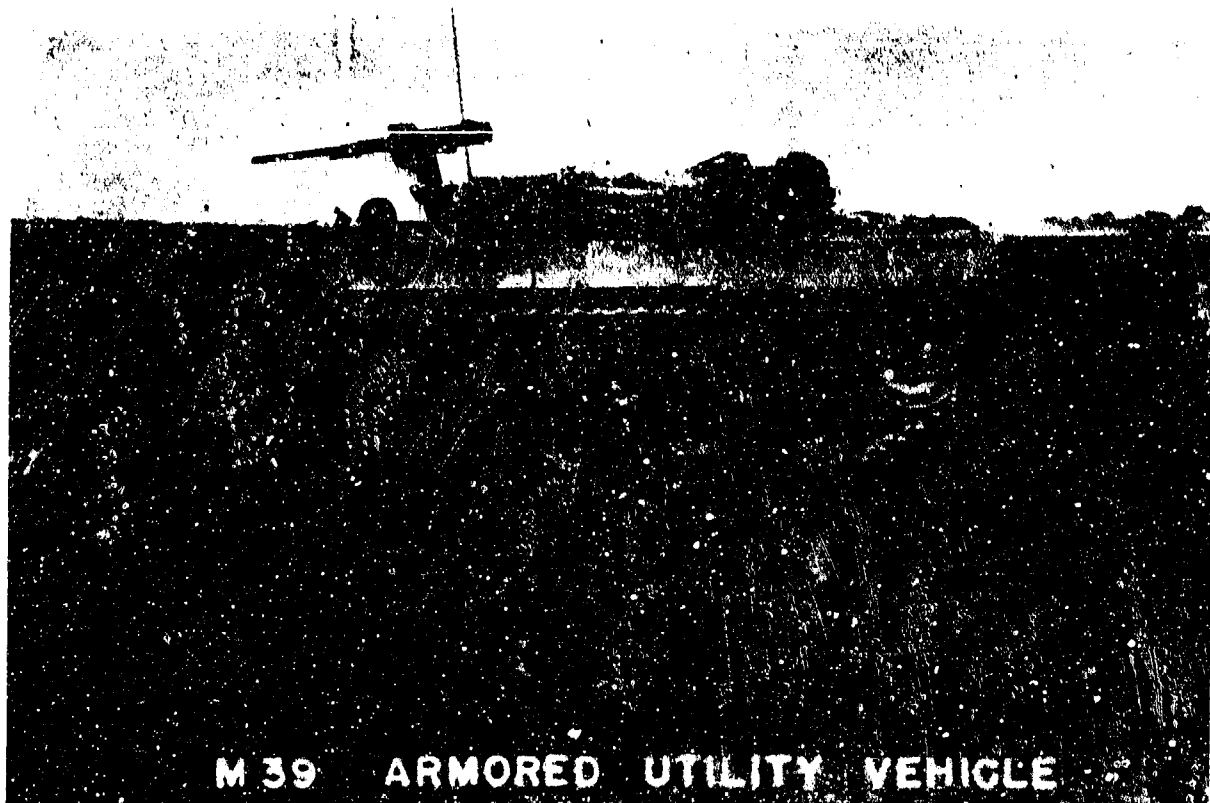
Chassis and Engine: 1/2" armor basis; improved radial engine of 480 hp; newly designed track, steel, rubber-bushed, with slack compensation, capable of high speed and with life double that of tanks; ground pressure approximately 11 bs; slope-climbing ability 60% or 50% with towed load of 8000 lbs. Forging depth, 48". Speed, 55 mph.

Summary: A highly mobile gun motor carriage with new suspension, having individually mounted wheels on trailing arms, torsion bar springing, new track, torque transmission, engine and transmission differential removable on rails through doors in

one hour, horse-power weight ratio of 25 to 1. Weight 17 tons.

Gun - power, turret-mounted, of armor-penetrating caliber and velocity, flat trajectory with a good direct laying sight (telescope), means for indirect laying.

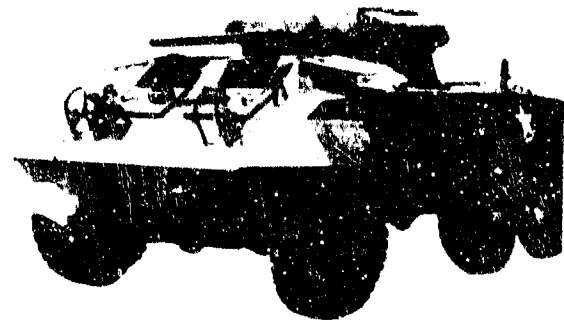
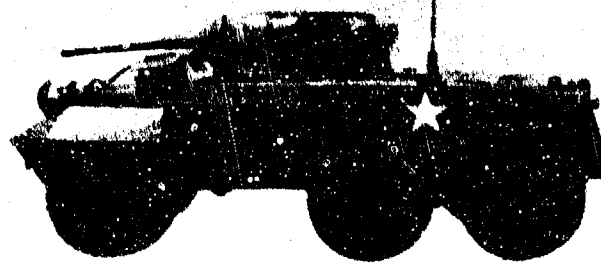
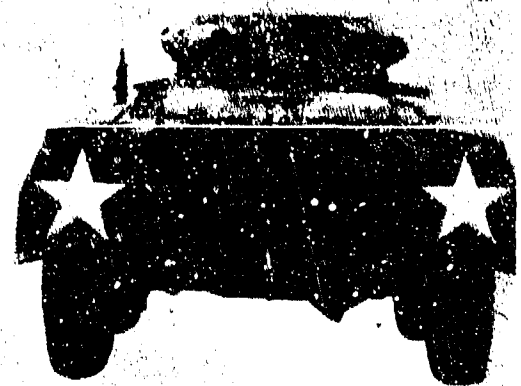
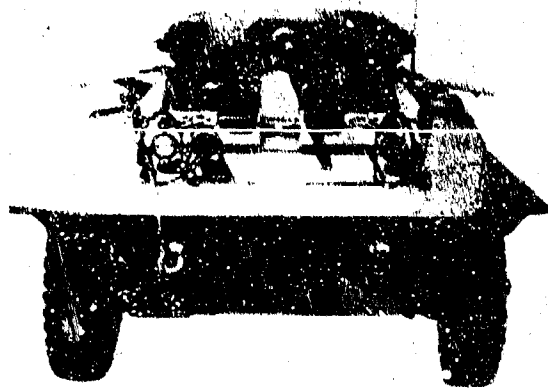
Capable of widely varied tactical application as a self-propelled gun.



Armored Utility Vehicles M-39: The M-39 is a prime mover modification of M-18, with the gun and turret removed, affording space in hull for a crew of ten and 47 rounds of ammunition; as ammunition carrier transports 263 rounds 3" and crew of two; mobility characteristics same as the M-18 but weight of 16 tons. The M-39 was approved as the prime mover for the 3" guns M1 and M6, and use as a reconnaissance vehicle.

3" Gun Motor Carriage M-10 and M-10A1: 3" Gun Motor Carriage M-10 is a modification of the standard M4A2 Medium Tank chassis, mounting the 3" Gun M7 in an open top, hand-operated, 360° traversable turret. Vehicle weight is 32 tons, carrying a crew of five and 54 rounds of 3" ammunition. Vehicle is powered by a 375 horsepower, twin 6 diesel engine, providing a top speed of 30 miles per hour, with a maximum gradeability of 50%. Fording depth is 36". 3" Gun Motor Carriage M10A1 differs from the M10 only in power plant, which is a 500 horsepower Ford V-8 engine providing approximately the same performance characteristics as the M10.

90mm GMC M36: The M36 is a modification of the 3" Gun Motor Carriage M10A1, mounting a 90mm gun in a conical 360° turret, traversed by hand and power. Turret is balanced in design, requiring no counterweights as in M10, and is therefore approximately



TANK DESTROYER BOARD

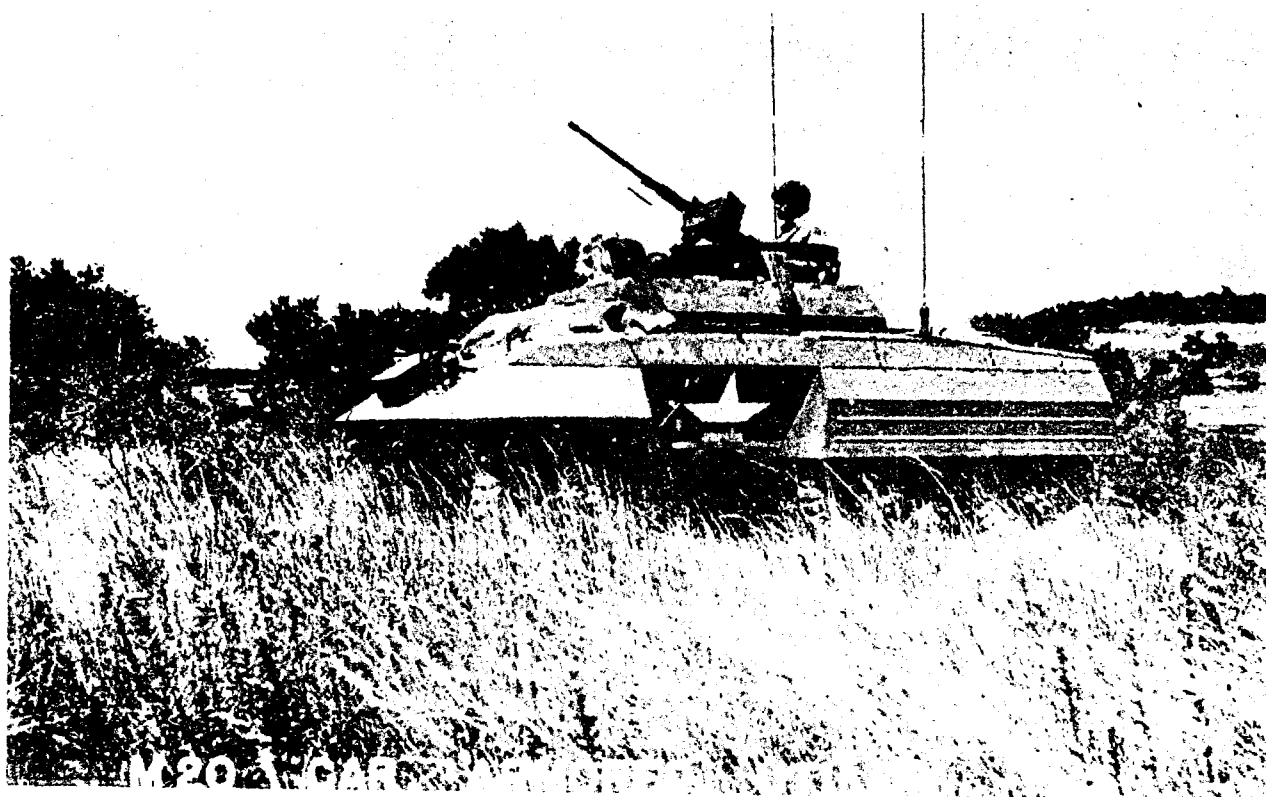
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CAMP HOOD, TEXAS

LIGHT ARMORED CAR, M8

1000 lbs. lighter. Crew of five; 47 rounds of ready ammunition. Armor penetration, 6" at 1000 yards; reinforced concrete penetration, 5 ft at 1000 yards with 2 rounds (compares with 10 rounds for same penetration with the 3" gun). Rate of fire slower than other GMC's due to bulk and weight of round and space limitations in turret. Gun recoil mechanism same as the 3".

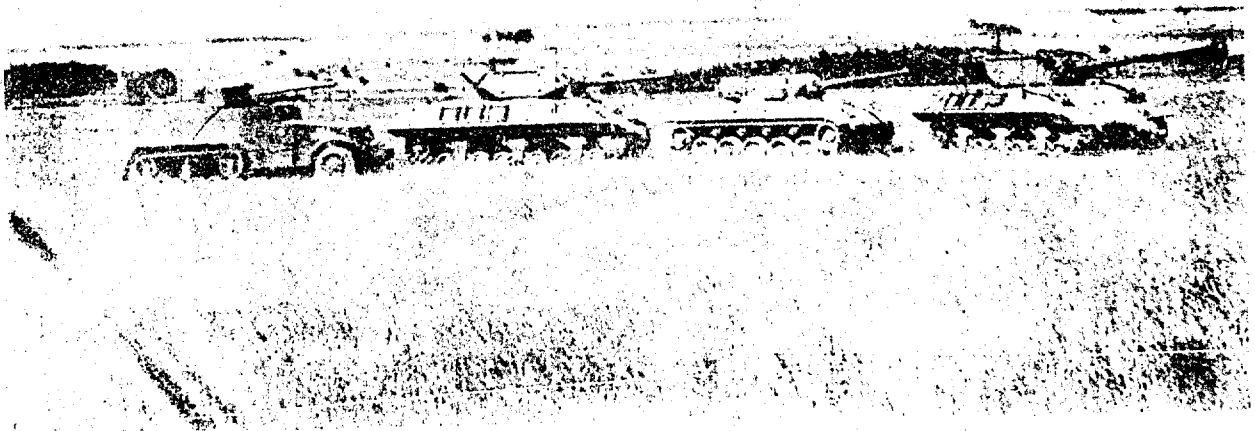
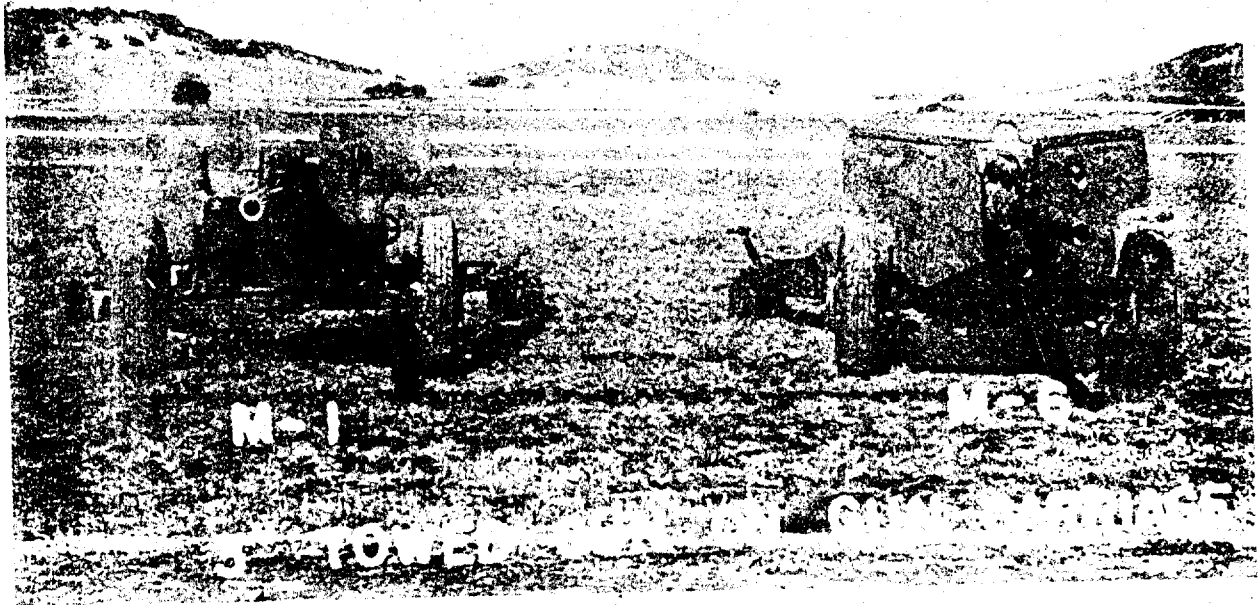
Car, Armored, Light, M8 (6x6): Vehicle was designed to provide high speed mobility, defensive fire power, and crew protection for reconnaissance personnel. Armament consists of one gun 37mm, one machine gun caliber .50 mounted coaxially, and one machine gun caliber .50 on rear mounted pedestal mount for antiaircraft protection. Crew consists of four men and space is provided for stowage of ammunition, 506 and 602 radios. Basic armor of vehicles is 7/8" on front and 3/8" on side.



Car, Armored, Utility, M20 (6x6): Vehicle utilizing Light Armored Car M8 chassis was designed to provide a highly mobile armored personnel, cargo carrier, and field commander's car. Space is provided to accommodate crews of six, in addition to 506 and 608 radios. Armament consists of one machine gun caliber .50 mounted on a ring mount for anti-aircraft protection, a rocket launcher AT, and individual weapons. Basic armor is same as that of the Light Armored Car M8.

3" Towed Gun M1 - M6:

Description: The 3" Gun Carriage M6 is the standard 3" Gun Carriage M1 with following modification: Handbrakes 12" longer and rotated 45° muzzleward; the Gun, M5, is repositioned one inch rearward; carriage has: (1) firing segments with



locking devices for firing and traveling positions; (2) gunner's shoulder guard with hinged portion for breechblock removal; (3) one additional standard handspike (total two); (4) handspike socket added to each spade at right angles to trail; (5) new cradle yoke for telescopic mounts and range quadrant; (6) a sloping shield; (7) a sight box; (8) trail caster; (9) two wheel ratchet wrenches; (10) two ropes; and (11) special hubs. The traveling position of muzzle has been raised 12 inches. Shield apron is hinged to axle with 5-inch ground clearance in firing position. Axle stops limit the equalizer cant correction to 5°.

Rocket Launcher M1 (Bazooka): The Bazooka originally was an open tube approximately 54 inches long, 2.365 inches in internal diameter, equipped with hand grip, stock, firing mechanism and sights. It was designed to launch the rocket, AT, 2.36 inches, M6, which was a high explosive projectile for use against tanks and armored vehicles. The weapon was to be fired from the shoulder and there was no recoil since the propulsion of the rocket was by jet action of the propelling power. The rocket weighed approximately 3½ lbs and was 21½ inches long. It was capable of penetrating heavy armor at angle of impact up to 30 degrees and could be used up to distances of 400 yards with an optimum range between 200 and 300 yards. The muzzle velocity was about 300 feet per second. The Rocket Launcher has been constantly improved and is a most formidable antitank weapon and superior weapon against fortification.

THE TANK DESTROYER SCHOOL

A Tank Destroyer School was a part of the original organization of the Tank Destroyer Tactical and Firing Center. It was to teach the tactics and technique of tank destroyer employment, emphasizing practical instruction applicable to training and leading tank destroyer organizations; to give key tank destroyer personnel a working familiarity with the tactics and technique of associated arms; to train selected officers and enlisted men for special technical duties in tank destroyer units; and to furnish qualified officers and enlisted men for the cadres of new tank destroyer organizations.¹ The capacity of the School was to be sufficient to allow sixty percent of the officers and ten percent of the enlisted men assigned to tank destroyer units to attend courses there in any given year. The school was to develop and perfect tank destroyer tactics and technique as well as conduct courses.

The commanding officer of the Center was designated as Commandant of the School. He delegated the task of organizing and operating the School to Lt. Col. (later Brig. Gen.) Hugh T. Mayberry, who reported for duty 3 December 1941, and was detailed as Assistant Commandant.²

Colonel Mayberry's experience as a member of the staff and faculty of The Infantry School, Fort Benning, Georgia, provided him with an excellent understanding of the problems connected with organizations and operation of the Tank Destroyer School. He continued as Assistant Commandant until 27 May 1942, when he was named Commandant of the School, and directed the School's activities from its pre-activation planning period to its establishment at Camp Hood, Texas, as one of the largest and finest Army special service schools.³

CHAPTER X

THE TANK DESTROYER SCHOOL

The organization of the Tank Destroyer School as an element of the Tank Destroyer Tactical and Firing Center was directed by the War Department letter of 27 November 1941, under the provisions of which the Center was activated at Fort George G. Meade, Maryland, on 1 December 1941.

The commanding officer of the Center, Lieutenant Colonel (later Major General) Andrew D. Bruce, was designated as Commandant of the School, and the following action was directed by the War Department:¹

The organization and operation of the Tank Destroyer School was directed as a War Department agency to develop and perfect tank destroyer tactics and technique and to conduct courses for the training of key officers and enlisted men. The capacity of the School was to be sufficient to allow sixty per cent of the officers and ten per cent of the enlisted men assigned to tank destroyer units to attend courses there in any given year.

The School was directed to submit to the War Department an outline of courses to be conducted and to make recommendations to the War Department for the training in existing schools of officers and enlisted men required to start the School and other elements of the Center.

Accordingly, the Tank Destroyer School was organized: to teach the tactics and technique of tank destroyer employment, emphasizing practical instruction applicable to training and leading tank destroyer organizations; to furnish key tank destroyer personnel with a working familiarity with the tactics and techniques of associated arms; to train selected officers and enlisted men for special technical duties in tank destroyer units; and to furnish qualified officers and enlisted men for the cadres of new tank destroyer organizations.²

The task of organization and operating the Tank Destroyer School was delegated by the commanding officer of the Center to Lieutenant Colonel (later Brigadier General) Hugh T. Mayberry, who reported to the Center on 3 December 1941 and was detailed as Assistant Commandant to the School.³

Colonel Mayberry's experience as a member of the staff and faculty of The Infantry School, Fort Benning, Georgia, provided him with an excellent understanding of the problems connected with the organization and operation of the Tank Destroyer School. He continued as Assistant Commandant until 27 May 1942, when he was named Commandant of the School, and directed the School's activities from its pre-activation planning period to its establishment at Camp Hood, Texas, as one of the largest and finest Army special service schools.⁴

Upon reporting to Fort Meade, the Assistant Commandant was faced with a number of problems, the immediate solution of which was essential to the early activation and operation of the Tank Destroyer School. The most important problems were those connected with the administrative organization, the planning of courses of instruction and the formulation of master training schedules, the selection and training of a staff and faculty, and the development of a table of organization and equipment for the School,⁵ and the submission of recommendations for the construction of the School's buildings.

It was initially planned to organize the School into five academic departments for instructional purposes, and the first seven officers detailed to the School by the Center in December 1941 were assigned to the tactics, weapons, pioneer, and communications departments.

The initial efforts of the Assistant Commandant and his staff were concentrated on the planning of courses of instruction. Initial plans were submitted to the Assistant Chief of Staff, G-3, War Department, on 15 January 1942,⁶ and on 3 February 1942 the War Department announced its official approval of the following courses:⁷

Officer Courses

<u>Course</u>	<u>Number of Students</u>	<u>Length</u>
Automotive Maintenance	40	12 weeks
Basic Tactical	80	12 weeks
Pioneer	40	4 weeks

Enlisted Courses

Communications	74	6 weeks
Pioneer	74	4 weeks
Weapons and Gunnery	370	8 weeks
Motor Mechanics	74	12 weeks

To carry out the instruction planned, the School was then confronted with the problem of instructors. Available officers were not qualified so the School, through the Center, effected the sending officers and enlisted men to various established schools for training, from which they returned as instructors to the Tank Destroyer School.⁸ By 20 March 1942, 29 officers and 209 enlisted men were attending the Armored and other special schools.⁹

The problems of the great number of instructors required from the beginning of the School was thus only partly solved. In addition, the School obtained from any and all branches available officers. Very few of them had any teaching background and fewer still knew anything about training in antitank or tank destroyer technique.¹⁰ To prepare them as instructors, the School established a thorough "Methods of Instruction" course, which was a continuing project. This course designed and instituted by the Tactics Department was of 14 hours length and was given in two-hour evening sessions to each group of newly arrived instructors.¹¹

Each instructor was required to demonstrate proficiency in form and material before he was classed as qualified. At that time there was no field manual covering tactics and doctrine, but the School officers evolved their tactics and doctrine from the description of the ideal tank destroyer,¹² and its characteristics in action. To improve officers in lecture technique, current events were discussed in conferences beginning in March 1942.¹³

The instructor problem was being met, but the Army Ground Forces policy of relieving officers of troop age after one year's duty with any special service school, which was announced on 7 April 1942, presented a new personnel problem.¹⁴ In order to procure officers not subject to this rotation plan, steps were taken to secure the commissioning of men who had served as officers overseas during World War I. These officers were assigned to positions in the School commensurate with their civilian experience and skills.¹⁵ Later, as the instructor staff expanded, officers were assigned to understudy key personnel, so that the School was not deprived of qualified officers by transfers incident to the rotation plan.¹⁶

One of the principal reasons for the Tank Destroyer Tactical and Firing Center's moving to Temple, Texas, before the completion of facilities on the Camp Hood reservation was to allow the Center's training elements--the School and the Unit Training Center--to begin instructing tank destroyer personnel as soon as possible.

The need for some degree of standardization in the training of existing tank destroyer battalions was acute. Accordingly, the School on 24 March 1942 requested authority from Army Ground Forces to conduct an officers' orientation course designed to train inspector-instructors for tank destroyer organizations and for the higher headquarters to which they were attached.¹⁷ Approval was granted on 8 April for a four weeks' course to begin on 4 May 1942.¹⁸

Two hundred and sixty officers attended this course, which was the first training to be conducted by any element of the Tank Destroyer Command.¹⁹ (The Tank Destroyer Tactical and Firing Center was redesignated as the Tank Destroyer Command on 14 March 1942.)²⁰ Since no housing was available in the cantonment area, the students were quartered in private homes in Gatesville, Texas, near the northwestern boundary of the reservation. Classes were conducted on the reservation, except in inclement weather, when the auditorium of the Gatesville municipal building was used.²¹ Firing was conducted on three temporary ranges operated by a detail from the School Training Regiment. Demonstration units and assistant instructors were furnished by the 893d Tank Destroyer Battalion and the 753d Tank Battalion (Medium) both bivouacked on the reservation for duty as school troops.²²

The course included instruction in the use of tank destroyer weapons and equipment, operation and employment of tank destroyer units, tank destroyer tactical doctrine, tables of organization and allowances, proper training programs for tank destroyer organizations, and methods of training inspection. Officers received this instruction from the School's five academic departments and from the Unit Training Center, which presented demonstrations of tactical employment and of tank hunting.

The school conducted a second officers' orientation course from 4 to 30 June 1942. This class was attended by 236 officers, of which number 32 were assigned to the Tank Destroyer Command.²³ During this period, the School's demonstration troop requirements were coordinated by Headquarters, School Troops which began operating 1 June 1942 when the 893d Tank Destroyer Battalion and the 753d Tank Battalion, and the Tank Destroyer School Band was assigned to it.²⁴

During April and May a book shop, a reproduction department and a library were established for the School.²⁵

Although the operation of an Officer Candidate School was not included in the initial plans for the Tank Destroyer School, Colonel Mayberry foresaw its need. He detailed a member of his staff to study existing officer candidate schools and to plan a program of instruction for such a school. This program was completed on 27 April 1942.²⁶ Thus when the War Department directed on 23 June 1942 the immediate establishment of a Tank Destroyer Officer Candidate School, with a capacity of 2100 to be reached by 15 October 1942, plans were ready.²⁷

The expansion and reorganization of the Tank Destroyer School required by its increasing activities, began on 15 July 1942, when the School Service Regiment was redesignated the Student Regiment and the activation of the School on 9 March 1942, was confirmed and made of record.²⁸ The Tank Destroyer Command activated the Tank Destroyer Officer Candidate School on 16 July 1942, and assigned it to the Tank Destroyer School.²⁹

On the same day, the Tank Destroyer School activated the following organizations:³⁰

School Headquarters.

Academic Division, consisting of a headquarters and eight departments--automotive, communications, officer candidate school department, pioneer, publications, reproduction, tactics, and weapons.

Academic Regiment, consisting of Headquarters, Headquarters and Service Company, and four lettered companies.

Officer Candidate School Regiment, consisting of Headquarters, Headquarters and Service Company, and two battalions of seven numbered companies each (the two battalions of seven numbered companies each were never organized in lieu thereof the Regiment was organized with twelve lettered companies).³¹

Student Regiment, consisting of Headquarters, Headquarters and Service Company, the Student Officers' Battalion of four lettered companies, and the Student Enlisted Battalion of eight lettered companies.

The scope and delineation of functions of the entire organization was excellently portrayed by their organizational charts.³²

The School's internal organization appeared at all times to be patterned according to the fabric of its instructional missions and caused little difficulty of itself. The Academic Division was later inactivated³³ but this was to effect full compliance with Army Regulation 345-400, and resulted in all Academic Division personnel being assigned to the Academic Regiment.³⁴

One of the initial problems of the School was in getting orthodox textbooks published which were to be used as a basis for its instruction. The time lag between the composition of the subject matter and its submittal to a higher headquarters, until final approval, tended to muddle and throttle action. This problem was accentuated by the placement of the School under the jurisdiction of the Replacement and School Command, 30 July 1942,³⁵ which further involved continuity and celerity of action over the assigning and reassigning of personnel.

Due to the efforts of the School and Tank Destroyer Center, the School was again made the responsibility of Tank Destroyer Center but not until 15 March 1943.³⁶ The Tank Destroyer Center's jurisdiction was again withdrawn on 11 November 1943.³⁷ Jurisdiction was again re-established over the School by Tank Destroyer Center on 28 December 1944.³⁸

The officers of Tank Destroyer Center and of the School felt that jurisdiction exercised by Tank Destroyer Center, recommended by an over-all inspection by Replacement and School Command, materially aided the expeditious action required by higher headquarters.

A further problem confronting the School was that of obtaining equipment. Many items of equipment were not standardized at that time and had to be purchased in the open market where priorities were allocated to the School for approximately its first three months of existence and after funds were allocated, the School had to secure \$26,000 worth of tools for the automotive department. Motors which were highly essential were almost impossible to secure. They were finally obtained through the cooperation of the 8th Corps Area Headquarters which made available a number of old Civilian Conservation Corps vehicles which had been inventoried and condemned and were stored at Lufkin, Texas.

Instruction in the Tank Destroyer School, which had ceased with the completion of the second officers' orientation course on 30 June 1942, was resumed on 20 July 1942, when the first officer candidate class of 150 students began classes at Gatesville, Texas. These candidates were selected from tank destroyer battalions bivouacked on the Camp Hood reservation.³⁹ In accordance with War Department direction, a new class was begun each week, the first four reporting at Gatesville, and the source from which candidates were drawn was broadened to include the entire Army. Classes at Gatesville were conducted on the reservation and in municipal buildings. Students were quartered in public schools, tents, and in an abandoned Civilian Conservation Corps camp.

The School moved its headquarters from Temple to Camp Hood on 14 August 1942, the first element of the Center to occupy permanent quarters in the cantonment area.⁴⁰ The fifth officer candidate class reported at Camp Hood, and the four classes at Gatesville moved into the cantonment on successive week-ends so as not to interrupt their training.

The largest number of candidates ever present was 2,005 on 28 December 1942, when the twenty-third class began training.⁴¹ This enrollment was only slightly less than the 2,100 maximum authorized by the War Department's directive of 26 June 1942, which ordered the establishment of the Tank Destroyer Officer Candidate School.⁴²

The graduation requirements of the school stressed leadership. The leadership rating of a candidate was determined chiefly by his company commander and platoon leader, based upon their observation of his conduct of command and physical training exercises, his weekly assignments as a student officer or non-commissioned officer, and his execution of practical work in classes. Two ratings were submitted by the members of each platoon on their classmates. Demerits given candidates by their officers for miscellaneous delinquencies were also considered in determining a candidate's leadership capability.⁴³

The faculty board which considered doubtful candidates during the eleventh week of the thirteen-week course adopted a policy of allowing students weak in academic subjects but not adjudged lacking in leadership to repeat parts of the course failed. Successful completion of academic work on the second attempt by these candidates resulted in their graduation. Students whose leadership was not satisfactory were relieved at the end of the eleventh week. All doubtful candidates appeared before the board and were given an opportunity to make any statements they desired.⁴⁴ The system of leadership rating was modified in December 1942 to include semi-weekly rather than weekly assignments of students to command positions.⁴⁵ In June 1943, a new efficiency report for the use of company commanders and platoon leaders was introduced to make their ratings of candidates more accurate by basing them upon the candidates' demonstration of specific traits of leadership.⁴⁶ The new system reduced the emphasis on student conduct of command and physical training exercises as a means of judging leadership and gave greater weight to the other component parts of the rating scale. At the same time, company commanders were permitted to recommend the release of weak candidates at the end of the fifth week of training.

The reduction in the size of classes from 175 to ninety men in February 1943, facilitated close observation of candidates by their officers,⁴⁷ and the introduction of a week's field training in April 1943 gave an additional opportunity for students to demonstrate their capabilities.⁴⁸

The problem of rating candidates in leadership was complicated by the varied experience of the students prior to their attending the Tank Destroyer Officer Candidate School. This complication was alleviated somewhat in July 1943. The quota for volunteer officer candidates was greatly reduced as a result of the Army's accepting no more such candidates after February 1943. In July 1943, it became the policy to place all

students from the Reserve Officers' Training Corps in the same classes, whenever possible. The situation was further improved as the military experience of other candidates became more uniform, all having completed at least a basic training program.⁴⁹

As originally organized, the instruction in the Officer Candidate School was divided as follows:⁵⁰

Weapons department--227 hours devoted to antiaircraft fire, pistol and revolver, carbine, grenades, light machine gun, .50 caliber machine gun, Thompson sub-machine gun, 37mm antitank gun, 75mm gun, aircraft identification, and close combat methods.

Tactics department--170 hours devoted to air-ground liaison, armored force tactics, combat orders, current events, defensive employment, general subjects, offensive employment, reconnaissance, security and command, staff, and logistics.

Pioneer department--29 hours devoted to map reading and aerial photograph interpretation, antitank mines, bridges and roads, camouflage, demolitions, engineer reconnaissance, engineer tools and equipment, and obstacles.

Automotive department--26 hours devoted to the army system of maintenance, inspection of motor vehicles, nomenclature and functioning of major assemblies, principle parts and installations, preventive maintenance, formal and informal inspections, field maintenance and operation, and tank identification.

Communications department--15 hours devoted to antitank warning nets, characteristics of tank destroyer radio sets, communications in the tank destroyer battalion, voice procedure, and operations of various radio sets.

General subjects committee--113 1/3 hours devoted to command training, company administration and mess management, defense against chemicals, efficiency reports, medical service in the tank destroyer battalion, military law, physical training, sanitation, hygiene and first aid, military discipline, and social customs and courtesies.

By March 1943, the original curriculum had been modified by reducing the hours devoted to general subjects and communications and by increasing the time devoted to automotive, tactics, weapons, and pioneer instruction, the greatest increase being in pioneer training.⁵¹

On 10 July 1943, the length of the officer candidate course was increased to seventeen weeks.⁵² Instruction was increased in all courses, but principally in tactics, weapons, and automotive training. Much of the increased time was devoted to practical work, the students receiving a total of 471 hours of such instruction.⁵³ In addition, the time devoted to command and physical training exercises and school of the soldier, under the supervision of Officer Candidate School Regiment company officers, was increased.

With the lengthening of the course to seventeen weeks, the number of classes reporting was cut from one each week to one every two weeks. In August 1943, this was further cut to one new class per month, and the number of companies in the regiment was reduced from twelve to eight. By 30 October 1943, a total of 4,929 candidates had been graduated from the Tank Destroyer Officer Candidate School.⁵⁴ On 15 November 1943, six officer candidate companies, totaling 275 students, were in training. Of these, 175 were candidates from the Reserve Officers' Training Corps.⁵⁵

Late in 1943 the Officer Candidate School Department at the Tank Destroyer School experimented with a Combat Adaptability Test developed by Dr. Ernest M. Ligon, Expert Consultant to the Secretary of War, with the object of discovering a reliable method of selecting successful combat officers. The approach involved an analysis of the "job elements" of the combat leader's work; among these were ability to instruct his men in their mission, to reach his objective, to get his men to cooperate, to keep his head when things went wrong, to foresee what the enemy would likely to do, etc. A rating scale was developed to record the judges' estimate of the candidate's possession of these traits, and the candidate was placed in several test situations in which, presumably, the traits or their absence would be revealed. While a group of four or five judges observed and rated the candidate, he was first interviewed for ten or fifteen minutes. On the basis of his answers to a list of questions--all questions were the same for all candidates--the judges were to rate some of the desired "job elements"; thus, ability to get men to cooperate was inferred from the subject's response to such a question as "How would you deal with stubborn subordinates?" After the interview, the candidate was given a short time in which to prepare and deliver a two-minute talk to an imaginary platoon about to go into battle for the first time. This test revealed to the judges something of the candidate's performance under stress, his power of expression, and his ability to command attention. To get more direct evidence on the subject's ability to work under pressure, the judges placed him in two "stress situations." Against time, he was required to solve a map problem and to translate two different codes sent alternately by two senders. As he worked he heard a battle noise recording through an earphone, felt periodic shocks applied through a shock device strapped to one wrist, had his chair violently shaken by a vibrator, and breathed with difficulty through the partially closed intake of the gas mask he wore.

The combat adaptability test was used on the last three officer candidate classes at the Tank Destroyer School. No relationship was discovered between the test ratings and the regular Officer Candidate School rating scale, or between the test and the AGCT scores, age, height, weight or education. There was a slight correlation with scores on the Officer Candidate Test (OCT). Since the Tank Destroyer School closed soon after the experiment was undertaken, no complete findings or revisions were possible.⁵⁶

Of the three principal ratings made on each man--academic rating, tactical officer's rating, and fellow candidate's rating--the last two carried the greatest weight because they revealed the candidate's leadership ability. A man whose leadership ability was high but whose academic average was low would probably be commissioned; a man whose grades were high but whose leadership was thought mediocre or poor would probably not be commissioned.

The Officer Candidate School Regiment was disbanded 16 May 1944 with the completion of its 54th class.⁵⁷

The Tank Destroyer School's first courses for officer and enlisted specialists began on 17 August 1942, with instruction starting in officers' automotive, pioneer, and basic tactical courses and in the enlisted pioneer course.⁵⁸ These courses ranged in length from 4 to 12 weeks and the length of the courses and the number of officers attending were modified from time to time to achieve the most thorough instruction possible.⁵⁹ Instruction was given by all academic departments of the School.

On 7 November 1942, a basic orientation course was inaugurated. It was attended by sixty officers, principally recent graduates of schools other than the Tank Destroyer School, and was designed to familiarize them with subjects peculiar to tank destroyers. As in the advanced orientation course, instruction was given by all School's academic departments. Unlike the advanced course, however, the emphasis was on subjects applicable to the work of company grade officers of tank destroyer organizations. The course lasted four weeks and was discontinued after two courses

had been conducted.⁶⁰ A third officers orientation course with a duration of four weeks, began on 12 October 1942. This course was for commanders and staff officers with prior tank destroyer training.

The officers' advanced orientation course was initiated by the School on 7 December 1942,⁶¹ to indoctrinate the students with correct tank destroyer doctrine, tactics and technique of employment.⁶² This course was discontinued 6 February 1943 and replaced by a six weeks officers advanced tactical course which began 8 February 1943 with an enrollment of 100 officers.⁶³ The major portion of this course was conducted by the tactics department, and the emphasis was placed on problems likely to be encountered by commanders and staff officers in combat.⁶⁴ The first classes received their field training under the supervision of the Advanced Unit Training Center. Coordination of the School and Center schedules being difficult and often unsatisfactory, on 26 June 1943, the School recommended to the Replacement and School Command that the course be modified to include field exercises under School supervision.⁶⁵ This request was approved by Army Ground Forces on 12 August 1943.⁶⁶ Its revision was recommended on 4 August and approved on 11 September 1943, to include more practical work and less classroom instruction.⁶⁷

The School inaugurated an officers communications course on 27 March 1943 to meet the urgent need for qualified communications officers in newly activated tank destroyer organizations.⁶⁸ A rising need for qualified company grade officers in newly activated organizations resulted in the starting of a new unit officers course on 1 May 1943. This instruction was similar to the basic tactical courses which had been discontinued.

A four weeks' officers' advanced course in the maintenance and operation of motor vehicles, with emphasis on the 76mm gun motor carriage T-70, was begun by the automotive department on 14 September 1943. Forty students were enrolled, all of whom were required to have completed satisfactorily a basic motor course at an Army service school, and a new class reported every four weeks.⁶⁹ The name of the course was changed to the officers' full-track vehicle course on 16 September 1943.⁷⁰

Enlisted courses for tank destroyer personnel in the pioneer, weapons, communications, automotive and other classes, were initiated in August 1942 and the training in each subject was designed to produce specialists who, in turn, could conduct thorough instruction with their units.

The School reached its largest enrollment on 1 January 1943, when there were 4,810 students in the following courses:⁷¹

NAME OF COURSE	NUMBER OF COURSES IN SESSION	TOTAL NUMBER OF STUDENTS
Officers automotive	3	142
Officers advances orientation	1	40
Officers basic orientation	1	63
Officers pioneer	1	68
Officers basic tactical	3	260
Enlisted motor	9	584
Enlisted communi- cation	6	515
Enlisted pioneer	1	107
Enlisted weapons	8	1,039
Officer candidate	12	1,992
Total		4,810

During its organization and through 1942 and 1943, the Tank Destroyer School had initiated schools and instruction to cover the needs that were arising throughout the units of the tank destroyers.

In 1944, with the demand for trained personnel decreasing, the School necessarily curtailed activity. Student capacities were reduced in January 1944 and the School overhead, both enlisted men and officers, in excess of requirements, was made available to the Replacement and School Command for reassignment. On the basis of a survey of training needs of field units, Headquarters, Army Ground Forces directed on 14 February 1944 the following changes in the capacities of classes at the Tank Destroyer School:⁷² The officers' advanced class was to be increased approximately 60% in capacity and all other classes were to be reduced approximately 30 - 40 %.

With the discontinuance of the Unit Training Center and the Training Brigade, the 22d Tank Destroyer Group of three tank destroyer battalions, one tank battalion and other special troops, were transferred to the School for administration and for use as school troops. For the greater part, the administration of the troops was delegated to the commanding officers of the several units but was supervised and coordinated through the School Assistant Executive Officer.⁷³

Brigadier General E. J. Dawley, F.A., a veteran of the Mediterranean theatre, assumed command of the Tank Destroyer School on 26 February 1944 upon the departure of Brigadier General Hugh T. Mayberry. General Dawley enlivened the tempo of activities at the Tank Destroyer School by accentuating realism, accuracy, perfection and teamwork in all School activities. He emphasized accuracy, followed by speed developed to the acme of perfection.

During the period from 1 March 1944 to 31 October 1944, there were drastic reductions in the overhead personnel of the Tank Destroyer School. The overhead decreased 1492 as opposed to a reduction of 1613 students.⁷⁴ This drastic reduction in overhead was met by instructors' assuming additional duty.

Brigadier General Dawley was succeeded as Commandant of Tank Destroyer School by Brigadier General Miles A. Cowles on 30 June 1944. General Cowles was also a veteran of the Mediterranean theatre of operations. While continuing the policies of his predecessors, General Cowles was particularly interested in the tactics and employment of tank destroyers because of adverse criticism in theatres of operation with respect to their boldness and their over-all employment. Through successive demonstrations, he, with his School faculty, attempted to find and exploit the proper use of tank destroyers in integrated action.⁷⁵

A new organization of the School was effected on 17 November 1944, whereby the Tank Destroyer School Regiment was redesignated Tank Destroyer Battalion and Headquarters and Service Company, and Companies A and B of the Regiment were redesignated Headquarters and Service Companies A and B of the School Battalion.⁷⁶ The WAC Detachment on duty at the School was disbanded during November, their duties being assumed by civilian personnel and Class "D" personnel. School troops were cut to one battalion.⁷⁷

The personnel problem was the major problem during the last few months of Tank Destroyer School activities at Camp Hood. The War Department policy was that of release of able-bodied and troop age personnel for combat duty. The problem presented was the utilization of limited service personnel and personnel returned from foreign service, most of whom knew little or nothing of tank destroyer procedure. There appeared to be but one manner of solving this problem and that was the doubling up of duties by those capable of instruction and the installation of classes for the training of new school instructors.⁷⁸

Brigadier General Kenneth G. Althaus became acting Commandant of the Tank Destroyer School on 25 May 1945. As a veteran combat commander of the 10th Armored Division under General Patton in Europe, he brought to the School the viewpoint of an armored force commander. Frankly stated, this viewpoint was that despite the physical similarity of tanks and tank destroyers, the primary missions of the two were widely divergent. General Althaus appreciated the capabilities of tank destroyers and was of the opinion that they should be specialists or a separate arm so long as their primary mission was different from that of any other arm or group of specialists.⁷⁹

A valuable lesson indicated during this period was the necessity for liaison between the School and Redistribution Stations. Without such liaison, the School did not know which of the officers or personnel returned to the United States were capable of conducting proficient tank destroyer instruction.⁸⁰

SUMMARY: Unlike the majority of service schools, the Tank Destroyer School was started from naught and in the beginning, there was no basic structure upon which to build or to enlarge, no established doctrine, no standardized plan of instruction, and no equipment with which to operate. With the war raging and the need for trained tank destroyer personnel very acute, the School had to assume the proportions and develop the efficiency of an old, well-established and tremendously large teaching institution.

The initial problems of the Tank Destroyer School were concerned mainly with organization, personnel and equipment.

With respect to organization, tables of over-head allotment and distribution were evolved concurrently with the acquisition of students and the main difficulty experienced in organizing the School and setting up a table of organization was the fact that capacities for students varied every few weeks, thereby causing uncertainty as to what the School required. This problem was met by the School by pre-planning and then recasting the organization as dictated by the trial and error method.

With respect to personnel, the problem was most salient. Officers and enlisted men had to be quickly obtained as instructors and there were no men in the entire Army who were qualified in the basic tank destroyer subjects, or the new doctrine and new weapon which, at that time, was more or less spectral. The School solved this problem by first having the officers and enlisted men train in basic military subjects at other schools; then further training officers and enlisted men through orientation, unit and advanced unit courses. To meet the problem of rotation of officers and other personnel, officers and enlisted men over-age in grade and on limited service were sought as instructors. This resulted in standardized teaching methods and tended to stabilize organizational effort.

The problem of equipment for the Tank Destroyer School in the beginning was most acute. What was not issued, they sought and bought on open market and, in addition, they proved most adept at borrowing equipment from the Unit Training Center and the other tank destroyer organizations.

In all of the instructional activities of the School, it was evident that aggressive and competent combat leadership was the goal desired. The effort to develop strong combat leaders was especially manifested throughout the activities of the Tank Destroyer Officer Candidate School.

The later problems of the School were minor compared to those in the beginning. They were personnel problems. Trained officers and enlisted men needed as instructors

were lost to the School by reason of the over-all War Department needs. These difficulties were met by doubling up of time and effort on the part of those who knew the standards of tank destroyer training, and by teaching the doctrine and technique of tank destroyers to new men during over-time periods.

CHAPTER XI

THE TANK DESTROYER UNIT TRAINING CENTER

The Unit Training Center was activated as an element of the Tank Destroyer Tactical and Firing Center on 9 March 1942, with Major Noble J. Wiley, Jr. as Executive Officer and Colonel (later Brigadier General) Richard G. Tindall commanding.¹ Colonel Tindall and Major Wiley, because of zealous antitank work with the 93d Antitank Battalion during the October-November 1941 maneuvers of the 1st Army in North and South Carolina, were well qualified to meet the challenging problems of the Unit Training Center.²

The mission of the Unit Training Center was that of training tank destroyer units to the point of blotting out and erasing any fear of armored forces; establishing superiority in maneuver and gunfire; and fitting the unit to receive profitably combined training with other forces in maneuvers conducted by higher headquarters. In conducting this training, the Unit Training Center operated essentially as a Tactical and Firing Center, without slighting in any respect the specialist instruction necessitated by tank destroyer requirements.

Without a uniform training schedule for tank destroyer organization, the Unit Training Center's first concern was the preparation of a Mobilization Training Program to coordinate the basic training of all tank destroyer units in order to secure an appropriate uniform stage of their training upon their arrival at the Center. A schedule prepared by the Unit Training Center was published by the War Department on 1 April 1942, as Mobilization Training Program 18-1.³

This program provided for 19 weeks of training - 6 weeks basic and 13 weeks technical and tactical training. The basic instruction was comparable to that given at a replacement training center but the technical instruction was designed to make all personnel expert with their principal weapons or in their specialist duties. In the tactical phase, the coordinated action of the squad, section, platoon, company and battalion, was taught.

The original plan called for a Unit Training Center with a capacity of six battalions, three to be attached to each of two training groups to be organized by the Center.⁴ Accordingly, the First and Second Tank Destroyer Training Groups were activated by the Center early in June 1942.⁵ Meanwhile, the need for the unit training of tank destroyer battalions became so acute that nine battalions were ordered to report to the Center in June, 1942, and preparations to receive them were hurried during May.⁶

Bivouac areas for the battalions were located on the Camp Hood reservation, and a former farm house was selected for Center headquarters in the field. On 29 May 1942, only ten days before the first battalions were expected to arrive, 156 privates reported from the Infantry Replacement Training Center, Camp Wolters, Texas for duty as assistant instructors.⁷ Eighteen qualified non-commissioned officers were transferred from the 893d Tank Destroyer Battalion, which had arrived at Camp Hood in April, to augment the assistant instructor staff, and an intensive program of training for this personnel was inaugurated.⁸

An exceptional innovation in training was added at this time. Captain (later Lieutenant Colonel) Gordon T. Kimbrell of the Unit Training Center staff, who was at that time the only American graduate of the English courses in commando tactics, initiated a Battle Conditioning Course at the Center which later became a model for similar courses throughout the Army.⁹

With the advance echelon of the Center headquarters moving into a farmhouse on the reservation, the nine Tank Destroyer Battalions were met as they detrained at Copperas Cove, Texas, and placed in bivouac areas. Five battalions were attached to the First Training Group and four to the Second Training Group.¹⁰ These battalions were at a sufficiently advanced stage of training to permit the omission of the 6 weeks basic training course and to allow the reduction of technical and tactical training from 13 weeks to 2 months in some cases. The length of time each organization remained at the Unit Training Center was determined by its proficiency one month after commencing instruction there and by the status of its equipment and personnel.¹¹

While at the Unit Training Center, battalion officers exercised normal command functions and retained responsibility for the training of their units. Training Groups exercised general supervision and control over the training of battalions attached to them and were responsible to the Center for the training of such organizations.¹² Most of the instruction in the battalions was given by its assigned officers and non-commissioned officers. The training groups furnished officer and non-commissioned officer inspector-instructors to train the battalion's own teaching personnel and to supervise instruction. The inspector-instructors also conducted some specialist training themselves.¹³

The difficulties which confronted the Unit Training Center in beginning its program of training were colossal. Housing facilities were non-existent and equipment was scarce. Simulated tank destroyers maneuvered against simulated tanks over terrain almost devoid of roads. Firing was conducted on improvised ranges. There were no training aids. So few radios were available that practically no communications training could be given.¹⁴ The harassing problem of equipment shortage was met in part by pooling available equipment and by borrowing from Tank Destroyer units.

The scarcity and poor condition of roads from railheads to field camps made supply difficult. Drinking water had to be hauled from water points on creeks in the reservation, and very little water was available for bathing or for washing vehicles. As the summer progressed, creeks dried up; and new water points on larger streams had to be located. New battalions, arriving before the first battalions departed, made the location of even more new bivouac areas and water points necessary.¹⁵

Health conditions presented a serious problem. Black widow spiders, mosquitoes, chiggers, and poisonous snakes were hazards as well as sunstroke and heat exhaustion. The nearest hospital facilities were at Camp Bowie, Texas, approximately 100 miles away and, in case of an emergency, the Waco Army Flying School Hospital, approximately 50 miles away. These difficulties were dealt with in turn, established military doctrine pointing to a feasible solution in each case.

While not uncommon to other military installations, the multiplicity of these minor problems compounded the major problem of expediting training. Despite the handicaps incident to the location of field camps, the training of the first battalions by the Unit Training Center progressed rapidly in accordance with the detailed schedules in Mobilization Training Program 18-1.

As a result of the efficient training under these carefully prepared schedules, six battalions were shipped out in July with less than eight weeks instruction.¹⁶ This celerity of training was to meet the demand of Army Ground Forces for units ready for combined training. It was, however, expedient in nature and with the need for tank destroyer battalions temporarily alleviated, on 1 August 1942 it was decided that units arriving at Unit Training Center thereafter would remain for a full course of technical and tactical training.¹⁷

Tank destroyer battalions coming to the Center after August 1st showed a general deficiency in basic training. While this was normal for newly activated battalions, it presented a major problem to the Unit Training Center and resulted in the activation of the Basic Unit Training Center on 27 November 1942.¹⁸ In anticipation of this element's establishment, the Unit Training Center was redesignated as the Advanced Unit Training Center on 17 August 1942.¹⁹

During August and September 1942, the Advanced Unit Training Center and its units occupied housing facilities available at Camp Hood for 18 battalions. Facilities were also available for 4 additional training groups but these were never activated. This left the Center with only two training groups and in the meantime, the 1st, 2d, 3d, 4th, 5th, 6th and 7th Tank Destroyer Tactical Groups had been formed with the last 4 tactical groups activated at Camp Hood and assigned to the Center.²⁰

With five tactical groups in the Center and only two training groups authorized, a reorganization of the Center was effected 21 September 1942 to relieve the administrative burden then borne by the two training groups. All tank destroyer battalions attached to the Center were attached to the tactical groups for administrative purposes. Relieved of administrative problems, the First Training Group conducted instruction in tactics, communications and pioneer work, and the Second Training Group taught weapons, gunnery and automotive work. The tactical group headquarters were responsible for their own training and the supervision of administration and training of the battalions attached to them.²¹

The status of tactical groups was clarified by Training Memorandum 18 March 1943 which specified that group commanders were responsible for the training of their own group headquarters and headquarters company and for assisting in the training of battalions under their control. The training program for the group headquarters company paralleled in general that prescribed for battalion headquarters company. Much of the technical instruction was accomplished by attaching group personnel to battalions in training. Group staffs were trained by direct instruction from the group commander, by command posts and tactical exercises, and by practical work in receiving and clearing battalions and by supervising and inspecting battalion training and administration. The group commander was responsible for the correction of deficiencies noted in the training of battalions under his supervision.²² On 13 October 1942, the 8th and 9th Tank Destroyer Groups were activated at Camp Hood and assigned to the Advanced Unit Training Center.²³ and two days later, the 3d Tank Destroyer Group arrived from Camp Bowie, Texas.²⁴

Renewed demands by Army Ground Forces for tank destroyer battalions again necessitated shortening the training period, for some organizations, to two months, but by 29 October 1942, the program of the Advanced Unit Training Center assumed a definite form which continued thereafter without any important modification.²⁵ Three months training was scheduled and this period was divided into five weeks of firing under the Second Training Group and six weeks of tactical instruction under the First Training Group with one week on the Battle Conditioning Course.

An analysis of the activities of the Second Training Group, the Battle Conditioning Department and the First Training Group revealed parallelism of training effort of the Unit Training Center, the Basic Unit Training Center and the Tank Destroyer Replacement Training Center.²⁶ Such duplication of effort was due to: large number of units and personnel to be trained in shortest time possible; lack of uniformity in stage of training of many units; and the delay in establishing the Tank Destroyer Replacement Training Center.²⁷

The purpose and mission of the Second Training Group of the Unit Training Center was identical with that of the basic training outlined in Mobilization Training

Program 18-2, 11 July 1945, for Tank Destroyer Replacement Training Center, except that new personnel were trained in newly activated units rather than as replacements for an experienced unit. The purpose and mission of the First Training Group was the same as that given the Tank Destroyer Replacement Training Center in paragraph 8 of Mobilization Training Program 18-2, covering tactical training, except that the Unit Training Center through its groups and brigades, carried teamwork into the company, battalion, group and brigade.

From analysis of the training conducted by both the Second Training Group, the Battle Conditioning Department and the First Training Group, it appears that Mobilization Training Program 18-5, 11 July 1945, was a refinement of the principles of tank destroyer training initiated by the Unit Training Center in 1942.^{XX}

Preparatory, technical, and range firing training were all outlined in the Second Training Group's master training plan. To aid battalions in preparing for range firing, the group published training guides on: preparatory marksmanship for the 75mm and 3 inch guns, placing the 75mm destroyer in action, range cards and data charts, target designation and range estimation, and standing operating procedures for the various ranges. The group also provided such training aids as drill and dummy cartridges, transparent sight reticles, sighting and aiming bars, rifle rests, and instruction charts.²⁸ Small arms courses included field firing with the rifle, night and antiaircraft firing with the light machine gun, and field and antiaircraft firing with the .50 caliber air-cooled machine gun.

An outstanding innovation in training by the Second Training Group was sub-caliber firing at buttressed-up moving tanks equipped with periscopes. Introduced in March 1943, this proved to be one of the most valuable features of the entire weapons training program, affording gun crews marksmanship training more nearly approaching actual combat than could have been devised in any other manner. The targets were light tanks which were reinforced with 1/4 inch armor at points vulnerable to small arms fire. Drivers were protected from bullet splash by special shields.²⁹

In June 1943, a new method of night target designation was developed by the Second Training Group. Range was determined by machine gun tracer fire and announced to a tank destroyer section. One gun was laid at the announced range and the other gun in the section at a range 100 yards short. A delayed fuse setting was used. Both gunners observed the tracers and fired at will. In a test of this method, three targets were destroyed with the expenditure of only three rounds per gun for each target.³⁰

In accord with Unit Training Center policy, the forms used by the Second Training Group were held to a minimum. Only three were used consistently--a report on the conduct of range firing, a training inspection report, and an all-purpose inspection report. The group issued periodical directives covering such subjects as pre-firing orientation, range policy, instructions for long range firing at stationary targets, sequence of fire orders and sensings, care and cleaning of tank destroyer weapons, and critiques.

After six weeks of basic instruction, units were introduced to the Battle Conditioning Course. Captain (later Lieutenant Colonel) Gordon T. Kimball, as acting S-3 of the Unit Training Center, was detailed by the Commanding Officer to develop a course in commando tactics as applied to the destruction of tanks.³¹ With the assistance of Captain (later Major) Ralph W. Sleator, formerly of the United States Border Patrol, he completed plans for such a course in May 1942. At that time, the first demonstration of "tank hunting" tactics was staged for the Tank Destroyer School's first officers' Orientation Course.³² At first the "tank hunting" course consisted of: an obstacle course and instruction in crawling across an open field; "wild west" hip shooting with pistol, submachine gun, and rifle; street fighting, manufacture and use

improvised grenades; and "tank hunting" raids and ambushes. Because of the wide scope of instruction, the name "tank hunting" was dropped in favor of "Battle Conditioning" course in April 1943.³³

Early in the same month, permission was received from the Tank Destroyer Center to experiment with the use of live ammunition in training. For the first time in the history of the United States Army, troops were subjected to grazing machine gun fire twelve to eighteen inches above their heads while they crawled across an open field in which explosives were detonated in their midst. This was the origin of the infiltration course, now standard throughout the Army as preparation for combat. The methods of street fighting, woods fighting, and close combat firing--taught by the battle conditioning department of the Unit Training Center--were copied extensively by other training installations.³⁴

Instruction was improved and expanded in accordance with information secured through military intelligence sources and reports of overseas observers. New classes added, included night firing in which small arms were fired at the flickering gleam of a flashlight bulb, the rattle of a tin can behind a target, and at other unseen marks.³⁵

In conjunction with this training, the tank destroyer battle firing position was developed--a crouch with the pistol held directly in front of the belt buckle or with the butt of shoulder weapons resting in the pit of the stomach. Aimed by ear rather than by eye, fire from this position was phenomenally accurate in daylight as well as in darkness. Units firing in the darkened tunnels of the battle conditioning course consistently averaged eighty-five per cent hits as compared to an average of fifty per cent hits on similar targets with aimed fire in daylight.³⁶ Two additional Battle Conditioning courses were constructed during the latter part of 1942 and January 1943 to provide facilities for all tank destroyer organizations.

The objectives of the course, as finally constituted, were the instruction of all personnel in close combat fighting and the destruction of tanks by the use of small arms and hand-placed demolitions. The infiltration course conditioned personnel to the din of combat and taught them the proper methods of advancing over rough terrain covered by machine gun fire and torn by exploding land mines and bursting grenades. Barbed wire entanglements, trenches, and foxholes added realism to this baptism of fire.

In a trip through the Nazi village--a complete small town filled with surprise targets, booby traps, and anti-personnel mines--instruction was given in street fighting with machine guns, submachine guns, rifles, and grenades. The close combat use of all small arms available to tank destroyer organizations was taught, and instruction was given in firing the light machine gun from the hip in assault and against enemy aircraft. Other subjects included woods fighting, dirty fighting, scouting and patrolling, use of maps and compasses, fieldcraft, assault on minor field fortifications, and fire recognition. This last course taught men to recognize, distinguish, and locate overhead fire of small arms, automatic weapons, and artillery coming front and flanks. Further additions to the battle conditioning course included night infiltration, training for medical personnel in removing wounded under fire, a combined woods-and-street fighting course involving the use of eye-and-toggle ropes in surmounting difficult obstacles, and the use of live grenades by personnel in training.

Unit commanders were urged to initiate an intensive physical conditioning course at least one month before their organizations underwent battle conditioning, since the battle conditioning schedule included the running of an obstacle course four times daily and a five-mile forced march. In preparing for the course, exercises were stressed which would harden the hands and strengthen the arms and legs, teach the proper methods of falling, and give practice in crawling, running, and in jumping from

heights of at least four feet.³⁸ Personnel not fit for battle conditioning training were assigned fatigue or guard duties for the week or, if able to undergo part of the instruction, were excused from the more hazardous and strenuous portions. Class "X" uniforms were worn on the course, and one evening meal during the course was prepared individually without the use of mess kits or kitchen utensils.³⁹ In addition to conducting instruction, the battle conditioning department developed the so-called "sticky" grenade and tested for the Tank Destroyer Board such weapons as knives, the rocket grenade launcher, the M-3 Inland machine pistol, various types of antitank mines and incendiary grenades, and steel-case .45 caliber ammunition.⁴⁰

In accordance with Unit Training Center policy, the battle conditioning department made only a minimum use of forms. They included a monthly schedule, a time record for the obstacle course and the forced march, a bivouac raid report, and a final report on each organization's work under the department.

Although the training of battalions in the Unit Training Center did not come under the control of the First Training Group until the seventh week, the First Training Group supervised and conducted specialist instruction during the first five weeks of the training period in order that organizations could begin tactical training with efficient specialist personnel. Pioneer platoons were trained directly by the First Training Group, and battalions or groups conducted schools for communications, reconnaissance, staff section, bugler, and armorer-artificer personnel under the supervision of the First Training Group.

Detailed subject schedules covered 100 hours of instruction for radio sections of communications platoons, 110 hours for message center sections of communications platoons, 40 hours for administrative sections of staff platoons and company clerks, 104 hours for intelligence and operations sections of staff platoons, 58 hours for supply sections of staff platoons and company supply sergeants, and eight days of training for reconnaissance platoons.⁴¹

The tactical training conducted by the First Training Group began with the seventh week of the training period and was divided into small unit, company, and battalion instruction.⁴²

The small unit period consisted of six eight-hour field exercises and four five-hour sand table previews. Each exercise included a conference, demonstration, and critique. One exercise was devoted to squad and section tactics, platoon organization and equipment, and organization of positions during daylight, darkness, and in desert terrain; deliberate occupation of positions; hasty occupation of positions; and use of road nets and combined platoon battle plays.⁴³ For the company and battalion, similar instruction was given with emphasis on the unit functioning as part of a combat team. Pioneer, reconnaissance, intelligence, and communications personnel underwent special instruction during the small unit and company periods and rejoined their organizations for the battalion exercises. The First Training Group scheduled training film programs and administrative inspections. It also handled the assignment of training areas.⁴⁴

In accordance with Army Ground Forces training directives, the Army Ground Forces physical fitness, combat firing, and tactical proficiency tests for Tank Destroyer Battalions were added to the Unit Training Center training schedule.⁴⁵ While the tactical groups were given the responsibility of conducting the physical fitness tests, the Center, through the First Training Group, prepared these tests, scheduled and supervised them.⁴⁶

The use of forms by the First Training Group was held to a minimum and included only rating sheets for unit and organization exercises, a daily strength report on personnel participating in problems, an air observer's report, reports of camouflage

and chemical warfare training, a confidential final report, and a standard cover-indorsement for forwarding reports to groups and battalions through Unit Training Center Headquarters.

The activation of the Basic Unit Training Center materially simplified the Advanced Unit Training Center's instructional problems. One group and six battalions were transferred to the Basic Unit Training Center,⁴⁷ and thereafter all battalions scheduled to come to the Advanced Unit Training Center were first sent through the Basic Unit Training Center and received uniform basic training prior to beginning advanced instruction.

Brigade training was added to the Center's program following the activation of the First and Second Tank Destroyer Brigades at Camp Hood on 24 November 1942, and their assignment to the Advanced Unit Training Center on 7 December 1942.⁴⁸ A training directive defining brigade organization and the functions of the brigade commander was prepared by the Advanced Unit Training Center and published on 5 January 1943 with the approval of the Tank Destroyer Center.⁴⁹

The adoption of the revised tank destroyer battalion table of organization 18-25 on 27 January 1943, which reduced materially both the personnel and the vehicles of self-propelled tank destroyer organizations, and the conversion of ten battalions in the Advanced Unit Training Center from self-propelled to towed units on 31 March 1943, both presented new problems.⁵⁰ In both cases it was necessary: to conduct experiments to determine such matters as the time length for road marches of the new battalions; to study the need for revising some parts of Field Manual 18-5, Organization and Tactics of Tank Destroyer Units, and to determine the ammunition allowances and the modifications in firing schedules needed.

The conversion of the self-propelled battalions to towed units was far more disruptive from a training standpoint than the adoption of the new table of organization in January 1943, since it necessitated a complete revision of technical and tactical instruction. The towed organizations began subcaliber firing immediately after their conversion, however, and by 1 May 1943, complete details on the training of towed Tank Destroyer Battalions were published by the Advanced Unit Training Center.⁵¹

By 13 April 1943, thirteen months after the Advanced Unit Training Center had been activated and ten months after the first units had arrived for training, forty-two battalions with an average strength of 750 officers and men--approximately 31,500 troops in all--had been trained and shipped out by the Center.

On 5 May 1943, General Tindall, who had commanded the Advanced Unit Training Center since its activation, was succeeded by Colonel Thomas J. Heavey.⁵² Colonel Heavey had commanded the Second Training Group of the Center, gone to England and to North Africa as an observer, and returned to the Tank Destroyer Center as commander of the Training Brigade. The training policies of General Tindall were continued by Colonel Heavey.

Shortly after this change of command, on 25 May 1943, the number of groups and battalions in the Advanced Unit Training Center reached its peak with a total of eight groups and twenty-eight battalions--1,312 officers and 24,159 enlisted men--approximately equivalent to two infantry divisions.⁵³

On 13 August 1943, the Advanced Unit Training Center was redesignated as the Unit Training Center, the Basic Unit Training Center being redesignated as the Individual Training Center.⁵⁴ The staff sections of the Unit Training Center established schools for correction of deficiencies in personnel, in military intelligence, and operations and supply. Internal battalion administration was greatly improved through

an inspector-instructor team operating during 1943.⁵⁵ Schools for illiteracy, non-English speaking and mentally retarded personnel were established 19 July 1943.⁵⁶ Extra-curricular programs of training films for both officers and enlisted men were used by both the S-2 and S-3 staff sections. In cooperation with the Training Brigade, special courses in battalion artillery and small arms, internal combustion engines, automotive, electricity, welding and other subjects, were established in August 1943 for the purpose of effecting proficient unit maintenance.⁵⁷

The Unit Training Center S-4 cooperated with the G-4 of Tank Destroyer Center to alleviate a serious shortage of vehicles, radios and weapons common to most tank destroyer units. Some improvement was effected in this situation but a wholly satisfactory solution was never reached.

By 15 December 1943, all battalions under the Unit Training Center had completed their normal training cycle; thereafter time was allotted to correcting deficiencies, conducting firing required by POM and to refresher firing under the direction of the Second Training Group.

On 1 January 1944, Colonel Heavey was succeeded by Colonel Earl W. Bacon, a veteran of World War I and a seasoned artilleryman.⁵⁸ Colonel Bacon had formerly commanded the Second Training Group and continued the policies of his predecessors, with emphasis on accuracy and teamwork. All battalions of the Unit Training Center during the months of January and February 1944 were given the Army Ground Forces combat intelligence training test.⁵⁹

On 18 February 1944, the Unit Training Center, with its mission accomplished, was officially discontinued.⁶⁰

SUMMARY: Battle realism was the key note of the Unit Training Center's program from its inception. Training was constantly modified to increase its effectiveness and correlate it with combat conditions. Frequent modifications in the training program were effected through the close supervision of instruction by General Tindall, Colonel Heavey and Colonel Bacon. General Tindall was awarded the Legion of Merit on 18 August 1943 in recognition of his contributions to the development of Unit Training Center and to the progress of tank destroyers.⁶¹

Faced with innumerable difficulties, the Unit Training Center had, within less than two years, trained two brigades, 21 groups, 100 battalions and one separate company. Between 85,000 and 87,000 troops had passed through the Center in less than a year and a half. They had been trained on a mass production basis by decentralizing the training responsibility from the Center through the training groups to the tactical groups. Despite this decentralization, their training had been efficient and thorough. Always overcrowded with organizations in training, the Center took ill-equipped and undermanned units and shipped them out as well-trained combat teams by securing as much equipment for them as possible and lending them what could not be otherwise supplied.

The tank destroyer organizations trained by the Center were ready to participate in maneuvers and combined training. At the Center, they perfected their own teamwork; but, because elements of the ground force team other than tanks and mechanized cavalry were not available at Camp Hood until 12 July 1943 when a battalion of armored infantry was attached to the Training Brigade,⁶² the Unit Training Center was initially hampered in its efforts to teach tank destroyer battalions and groups to coordinate their operations with those of other ground elements.

By its efficient training of tank destroyer organizations in tactics and gunnery, the steady improvement of which was evidenced by the increasing difficulty of the firing tests conducted by the Center, the Unit Training Center contributed materially

to the advancement of tank destroyer forces. Special contributions were made by the battle conditioning department through its development of improved technique of close combat and its testing of weapons in cooperation with the Tank Destroyer Board.

Further, the Unit Training Center made a substantial contribution to training throughout the Army by its inauguration of instruction in infiltration under fire and its realistic battle conditioning program.

CHAPTER XII

THE TANK DESTROYER TRAINING BRIGADE

The plans for training at the Tank Destroyer Tactical and Firing Center included the use of school troops to serve the elements of the Center. The tactical organizations assigned as school troops were to be utilized in demonstrations for the Tank Destroyer School, Unit Training Center, and the Tank Destroyer Board. The remaining school troops were to be used in transportation details and maintenance of vehicles and weapons.

Supervision of these organizations was provided by the activation of Headquarters and Headquarters Company, School Troops, on 9 March 1942.¹ The original plan called for two tank destroyer battalions, one squadron of cavalry (mechanized), one infantry battalion (motorized), two quartermaster companies, and two ordnance companies.² The addition of armored force elements was indicated on 4 April 1942, by correspondence between the Tank Destroyer Command and the Armored Force regarding the assignment of a tank group consisting of a headquarters and headquarters detachment and two tank battalions, one medium and one light.³

Although its date of activation was 9 March 1942, the organization existed without personnel until 30 April 1942, at which time three officers were assigned.⁴ Colonel (later Brigadier General) Harry F. Thompson was assigned to and assumed command on 2 May 1942⁵ with temporary headquarters in Temple, Texas. On 20 May 1942, Headquarters and Headquarters Company, School Troops, moved from its location in Temple, Texas, to a field camp on the reservation, to facilitate demonstration requirements of the Tank Destroyer Schools' second officers' orientation course, using the 893d Tank Battalion (Medium). These two units were slated for assignment to School Troops and were located in field camps on the reservation. The first problem of the School Troops was the total absence of experienced personnel. Three key non-commissioned officers were obtained from the 893d Tank Destroyer Battalion⁶ and on 1 June 1942, a cadre of eighteen enlisted men reported for duty from Camp Bowie, Texas.⁷

An early problem was planning to coordinate troop requirements with the units of Tank Destroyer Center. It was indicated that the School Troops would have to know in advance the nature of demonstrations, the equipment to be carried, the equipment needed and the troops required. A plan was initiated whereby the headquarters would receive the troop requirements one week in advance so that a schedule could be prepared and distributed to all units concerned. However, with the rapid expansion of Tank Destroyer Center, troop requirements were such that it was necessary to establish notice of requirements at least one month in advance. This was necessary to permit scheduling of training for the School Troops themselves. The plans used for filling troop requirements at different service schools were studied and a file card system was instituted. These file cards contained all the necessary data for each demonstration and were kept complete for a month in advance.

With the increase in demand for tactical units, priority was established by the Tank Destroyer Center for the Tank Destroyer School and the Unit Training Center. The Tank Destroyer Board, because of the nature of its activities, was extended the privilege of requesting troops when they were needed without advance notice. The 893d Tank Destroyer Battalion and the 753d Tank Battalion, together with the Tank Destroyer School Band, were assigned to School Troops on 1 June 1942.⁹ The 893d had been the first provisional General Headquarters tank destroyer battalion and at this time had some experimental equipment but was short other essential items. This was all of the tank destroyer equipment available at Camp Hood. In order to stage demonstrations required by the Tank Destroyer School, it was necessary to call on the 753d Tank Battalion for vehicles and personnel. In addition, assistant instructors were needed by the

Tank Destroyer School, since it had not received any enlisted personnel. This was solved to a certain extent by calling upon the 753d Tank Battalion to furnish assistant instructors.¹⁰

The different units of the School Troops experienced the same difficulties in the field as were recounted in the early operation of the Unit Training Center, but these units, more experienced in bivouac and maneuvers, readily solved the problems of health, hygiene, communications, etc.

Additional demonstrations were required upon activation of the Tank Destroyer Officer Candidate School. These requirements could not be met by the 897d Tank Destroyer Battalion, and it was therefore necessary to assign another unit to School Troops. The 809th Tank Destroyer Battalion was added on 29 June 1942,¹¹ but this organization was poorly equipped, under strength, and not fully trained. The additional mission of training this battalion increased the responsibility of school troops.

Facilities for the school troops' training program were provided by the construction of temporary ranges near the field camps. Ranges were provided for firing at moving targets, vehicular firing, firing from ground mounts, and antiaircraft firing. Training aids such as obstacle courses and driving courses were constructed, and other areas were designated for different types of training.¹²

On 15 July 1942, Headquarters and Headquarters Company, School Troops, was redesignated Headquarters and Headquarters Company, Training Brigade.¹³

To supervise the demonstrations and training of tank battalions, the Seventh Tank Group was assigned to School Troops on 1 July 1942.¹⁴ The number of tanks available for troop requirements was increased by the assignment of the 744th Tank Battalion (Light) to the Training Brigade on 21 August 1942.¹⁵ This organization was considerably understrength and had only recently been activated. Due to its training program, it did not participate in troop requirements until 1 December 1942. The demand for tactical units became so great that an additional organization, the 605th Tank Destroyer Battalion, was assigned to the Training Brigade on 1 October 1942.¹⁶

Tank requirements for the Advanced Unit Training Center soon increased to such an extent that it was impossible to furnish tanks from the two available battalions. A plan was suggested to use the tanks of the cavalry regiment that had been requested but as yet had not arrived at Camp Hood. The addition of this organization would allow the two tank battalions to be used for Advanced Unit Training Center free maneuver exercises. It was also apparent that tank destroyers should have some experience in maneuvering against the mounted reconnaissance that cavalry could furnish.¹⁷ On 15 December 1942, the 113th Cavalry Regiment (Mechanized) was attached (later assigned--20 February 1943) to the Training Brigade.¹⁸ This organization was well organized, completely equipped, and thoroughly trained.

The tank destroyer group problems that were given by Advanced Unit Training Center required an enemy force that was furnished by the Training Brigade. The coordinator of this force was the commanding officer of the Seventh Tank Group. It was usually composed of the Tank Group Headquarters, two tank battalions, one squadron of reconnaissance cavalry, and one company of tank destroyers. Experience gained from these problems was used as a basis for future training of both the demonstration troops and units of the Advanced Unit Training Center.¹⁹

To provide for demonstrations by all types of tank destroyer battalions, the Training Brigade was assigned one towed battalion and two self-propelled battalions, one equipped with M-3 destroyers and the other with M-10 destroyers.²⁰ Due to the lack of other ground elements, principally infantry and artillery, the Training Brigade was

unable to present a picture of tank destroyer operations as a part of the larger ground force team.²¹ This situation was not alleviated until the First Battalion, 51st Armored Infantry Regiment, 4th Armored Division was attached to the Training Brigade on 12 July 1943.²² This was a well trained and well equipped organization, and its participation in demonstrations and problems proved valuable. To afford additional training of tank destroyer battalions with ground elements, plans were made to include field artillery and combat engineers in the demonstrations. Artillery was added on 4 November 1943, by the assignment of the 264th Field Artillery Battalion,²³ but combat engineers were not available.

The tactical elements of the Training Brigade had the dual task of furnishing troop requirements and of increasing their own combat efficiency. In order to accomplish this, it was essential that all available time for training be applied with sedulity. Accordingly, a master schedule was devised which coordinated the time devoted to troop requirements and the hours in which training could be conducted by each unit of the Training Brigade. In addition, demonstration troops were given instruction while on assignments. Officers' schools, non-commissioned officers' schools, marches, and specialist training were conducted at night in order that units leaving the Training Brigade be prepared for combat duty.²⁴

Troops were rotated through the Training Brigade so that many organizations were able to attain a higher standard of efficiency by serving as demonstration units. To facilitate the rotation of troops, the Training Brigade established a system of instructing new organizations in demonstration duties which minimized the training required.²⁵ This plan was divided into three phases. The first phase called for the observing of parts played by key personnel in demonstrations. That was followed by substituting key personnel of the new unit to act as enlisted men under the direction of non-commissioned officers of the old organization. In the final phase, the new unit furnished vehicles and non-commissioned officers while the old organization furnished one key non-commissioned officer with each vehicle. If the new unit was unable to perform satisfactorily, additional rehearsals were scheduled before the new organization was used for demonstrations.²⁶

To check the performance of units on troop assignments, each instructor was required to fill out a troop performance record. All records showing a rating of "satisfactory" had to be endorsed by the instructor and state what was lacking to make this performance excellent. Headquarters of the unit reported upon would then correct the deficiencies. In case the rating was "unsatisfactory" then the commanding officer of the Training Brigade was notified.²⁷

A large part of the Training Brigade was made up of ordnance units stationed at Camp Hood for maintenance and training purposes. Maintenance of vehicles and weapons at Camp Hood was of major importance due to the large amount of material that was utilized at this station. The main problem that confronted the ordnance units was the necessity of completing their training before undertaking their primary mission of maintenance.

Certain of the ordnance units were activated at Camp Hood where they received all their training, while others were activated at other stations. Some were organized from "affiliated units" (organizations from which civilian automotive experts, both officers and enlisted men, were appointed in grade). Others were activated in the usual manner with cadres furnished by existing organizations and fillers reporting directly from induction centers.²⁸

The primary mission of ordnance troops activated elsewhere and sent to Camp Hood was somewhat obscure. Apparently many units were sent to Camp Hood for training, yet the changing policies of the Army Ground Forces conferred new responsibilities as

time went on. The principal problems arose from the conflicting missions of training and maintenance, since maintenance presented a full time job for fully trained troops.²⁹ The first ordnance units were Medium Maintenance and Medium Automotive Maintenance, and the number rapidly grew to include ammunition, evacuation, depot, heavy maintenance, and heavy maintenance tank companies. The 13th Ordnance Battalion Headquarters and Headquarters Detachment, which had been assigned to the Training Brigade on 26 October 1942³⁰ conducted an intensive course of basic technical training from 26 October 1942 to 15 January 1943. Up to that time, Post Ordnance units had been attempting to perform maintenance and supply functions, but on 15 January 1943, the 13th Ordnance Battalion assumed the responsibility of servicing Tank Destroyer and Training Brigade units.³¹

To insure training supervision of the many ordnance companies activated at Camp Hood, the 310th Ordnance Battalion was activated on 1 April 1943, and the 320th Ordnance Battalion on 24 June 1943. These units were assigned to the Training Brigade on the date of their activation.³²

Newly activated companies were assigned to the 310th Ordnance Battalion for basic training, the Thirteenth Ordnance Battalion for technical training and the 320th Ordnance Battalion for field training.³³ A Battalion basic technical school was established by the 310th Ordnance Battalion in which the maintenance of artillery, small arms, fire control instruments, and wheeled and track laying vehicles, were taught to recruits. Instruction was given to about 400 individuals during the first five or six months of its operation. This school supplemented the instruction given in regular service schools.³⁴ Systematic tests and examinations permitted the selection of personnel to attend service schools based on demonstrated aptitude rather than on reference to the soldier's individual qualification card.³⁵

A great variety of instruction was required, as nearly every type of ordnance service was represented. At the outset a marked shortage of experienced personnel was a serious handicap, but as training progressed more than fifty percent of enlisted specialists and all officers attended one or more ordnance schools. This interrupted unit instruction, but no alternative was possible, since no technical ordnance school facilities were available at Camp Hood. By the time each company entered its final phase of training, practically all personnel was present for duty and the organization was able to function as a team.³⁶

All ordnance companies activated at Camp Hood were instructed on the basis of of thirteen weeks basic military and technical training. As much advanced training was given as time permitted.

On 27 April 1943, the Army Ground Forces ordnance units were assigned the responsibility of maintenance and supply for all elements of the Tank Destroyer Center.³⁸ As a measure of the extent of this responsibility, it is noted that the material inventory of Camp Hood in July 1943, included:³⁹

General Purpose Vehicles	7,000
Combat Vehicles	2,200
Light Artillery	1,050
Hand and Shoulder Weapons	48,000

A shortage of replacement parts created a major maintenance problem. Individual requirements were continually on an emergency basis because post ordnance warehouses carried inadequate stocks. Parts requisitions were forwarded to distant base depots and the vehicle deadline figures were the highest of any Army Ground Forces installation in the country.⁴⁰ To remedy this situation each maintenance company was authorized to stock appropriate parts on a fifteen-day basis. A depot company was installed in North Camp and began to stock parts. The effect of these changes was felt at once, and the

vehicle deadline condition showed prompt improvement. From a high point of 8.46 percent in July 1943, it declined to a 2.55 percent in October 1943.⁴¹

The Training Brigade was not organized to coordinate properly training activities of the ordnance units. As a higher headquarters in the chain of command, it imposed an extra administrative channel which did not always expedite the accomplishment of the ordnance, maintenance, and training mission.⁴² To remedy this situation, plans were formulated for the organization of an ordnance group headquarters, which would be assigned to the Training Brigade. These plans were approved on 25 August 1943, and Ordnance Group Headquarters was organized on 1 September 1943.⁴³ This agency immediately undertook the task of coordinating the activities of the three ordnance battalions. By 1 November 1943, a total of twenty-one ordnance companies had received all or part of their training at Camp Hood. By their maintenance of materiel, these units rendered valuable service to the Tank Destroyer Center.⁴⁴

In addition to demonstration troops and ordnance units, there were assigned to the Training Brigade a number of organizations that performed a variety of services. The most important of these services was that of transportation and on 12 June 1942, Company C, 49th Quartermaster Regiment (Truck) arrived at Camp Hood.⁴⁵ This company had been recently activated, and the men had not been trained to function as truck drivers. In order to start training immediately, twenty-two class "Y" vehicles were utilized for the instruction of drivers and mechanics. As soon as training was completed, transportation details were furnished to the Post Engineer and to the Post Range Officer to haul materiel from the cantonment area to temporary training areas. By 25 July 1942, the company had received forty-one 2½-ton trucks, and additional training in these vehicles was given by instructors from the automotive department of the Tank Destroyer School.⁴⁶

The transportation required by the Tank Destroyer School reached such proportions that eventually 48 tractors and 40 semi-trailers were secured. Thirty-five of these vans were equipped to seat 70 students each. Transportation facilities were further augmented on 4 February 1943 by the activation of the Provisional Truck Battalion;⁴⁷ this unit was later renamed Truck Battalion, Tank Destroyer Center,⁴⁸ and served as a pool for all transportation of the Center.

To release tank destroyer units for other duties, the 374th Engineer General Service Battalion, less Company B, was assigned to the Training Brigade on 21 August 1942.⁴⁹ This organization constructed the airport, temporary landing fields, numerous ranges, battle conditioning courses, the other training facilities both at Camp Hood and North Camp Hood.⁵⁰ On 3 August 1943, this unit was redesignated the 374th Engineer Regiment and was assigned to the Eighth Service Command, with station at Camp Hood.⁵¹

To facilitate future scheduling of band activities, the Tank Destroyer School Band was assigned to School Troops on 1 June 1942.⁵² The band was used to play for parades and other functions of the Tank Destroyer School in Gatesville. It was also utilized to perform at ceremonies and concerts for organizations of the Unit Training Center located in field camps. On 15 August 1942, the Second Band, Tank Destroyer School was activated and assigned to the Training Brigade.⁵³ The following month, on 2 September 1942, the bands were redesignated the First and Second Bands, Tank Destroyer Center.⁵⁴

There were a number of other organizations present at one time in the Training Brigade, a complete list of which is recorded in the Appendices, Chapter XII.

The Training Brigade since its activation on 9 March 1942, was under the direction of six commanding officers:

1. Colonel (later Brigadier General) Harry F. Thompson,
2 May 1942--28 November 1942.⁵⁵
2. Colonel (later Brigadier General) Alexander O. Gorder,
28 November 1942--22 February 1943.⁵⁶
3. Colonel Thomas J. Heavey, 22 February 1943--4 May 1943.⁵⁷
4. Colonel William S. Biddle, 4 May 1943--20 July 1943.⁵⁸
5. Colonel Lansing McVicker, 20 July 1943--20 January 1944.⁵⁹
6. Colonel Edward A. Kinball--20 January 1944.

The Training Brigade was inactivated 17 February 1944.⁶⁰ The 22d Tank Destroyer Group was assigned to the Tank Destroyed School for administration and use as school troops. Other units were either disbanded or rejoined their arm or service.

SUMMARY: The Training Brigade, beginning from naught, in March 1943, grew to an organization of approximately 800 officers and 11,000 enlisted men, eventually comprising all arms except engineers and chemical warfare service.

Through troops furnished the Tank Destroyer School and demonstration troops furnished the Unit Training Center and other installations of the Tank Destroyer Center, it was a most constructive agency in helping other installations execute their primary missions. Due to lack of infantry and artillery units, the Training Brigade was not able to present a true picture of tank destroyer employment in integrated combined arms action until July and November 1943.

The Training Brigade accomplished its demonstration mission and at the same time maintained a high standard of training by continuous instruction. It also performed valuable services for elements of the Tank Destroyer Center through its supervision of maintenance and transportation, and its supervision of training ordnance troops who rendered a very necessary maintenance and supply service and emerged as well trained units themselves.

CHAPTER XIII

THE TANK DESTROYER REPLACEMENT TRAINING CENTER

As reflected in Chapter II of the Tank Destroyer Center history,¹ the Commanding General of the Center visualized in December 1942 the necessity for a Tank Destroyer Replacement Training Center. The Mobilization Branch, G-3, War Department, did not concur in the recommendation for the establishment of a Replacement Training Center as a part of the Tank Destroyer Tactical and Firing Center.²

On 8 May 1942, General Bruce recommended to Army Ground Forces that a tank destroyer section be established in each of the Replacement Training Centers at Fort Riley, Kansas, Fort Sill, Oklahoma, and Camp Wolters, Texas. This recommendation was disapproved.³

Again on 2 June 1942, General Bruce definitely recommended the establishment of a Tank Destroyer Replacement Training Center,⁴ based on the fact that existing replacement centers were not adequate in that their training did not include specialized instruction in tank destroyer subjects.

On 19 August 1942, the Replacement and School Command recommended to Army Ground Forces that a Tank Destroyer Replacement Training Center be established expeditiously at Camp Hood, Texas.⁵ The Tank Destroyer Replacement Training Center was finally activated 3 October 1942, with temporary station at Camp Hood, Texas.⁶

Colonel J. E. Gillfillan, Lieutenant Colonel (later Colonel) Christian Hildebrand, and Major William H. O'Brien had reported to Camp Hood on 1 September 1942 to prepare plans for the Replacement Training Center. Thus, when the Center was activated with Colonel Gillfillan in command, plans had been prepared for:

1. Selection of trainees to be sent to the Tank Destroyer School for training in motors, radio, weapons and pioneer, in order to furnish specialists for the Basic Unit Training Center as new Tank Destroyer battalions were activated in that installation
2. Preparation of trainees to act in crews or sections as battle loss replacements for tank destroyer battalions.
3. Outline of training in Mobilization Training Program 18-1 as applied to a replacement training center.
4. Organizational charts for Center headquarters and lower echelons.
5. Plans for housing, supply, training aids, motor parts and ranges.

The first phase of the Tank Destroyer Replacement Training Center, covering the period from activation to 1 January 1943, was the training of initial trainees and other personnel to qualify as cadre for an expansion of the Center after 1 January 1943. The initial cadre were provided by the Replacement and School Command and arrived on 3 October 1942.⁷ This cadre was composed of personnel from various replacement training centers -- Cavalry, Infantry, Field Artillery and Branch Immateral. It was therefore essential that the time available before the arrival of trainees be used for specialized training of the cadre in tank destroyer subjects. With no equipment available for the Replacement Training Center, the facilities of the Tank Destroyer School were used and the cadre was trained in battle conditioning, vehicle operation, weapons, orientation, instructional methods and voice radio procedure.

It was thus that the Center was prepared to receive and initiate the training of the 2640 trainees who began to arrive on 26 October 1942.

The initial organization of the Replacement Training Center consisted of 99 officers, 528 enlisted cadre and 2640 trainees.⁸ In addition to Headquarters and Headquarters Company, Tank Destroyer Replacement Training Center, three training battalions (126th, 127th and 128th), consisting of Headquarters and Headquarters Company and four lettered companies, were activated.

The trainees, divided between three battalions, were then given the same curricular basic and technical tank destroyer training as their instructors had received. On account of the shortage of equipment and training aids, the facilities of the Tank Destroyer School were again used. Upon the re-assignment and transfer of Colonel Gilfillan on 31 October 1942,⁹ Colonel Christian Hildebrand acted as Commanding Officer of the Replacement Training Center until 13 November 1942 when Colonel (later Brigadier General) Walter A. Dumas arrived to take command. One of the early difficulties confronting the Center was due to temporary housing facilities at Camp Hood where there were a great number of tank destroyer battalions, school troops and school students, all operating under congested housing, congested training areas and paucity of equipment.

At the time of the activation of the new Replacement Training Center, and for a time thereafter, there was a shortage of officers. This shortage was met in part by assigning officers of all grades from the Tank Destroyer School and the Replacement and Training Center. Junior officers were received directly from the Tank Destroyer Officer Candidate School,¹⁰ but due to their inexperience as newly commissioned officers, it was necessary for the Center to establish thorough courses of instruction for them.¹¹

With the weekly graduations of newly commissioned officers from the Tank Destroyer School and with newly assigned officers from other sources, the shortage of officers was overcome in a short time and resulted in a surplus. In order to facilitate the assignment and attachment of these officers to organizations, the Tank Destroyer Officer Replacement Pool was activated in November 1942. This pool furnished the initial needs of the Replacement Training Center for the bulk of the officers of company grade. The pool officers were attached to training units, placed on detached service or sent to the officer schools.¹²

Fortunately for the Tank Destroyer Replacement Training Center, not all of the 2640 trainees arrived during the months of October and November. There was a shortage of 331, and the Center requested of the Replacement and School Command that this number of men be transferred from the over head of the Tank Destroyer School which was, at that time, overstrength.¹³ This request was granted and the men from the School with previous tank destroyer training, provided a source of excellent non-commissioned officers who were sorely needed.

Since the Replacement Training Center planned to use the first men trained as cadre in the expansion of the Training Center, the training throughout the three battalions was uniform. The trainees were given basic subjects, together with technical and tactical subjects. The scope of the technical and tactical subjects had been indicated through the training inaugurated by the Unit Training Center and tank destroyer training manuals which, at this time, had assumed a definite form, policy and doctrine.¹⁴ The training was given, however, under adverse conditions due to the serious shortage of equipment, training aids, congested housing and training areas. Equipment was borrowed or simulated. Training aids were manufactured and borrowed from other units. Eventually the Replacement Training Center, without a reproduction plant, requested the aid of the 8th Service Command, San Antonio, Texas, in securing a large quantity of charts and other training aids. This resulted in the Replacement Training Center receiving 1500 pictorial training aids.¹⁵

By 1 January 1943, units of five training regiments had been activated to receive the weekly increments of 1050 trainees beginning the first week in January.¹⁶

Training was uniform for all battalions for the training. This basic training was substantially the same as that given in any other Replacement Training Center but included orientation lectures on the tank destroyer units. In addition to the basic and general subjects received, the trainees received 305 hours in technical and tactical training in their particular specialist field.¹⁷ The weekly system of increments presented a difficult problem for the Center in that it involved a large number of classes on different subjects in each battalion. With a limited number of officers and cadre for instruction, the instructors were not able to prepare thoroughly and specialize in the subjects to be presented. The Center required that each instructor prepare a written lesson plan at least 12 hours in advance of the instruction to be given. With the large number of classes in different subjects occasioned by the weekly increment system, instructors had to double up on different subjects. This tended to make the instructor "Jack of all trades" and in a large percent of the classes, defeated superior instruction developed through specialization. The only advantage of the increment system appeared to be in limiting to a small number the students in each class. In the opinion of the Center, this advantage was negligible when compared to the advantage of having specialized instructors in each subject.¹⁸

Since physical and mental aggressiveness were desired for tank destroyer personnel, trainees were given thorough individual training and close personal observation. Captain (later Major) Samuel H. Kraimes, psychiatrist, was assigned to the Tank Destroyer Replacement Training Center on 22 December 1942.¹⁹ A Mental Hygiene Clinic was opened and the Advisor System was established. Under this system the company commander was chief advisor. One non-commissioned officer was designated as advisor for each barracks. The trainees were encouraged to present their problems to the advisor. Extreme cases were referred to the Mental Hygiene Clinic for possible discharge under Section VIII of AR 615-360. Officers were instructed in the recognition and treatment of psychiatric difficulties likely to be found in any typical group of trainees.²⁰ On 4 July 1943, a Standard Operating Procedure for the disposition of mental and emotional problem cases was published. Cases to be referred to the Mental Hygiene Clinic were: retarded mental development; emotional instability; mentally sick; illiterate; non-English speaking; and personnel not performing satisfactorily. If action was indicated individual instruction in the company was given, or the subject was transferred to a Special Training Unit which had been activated 24 February 1943 with the mission of instructing low-grade men, illiterates, non-English speaking and mental and physical misfits, with a view to preparing them for regular training.²¹ Otherwise, personnel was transferred to the Station Hospital for necessary examination and treatment with a view to either discharge under AR 615-360 or reclassification as limited service personnel.

The training problem was complicated by epidemics of measles, meningitis, mumps and scarlet fever which occurred in the early spring of 1943. The situation became so bad that the Post Commander, on 13 March 1943, imposed an over-all working quarantine on the Replacement Training Center which continued in force until 22 April 1943.²²

In order to secure leaders and the best equipped instructors, the Center established numerous schools. Three of these schools were most effective.

An Officer Candidate Preparatory School was established on 22 February 1943.²³ Altruistically, this was designed to select the best officer candidate material possible. It consisted of a two weeks course of instruction for men with Reserve Officers Training Corps experience and for volunteer officer candidates and selected trainees. If able to pass the examination, selectees were sent before the Post Officer Candidate School Board where, if they failed entrance requirements, they continued instruction

in the Officer Candidate Preparatory School. This School served a worthy purpose in helping find officer material when officers were needed but was discontinued by directive of the Replacement and School Command on 8 May 1943.²⁴ The post-graduate school for officers of the Center and the Pool was inaugurated 10 March 1943.²⁵ The courses offered consisted of post-graduate work for newly appointed second lieutenants and cadre schools for other officers. The School was primarily a refresher course in the fundamental subjects, such as marksmanship and methods of instruction. Originally designed to cover a two weeks period, it was expanded on 27 August 1943 to include weapons and radio communication and was increased to six weeks duration. All assigned officers were scheduled for the course and by 15 October 1943, 2644 officers had received instruction in this school.²⁶

To standardize and improve the instruction of the cadremen, thereby better fitting them as instructors, an enlisted cadremen's class was organized 8 June 1943. This course extended over a two weeks period with emphasis placed on methods of instruction in basic training. Cadremen were rotated so that all assigned cadremen might receive this instruction. Efficiency ratings were forwarded to battalion commanders and in the case of ratings below excellent, the battalion commander either effected correction of deficiencies or obtained a new cadremen for instruction purposes.²⁷

In April 1943, the Replacement Training Center attained its full growth. Although 14,000 was the authorized trainee strength, the actual strength was much greater due to the presence of volunteer officer candidates awaiting transfer to Officer Candidate School and men held over to complete training. The cadre at this time consisted of 18 per company of 220 to 250 trainees.

Pursuant to authority by Replacement and School Command, which provided for the omission of one weekly increment, Replacement Training Center completed its movement to North Camp Hood on 2 May 1943. Training was resumed at 0700 on 3 May 1943.²⁸ The official opening of North Camp Hood took place on 29 May 1943. The outstanding feature of this occasion was a review of the Replacement Training Center troops by Major General Orlando Ward and Lieutenant General Lesley J. McNair, Commanding General of the Army Ground Forces.²⁹ General McNair was greatly impressed with the progress made by the Center and rendered high commendation in his address.³⁰

During the latter part of May 1943, the Tank Destroyer Replacement Training Center was directed to conduct basic training for Army Specialized Training Program candidates for one cycle of thirteen weeks, using existing facilities. The inflow of tank destroyer trainees was stopped to provide space for 7,000 of these candidates. Eight thousand candidates were housed in battalion areas vacated by the Basic Unit Training Center.

Army Ground Forces allotted additional cadres to take care of this program on 24 May 1943. The inauguration of the Army Specialized Training Program resulted in the loss of many of the best men in the Tank Destroyer Replacement Training Center overhead who became cadremen for units of this new activity or were shipped to colleges as students.³¹ The 132d Army Specialized Training Battalion, the first to be formed, was activated on 29 May 1943.³² The inflow of Army Specialized Training Program candidates was 1000 weekly beginning early in June 1943, for the vacant Tank Destroyer Replacement Center battalion areas and 2,000 per week arriving in July 1943 for the vacant Basic Unit Training Center areas. Provision for additional commissioned and enlisted cadre for the Army Specialized Training Program was made by a letter from the Replacement and School Command on 24 May 1943, which authorized 262 additional officers and 1,301 additional enlisted men.³³ The Sixth and Seventh Army Specialized Training Regiments consisting of four battalions of four companies each were activated on 8 June 1943.³⁴ The training consisted of thirteen weeks' basic infantry training, after which the trainees were ready for assignment in advanced courses of study. The expected

inflow of Army Specialized Training Program candidates materialized only to the extent that two battalions received trainees. The flow then became sporadic and finally stopped with a total of approximately 4,000 present for training.

One of the duties of the pre-activation planning board had been to plan for the inclusion of eight per cent of colored trainees with appropriate cadres within the authorized strength of the Replacement Training Center. Two battalions, the 132d and the 133d, remained inactive, reserved for colored trainees.

On 22 May 1943, the Replacement and School Command sent a letter to the commanding general, Army Ground Forces, in which it was recommended that these two battalions be activated with white cadre in order to accommodate the Army Specialized Training Program and because the Replacement and School Command believed that the output of white tank destroyer replacements was more necessary than that of colored tank destroyer replacements. It was stated in this letter that upon completion of the Army Specialized Training Program in the Replacement Training Center, and at such time as was desired, these two white battalions, by reporting the cadres as available for assignment to the field forces and by securing colored cadre.

First intorsement to this letter by Army Ground Forces on 30 May 1943, approved the conversion of one Negro training battalion in the Tank Destroyer Replacement Training Center to a white battalion. One Negro battalion was activated in order to meet the estimated requirements of the War Department for approximately one battalion of tank destroyer Negro replacements in the calendar year 1943.³⁵ The first Negro unit, the 133d Tank Destroyer Training Battalion, was activated on 5 August 1943.³⁶ On 16 October 1943, there were 674 Negroes in the Replacement Training Center.³⁷

The installation of the Army Specialized Training Program with the resulting curtailment of tank destroyer activities at North Camp Hood caused a reorganization of the Tank Destroyer Replacement Training Center.

The Replacement and School Command directed the commanding general, Tank Destroyer Replacement Training Center, on 1 October 1943, to reorganize the Center on a basis of 7,540 white trainees to begin instruction on 11 October 1943. A total of three regiments--eleven battalions, forty-five companies--was planned. Specialized training was given as follows:

Type of Training	Number of Trainees
Armored	120
Clerks	180
Cooks	168
Supply	180
Communication	416
Intelligence and Operations	80
Motor Mechanics	640
Reconnaissance	320
Pioneer	124
Motorcyclists--Scouts	160
Tank Destroyer	5152

Colored trainees were kept for the completion of instruction already in progress but they were in excess of the authorized capacity. Upon completion of training, no others were received and the colored training units were inactivated.³⁸

The remaining tank destroyer training units were the Second, Fourth and Fifth Regiments. The other four regiments at the Replacement Training Center were converted to the Army Specialized Training Program.³⁹

The inflow of tank destroyer trainees was at a standstill on 11 October 1943, but the reorganization was accomplished with the anticipation that the inflow would be resumed on 31 October 1943.⁴⁰ Under this new organization the number of specialists in the various training units was to have the same relationship to the total of 7,540 trainees as the number of like specialists in tank destroyer battalions. The length of the cycle was increased to nineteen weeks--seventeen weeks training and one week each for reception and shipment.

In the weapons regiment increments were of battalion size, since all the trainees were to receive identical training for the seventeen weeks. In the two specialists regiments the increments were of section, platoon, half-company, or company size. Under the system of inflow there were shipments of a balanced output of all specialists over a period of one month rather than weekly as had been the case before the reorganization on 1 October 1943. Training management was, therefore, simplified, since no organization received trainees every week.⁴¹ The increase in the training period from thirteen to seventeen weeks resulted in an increase in practical work. The training on the battle conditioning course was doubled, and other instruction involving practical work was lengthened.

Due to the heat wave in July and August 1943 which resulted in a number of cases of heat prostration and sunstroke, the Replacement Training Center effected a schedule greatly attenuating this hazard. In effect, an acclimatization week was added to the incoming week of trainees and work was avoided during the hottest hours of the day, with the men being toughened by gradually increasing activity.

The Replacement Training Center attempted to effect a combined staff for the Replacement Training Center and the Army Specialized Training combined program. This was never effected,⁴² and there were no indications as to when the flow of Army Specialized Training Program trainees would be resumed.⁴³ Hence, on 16 October 1943, there were in training 2,961 Army Specialized Training Program candidates in two battalions with both scheduled to complete training by 22 November 1943. There were in training 7,079 tank destroyer trainees in nine battalions, all scheduled to complete training by 15 January 1944.⁴⁴ The inflow of Army Specialized Training Program trainees was at a standstill, while the arrival of tank destroyer trainees was stabilized on a basis of from 1,400 to 1,700 men every four to five weeks beginning with the week of 1 November 1943.

The status of the Army Specialized Training Program was changed to that of a separate unit under the command and supervision of the Commanding General, Tank Destroyer Replacement Training Center, on 16 November 1943.⁴⁵ The Center provided Standard Operating Procedures and trained officers and enlisted men for its new element. However, the Army Specialized Training Program Basic Training Center was inactivated on 21 December 1943.⁴⁶

The era of retrenchment in manpower again was felt on 23 November 1943 when revisions were effected. Under the new plans, the total trainee load remained unchanged. It resulted, however, in an increase in the size of the weapons companies, which necessitated inactivation of two regiments and nine training companies. There then remained in the Tank Destroyer Replacement Training Center three regiments consisting of 11 battalions which included 37 training companies.⁴⁷

This effort by the Replacement and School Command to standardize Replacement Training Centers resulted in a number of problems for the Center. Personnel was shifted, equipment re-allotted, training aids divided, and training areas reassigned. The proportionate decrease in cadre created a problem due to the many essential activities for which no overhead was provided. This situation was happily solved by the Center through the inactivation of the Army Specialized Training Program. Many valuable

non-commissioned officers and trainees with especially high intelligence ratings were received by the Center from the Army Specialized Training unit.

Another problem confronting the Center at this time was that of rotation of key officers. Replacement and School Command cooperated with the Center in making extensions as far as possible and by alerting the Center in advance so that suitable replacements could be found.⁴⁸

Brigadier General Walter A. Dumas departed on reassignment 2 December 1943 and was succeeded by Colonel Christian Hildebrand.⁴⁹ The Center was confronted with a most difficult problem on 14 January 1944 when a plan was put into effect rotating cadremen who had served one year in the Replacement Training Center. Twenty percent of the physically qualified cadremen were reported for shipment each month and were to be replaced with Zone of Interior personnel.⁵⁰ This problem was met by the Center in utilizing all qualified officer personnel with the battalion as the instructors both for trainees and for Zone of Interior men replacing experienced cadremen.

On 15 February 1944, Brigadier General Alexander O. Gorder assumed command and Colonel Hildebrand resumed his duties as executive officer.⁵¹ General Gorder had had continuous service with tank destroyers since February 1942. He had commanded the Training Brigade at Camp Hood and a tactical brigade in the Second Army. He well understood the training requirements for tank destroyer personnel and emphasized accuracy, precision, and intelligent rhythmic action in all training.

On the same date that General Gorder assumed command, the Tank Destroyer Replacement Training Center was reduced to two regiments of tank destroyer crewmen and one regiment of specialists, comprising a total of 6600 trainees, and the storage of 400 trainees who had completed their training. A signal achievement of the Tank Destroyer Replacement Training Center during the early months of 1944 was that of solving the problem of maintenance, of motor vehicles, arms and equipment. The almost insuperable problem of motor vehicle maintenance was due to the fact that no regular drivers could be assigned to a vehicle. Vehicles were limited in number and were pooled for the use of different classes of instruction. Each day would bring a new driver for a vehicle and consequently no one driver could be made responsible for first echelon maintenance. The solution achieved was that of shortening the period of each class by five minutes and thus creating a forty-five minute period at the end of the day for over-all maintenance. All troops were rotated so that they would have experience in first echelon maintenance on vehicles, on arms and on other equipment. It followed the pattern of "stables" in the cavalry and artillery. All company officers and cadremen participated in supervision and final inspection and first echelon maintenance was thoroughly performed.

In training the policy was inaugurated that all men know the how, why and wherefor of what they were doing and the Commanding General of the Center through constant personal inspection achieved superior instruction and superior training through the interest sustaining element of appreciation of the how, why and wherefor.

The Tank Destroyer Replacement Training Center suffered further reductions on 21 September 1944 when trainees were reduced to 4000 and again on 2 December 1944 when the trainees were reduced to 2900. Under the latter reorganization, 2400 men were trained as tank destroyer crewmen and the remaining 500 specialists grouped as follows:

Cooks	50	Communications	150
Clerks	50	Pioneer	50
Reconnaissance crewmen	100	Motor mechanics	100

On 21 December 1944, the 144th Tank Destroyer Training Battalion was reorganized to give advanced training to trainee graduates immediately upon their return from a two weeks furlough. While made available to field requisition as loss replacements at any time, they were given training with emphasis on physical conditioning, development of leadership and potential non-commissioned officers, and as a tactical unit.⁵²

The advent of "Branch Immaterial" training for all personnel for the first six weeks interposed no special problem on the Tank Destroyer Replacement Training Center. This training was inaugurated on 30 December 1944. Being elemental, it simplified training procedure and was provocative of greater satisfaction among the trainees. The latter was due to the fact that the trainees felt that they had not had a branch of service imposed upon them and when the first six weeks of training was completed, they preferred to be tank destroyers.

The Tank Destroyer Officer Replacement Pool had declined in strength along with other training at the Center and on 8 May 1945, the total strength of the Tank Destroyer Replacement Training Center was 183 officers, 6 warrant officers, 750 enlisted men, 76 enlisted women, and 2818 trainees.

Training continued, using the same standards achieved earlier in the year and by the 1st of September, or V-J Day, the Tank Destroyer Replacement Training Center had been reduced to 2104 trainees. Notwithstanding the constant retrenchment and reorganization, the Tank Destroyer Replacement Training Center continued its high standards of training and wherever possible, obtained officers and men from overseas with battle experience, as instructors.

SUMMARY: Although requested as an adjunct for Tank Destroyer Center activities, the Replacement Training Center was not activated and did not commence functioning until one whole year after the activation of the Tank Destroyer Center. Unlike the Tank Destroyer School, the Replacement Training Center had something on which to build. The Unit Training Center had developed from use and experience Mobilization Training Program 18-1. Tank destroyer doctrine, gunnery and weapons standards had been evolved and the Center was concerned in a refinement of the methods delineated in Mobilization Training Program 18-1, 1 April 1942. The present Mobilization Training Program 18-2 is a refinement of the original Mobilization Training Program 18-1, omitting the tactical scope involving company, battalion and group employment. The Replacement Training Center contributed in a major way to achievements of the Tank Destroyer Center in training replacements perfected in basic and technical knowledge. The early problems of the Replacement Training Center were in securing officers and enlisted men capable of instruction. To do this, the Center inaugurated schools and trained personnel for the purpose. Lack of training aids and equipment were major problems and they were overcome by persistence and resourcefulness. The Replacement Training Center solved the problem of maintenance by devoting approximately one hour each day, with all personnel participating, in performance and supervision of maintenance.

The personnel problems of the Replacement Training Center were not uncommon to those of other Replacement Training Centers but through the system of advisors established in the Center, and the personal interest taken in each individual, the Tank Destroyer Replacement Training Center ranked high among all Replacement Training Centers as to number of effectives on duty.⁵³

From all reports received from units receiving replacements from the Tank Destroyer Replacement Training Center, the highest praise was given with respect to the replacements' ability to perform. One lesson pointed to in the experience of the Tank Destroyer Replacement Training Center was that after superior training as a tank destroyer replacement, an exceptionally large number of the graduate trainees of this

Center never found their way to tank destroyer units but were sent to other arms, and men trained in other arms were sent as replacements to tank destroyer units. The Tank Destroyer Replacement Training Center had no way of correcting this but it appeared to all officers of the Tank Destroyer Replacement Training Center that when men were trained as specialists and technicians for tank destroyers, that they should first be made available to tank destroyer units.

A high degree of parallellism was reflected in the training of the three units-- Unit Training Center, Basic Unit Training Center and Replacement Center.* The present MTP 18-2, 11 July 1945, is a refinement of training original outlined and developed by the Unit Training Center under MTP 18-1, 1 April 1945. Due to the large number of troops which had to be trained expeditiously, this duplication of effort could not have been avoided as there was no basis for training tank destroyer replacements. With the training in the Replacement Training Center as now prescribed, it is believed that replacements can be trained to take their places in organization and further training could be accomplished by the tactical commander of the unit.

CHAPTER XIV

THE TANK DESTROYER BASIC UNIT TRAINING CENTER (INDIVIDUAL TRAINING CENTER)

The Tank Destroyer Basic Unit Training Center was organized to standardize the activating, equipping, and basic training of tank destroyer battalions by centralizing all such activity under the control of the Tank Destroyer Center.

Prior to the activation of the Tank Destroyer Basic Unit Training Center on 27 November 1942, tank destroyer organizations were activated at various stations throughout the United States. After a period of basic training under the supervision of the higher headquarters by which they were activated, these units were sent to the Unit Training Center, Camp Hood, Texas, for advanced instruction. Upon the arrival of the first tank destroyer battalions to undergo the Unit Training Center's course in June 1942, it became apparent that this system of activation and basic training was defective.

Experience of the Unit Training Center demonstrated that many tank destroyer units sent to Camp Hood lacked the necessary basic training to complete successfully advanced tactical and technical training. Many organizations arrived at only half strength or less, in both officers and enlisted men, and the majority of them had few or no major items of equipment. Personnel had done little or no firing with individual weapons. There had been little or no training in night operations, marches and bivouacs, use of antitank mines, map reading, and camouflage. Many of the deficiencies in these basic subjects resulted from units having received filler replacements in small increments, from emphasis on more advanced subjects, and from an apparent lack of close training supervision by higher headquarters. Some of the battalions had been hampered in their training by excessive details for guard and transportation required by divisions to which they were attached, lack of training areas, lack of ammunition and training aids, and by their use as replacement battalions.¹

It appeared that these defects could be corrected by centralizing activation, organization, and training of tank destroyer units under the Tank Destroyer Center. General Bruce, commander of the Tank Destroyer Center, planned not only to activate and train new tank destroyer battalions in the Basic Unit Training Center, but also to give battalions already activated such further instruction as was necessary to enable them to absorb advanced unit training. It was estimated that approximately twelve to seventeen battalions which had been activated during 1942 needed such additional training.² This plan was approved by Army Ground Forces on 22 October 1942. Training was to begin as soon as possible.³

The plans provided for the training of tank destroyer units in 1943, and called for the activating and simultaneous training of twenty-one battalions and seven group headquarters and headquarters companies at the Basic Unit Training Center.⁴ Housing and other facilities for the Basic Unit Training Center were incorporated in the plan of the new cantonment at North Camp Hood, Texas.⁵ Housing for twenty-four tank destroyer battalions, to include necessary overhead, was requested in a letter to the Commanding General, Army Ground Forces on 17 September 1942.⁶

Pending the completion of construction for the Basic Unit Training Center, authority was granted by the War Department for the temporary use of available facilities at Camp Bowie, Texas.⁷ The Basic Unit Training Center was officially activated there on 27 November 1942, with Colonel Harry F. Thompson commanding and Lieutenant Colonel Ira W. Black as Executive Officer. The 780th Tank Destroyer Company at Camp Hood had been redesignated Headquarters Company, Tank Destroyer Basic Unit Training Center, by War Department authority as a nucleus for the new headquarters.⁸

As with other installations of the Tank Destroyer Center, it was necessary for the Basic Unit Training Center to organize with speed and start training almost immediately. Six tank destroyer battalions were moved to Camp Bowie for training under the new Center on 5 December 1942. Other units with from five to twelve months of training were also ordered to Camp Bowie from all parts of the country and by the end of December, twelve battalions had arrived and eight additional units arrived in January 1943.

The Basic Unit Training Center had a three-fold objective, namely, to train the individual soldier in basic fundamentals; to train individuals to take proper places in tank destroyer organization and work as members of the unit team; and to prepare organizations for advanced unit and specialized training.

The units had to be brought to full strength, as only four colored battalions and one white battalion arrived with complete personnel. The intelligence level of the battalions had been lowered by losses to officer candidate schools and to aviation training. Seven white battalions had from forty-seven to sixty-three per cent of their personnel in Army General Classification Test grades IV and V, the normal percentages being 23.5 and 9.7, respectively in these grades.⁹ The fillers for these battalions began arriving in the latter part of December. Each battalion upon arrival was given a special inspection to determine the state of its training and a program of instruction was prescribed.¹⁰

The control and supervision of training of the twenty-three battalions was handled by the Eighth and Ninth Groups which had been transferred to Camp Bowie on 4 December 1942 and 13 January 1943.¹¹ From six to eight battalions were attached to each group and the balance were trained directly by the S-3 Section of the Basic Unit Training Center. This arrangement was temporary as, on 13 February 1943, the Tenth Group was activated and assumed responsibility for training.¹² As new groups were activated, the number of units attached to each group was equalized.

For the most of the battalions, the program of training was of eight weeks' duration. Their stay at Camp Bowie was extended in a few cases due to the slow arrival of fillers, the shortage of housing facilities at the Advanced Unit Training Center in Camp Hood, and the repeated instruction necessary to enable the four colored battalions to attain a reasonable standard of proficiency in basic training.¹³ Beginning on 1 March 1943, the battalions completing their training at Camp Bowie were shipped to the Advanced Unit Training Center, Camp Hood. These battalions left at the rate of three per week, and by 20 April 1943, all of the original twenty-three battalions had cleared Camp Bowie.¹⁴

To the end of standardization procedure, both in pre-activation activities and in actual activation, the Basic Unit Training Center established a separate staff composed principally of officers awaiting assignment. This staff functioned as a planning board and developed policy and procedure for pre-activation and activation.¹⁵

The first three weeks preceding activation were utilized in continuing a program of officer conferences which covered the training program objectives, policy, procedure, administration, and instruction in tank destroyer battalion duties.

In the pre-activation period, training teams were organized which provided the newly activated units with qualified instructors. The objective of the training team idea was to provide each company of the battalion with a competent instructor in each subject. The principle of the training team was not considered wholly desirable and was adopted as an expedient due to the limitations of the eight weeks' training program.¹⁶

It was initially planned that basic training would commence one week after the date of activation with the first week utilized in receiving and processing fillers. However, in some instances fillers were slow in arriving, and the start of basic training was delayed. Later instructions were received that basic training in a newly activated battalion would commence when the unit had attained seventy-five per cent of its table of organization strength.¹⁷

The direct responsibility for training was decentralized. The tank destroyer groups became responsible for the conduct of instruction in their respective battalions. The training inspectors of the Tank Destroyer Basic Training Center were concerned primarily with the progress, methods of instruction, and training procedures in the units. Reports of deficiencies in training were made by the tank destroyer group headquarters, which was given the primary responsibility for instituting measures to correct such deficiencies.¹⁸

The deficiencies in training in Basic Unit Training Center battalions were found to be in direct proportion to the experience of their officers and key non-commissioned officers. Inexperienced young officers, many of whom were recent officer candidate school graduates, were necessarily placed in positions of command and on battalion staffs. The eagerness of men and officers to commence unit and advanced training caused an acceptance of low standards through efforts to digress from the basic individual training program. In some instances a lack of close supervision of training by responsible unit officers further contributed to a low degree of proficiency.¹⁹

The construction of facilities at North Camp Hood permitted beneficial occupancy by the Basic Unit Training Center beginning 1 May 1943. Because of the scarcity of vehicles, nine battalions and three groups made the 100 mile march from Camp Bowie, Texas, to Camp Hood in one week.²⁰ The march was tactical and afforded an excellent opportunity to observe and correct deficiencies in such basic subjects as military courtesy, discipline, marches, bivouac, sanitation, personal hygiene and security. The movement of the Basic Unit Training Center from Camp Bowie was completed 23 May 1943.²¹

By the end of June 1943, twenty-two battalions were in training at North Camp Hood. Eight of these battalions were put in field camps for lack of completed facilities in the new cantonment. These camps were from twelve to twenty miles distant from the Basic Unit Training Center Headquarters and complicated the training problem by extra requirements of transportation of training aids, training films and other facilities. This problem of transportation and training continued by reason of the advent of the Army Specialized Training Program which began in June 1943 under the Tank Destroyer Replacement Training Center. The battalions in the field, after completing their training, were shipped to the Advanced Unit Training Center and other Basic Unit Training Center battalions were moved out of North Camp Hood to make room for the Army Specialized Training Program. This process continued until the latter part of July 1943 when only seven Basic Unit Training Center battalions were in the cantonment area.²²

After the first six white battalions had been activated, a directive was received from the War Department to reduce tank destroyer battalions from a table of organization strength of 860 enlisted men to a new strength of 636. This meant that there was, in the six battalions, an overstrength large enough to fill two more battalions, and this personnel was used to fill the next two battalions activated.²³

As other tank destroyer battalions in the United States reduced their enlisted strength to the new table of organization, many of the fillers for the battalions later activated came from them. Problems arose because many of these fillers were the

cast-offs and undesirables of the parent organizations. These men were spread as thinly as possible among all units, but added administrative burdens to the organizations.²⁴

The limited time provided by the eight weeks' training program contributed to many minor deficiencies in the first battalions to be activated. The shortcomings of the eight weeks' program became evident at the Advanced Unit Training Center, where deficiencies in basic training, especially in weapons and motors, handicapped advanced instruction. A thirteen weeks' training program was prepared and recommended to the Tank Destroyer Center. This program was authorized in June 1943, and the training period of all units under the Tank Destroyer Basic Unit Training Center was extended to thirteen weeks. Due to their varied stages of training, separate programs had to be prepared for each of the eighteen battalions in the Basic Unit Training Center, taking into consideration the training already accomplished.²⁵

This extended program was approved and expanded to a fourteen weeks' program by Army Ground Forces on 5 June 1943, and was put into effect only in battalions that had not commenced basic training.²⁶ As a designation more in keeping with its functions, the Basic Unit Training Center was redesignated the Individual Training Center, upon the suggestion of Major General Orlando C. Ward, commanding general of the Tank Destroyer Center. Redesignation was accomplished on 13 August 1943, with the approval of Army Ground Forces.²⁷

The activation of battalions for training at the Individual Training Center ceased with the activation of the 679th Tank Destroyer Battalion (colored) on 21 June 1943, which was delayed six weeks in commencing training because of insufficient strength. The last white unit to be organized was the 672d Tank Destroyer Battalion, which was activated on 19 June 1943.²⁸

On 8 October 1943, the War Department ordered that the Individual Training Center, North Camp Hood, be discontinued effective 15 October 1943. Concurrent with this, the Headquarters and Headquarters Company of the Individual Training Center was disbanded.²⁹

SUMMARY: During the existence of the Tank Destroyer Individual Training Center, there was afforded an opportunity to compare the progress of the twenty-three tank destroyer battalions activated elsewhere, and shipped to the Individual Training Center after completion of five to twelve months of training, with that of the twenty-six battalions activated and trained within the Tank Destroyer Individual Training Center.³⁰

Considering other factors such as the availability of trained key commissioned and enlisted personnel and the increase in the program of training, it was believed that the plan for the activation and training of all tank destroyer units under the direct control of the Tank Destroyer Center was entirely sound and possessed many advantages over the decentralized procedures of activation and training which existed prior to the establishment of the Individual Training Center. The advantages of the Center's activation and training program were:³¹

1. Standardization of training of all battalions.
2. Training of all units at full strength.
3. Training in and firing of individual weapons by all men.
4. Increased instruction in night operations, marches, bivouacs, antitank mines, map reading motors and camouflage.
5. Closer supervision of training by higher headquarters.
6. Availability of training areas, training aids and ammunition.
7. Issuance of major items of equipment to battalions.
8. Reduction of guard and transportation details.

As a result of training under the advantageous conditions existing in the Individual Training Center, battalions arrived at the Unit Training Center in a uniformly high state of training which permitted them to readily absorb advanced instruction.

NOTES

CHAPTER I

1. FSR 6 Sep 1940 - Security -- 10 Sep - The Defensive.
2. Memo for Col Ward fr Gen McNair, 5 Sep 1940, subj: Studies by Gen. Staff Div. copy in 353/36.
3. Memo for C/S GHQ fr Sec'y GHQ, 10 Apr 1941, subj: Tank Hunting, original in 353/34 antitank.
4. Ltr to Lt Col R T Heard, fr Gen McNair, 12 Apr 1941, copy in 470.71/2.
5. OC/S 21103-6 14 Apr 1941.
6. G-3/43107 - G-3 JTD, 19 Apr 1941.
7. Tab D. G-3/43107 - G-3 JTD, 19 Apr 1941.
8. Memo to C/S GHQ fr Lt Col A F Kingman, 10 May 1941, subj: Report of Meeting called by Gen Braden on Branch Responsibility for Antitank Defense, original in 333/17 GAG AWC.
9. Memo to AC/S G-3 fr C/S OCS 22103-6, 14 May 1941, subj: Defense against Armored Forces. Copy in 353/15 antitank, Tab A, GAG AWC.
10. Memo fr AC/S G-3, WD - G-3/311, 15 May 1941, subj: Planning Branch, Copy in 337/17 GAG, AWC.
11. Memo to C/S GHQ fr Lt Col A F Kingman, 26 May 1941, subj: G-3 Planning Branch Conference on AT Defense, 26 May. Original in 337/17 GAG, AWC.
12. WD ltr to CG's all armies, AG 320.2(19 Jun 1941) MR-M-C, 24 Jun 1941, subj: Organization of Provisional Division and GHQ AT Battalions for use in current maneuvers. Copy in 353/15 Antitank.
13. (1) Inclosure to notes on G-3, AT conference 14-20 July 1941, War College, Washington, D.C. Copy in 353/98 Antitank.
(2) Memo to C/S GHQ fr ltr, Lt Col A F Kingman, 15, 17, 18, 22 July 1941, subj: War Department Antitank Conference. Originals in 334/89 GAG, AWC.
14. Ltr to CG's, all armies, and Chief of AF, from C/S GHQ, 6 Oct 1941, subj: Use of Dummy Antitank Mines in Maneuvers. Copy in 479.1/10, GAG, AWC.
15. Ltr to CG, 3d Army, fr C/S, GHQ, 8 Aug 1941, subj: GHQ antitank units in GHQ directed maneuvers. Copy in 353/30, Training Directives.
16. (1) Ltr to CG, 3d Army fr Gen McNair, 10 Oct 1941, subj: Comments on 2d vs 3d Army maneuvers. Copy in 353/595, 3d Army.
(2) Ltr to CG, 3d Army fr GHQ, 25 Sep 1941, subj: GHQ Provisional Antitank Groups. Copy in 353/15 Antitank.
(3) WD ltr to CG's, all armies. AG 320.2 (9-29-41) MR-M-C 2 Oct 1941, subj: Organization of Provisional Division and GHQ Antitank Battalions for use in Current Maneuvers. Copy in 353/15 Antitank.
17. Memo to C/S, WD, fr G-3, WD, G-3/43107. 18 Aug 1941, subj: Organization of Antitank Units in the Army. Copy in 353/15 Antitank.
18. Memo to AC/S, G-3, WD, fr C/S, WD, OCS 21103-20, 8 Oct 1941, copy in 353/15 Antitank.
19. WD ltr to CO, TDRTC, AG 320.2 (11-5-41) MR-M-C, 27 Nov 1941, subj: Organization of Tank Destroyer Tactical and Firing Center. Copy in 320.2/736. Supporting documents in 680.1/31.
20. (1) WD ltr to CG's, all armies and CA's, and C of AF, AG 320.2 (11-17-41) MR-M-C, 3 Dec 1941, subj: Organization of Tank Destroyer Battalions. Copy in 320.2/736.
(2) WD ltr to CG's all armies, and CA's, and C of AF, AG 320.2 (1-24-42) MR-M-C, 30 Jan 1942, subj: Organization of TD Bus. Copy in 320.2/736.

CHAPTER III

1. Par. 18, SO #258, WD, Wash., DC, 4 Nov 1941. Copy in AG 201-Bruce (O).
2. Outlined Biography, Maj Gen Andrew D. Bruce. Copy in Historical Officer's file.
3. Ltr to CO, TDTFC, fr WD AGO, AG 320.2(11-5-41)NR-M-C. 27 Nov 1941, subj: Organization of TDTFC. Copy in AG file 320.
4. Ibid.
5. CC #1, TDTFC, 1 Dec 1941. Copy in AG file 201-Bruce (O).
6. SO #2, 3 & 5, TDTFC. Copy in TDC SO file, TD School.
7. Verbal statement by Capt Cecil Stegner, Asst G-4 TDC. Type Copy in Historical Officer's file.
8. (1) SO #1, TDTFC, 2 Dec 41. Copy in TDC SO file, TD School.
(2) Ltr to Lt Col Ray C Montgomery, TDTFC, fr Lt Col Frank R Williams, 30 Dec 41. Copy in TD Board file 470.8/2-7.
(3) Verbal statement of Lt Col Thomas G Shaffer, G-4 TDC, Typed copy in Historical Officer's statement file.
9. (1) Memo for TAG fr AC/S G-3 WD, 17 Nov 41; subj: Organization of TD Bn. Copy in G-3 file 322.
(2) Ltr to CG, all armies and Corp areas, C/AF fr WD AGO, AG 320.2(11-17-41) M-R-MC, 3 Dec 41, subj: Organization of TD Bn. Copy in AG file 320.
10. Ibid.
11. Ibid.
12. Memo for AC/S, G-3, WD, fr CO, TDTFC, 11 Dec 41, subj: Activation of Group Hq for the TDTFC. Copy in AG file 320.
13. Memo for CO, TDTFC, fr AC/S, G-3, WD, G-3/46411, 11 Feb 42, subj: Activation of Group Hq for TDTFC. Copy in AG file 320.
14. Memo for the C/S, WD, fr AC/S, G-3, WD, G-3/43107, 18 Aug 41, subj: Organization of AT Units in the Army. Copy in Gen Bruce's memo notebook in Historical Officer's file.
15. Memo for AC/S, G-3, WD fr Chief of Mobilization Branch, G-3, WD, G-3/46995 12 Dec 41, subj: Permanent Location of the TDTFC. Copy in AG file 320.
16. Memo for TAG fr CO, TDTFC, 19 Jan 42, subj: Officers and EM to start the TDTFC. Copy in AG file 320.
17. Ltr TAG to CO, TDTFC, 20 Jan 42, subj: Request for Officer Personnel TDS. Copy in AG file 320.21.
18. Memo for AC/S, G-3, and AC/S, G-1, WD, fr CO, TDTFC, 31 Jan 42, subj: Tables of Organization, WD Overhead, TDTFC. Copy in AG file 320.21.
19. Memo for Historical Officer TDC, fr Maj Carl G Koeliner, Tactics Dept, TDS. Copy in Historical Officer's memo file.
20. Cf 9 (3).
21. Speech of Col Bruce to WDGS G-3 Antitank Conference, 14 Jul-20 Jul 41, War College, Wash., D.C. Copy in Notes on Conference.
22. Radiogram to Gen G C Marshall fr Gen Douglas MacArthur, 20 Feb 42 (C). Copy in TD Board file 311.2.
23. Verbal statement by Col Hazen L Hoyt, TD Board, typed copy in Historical Officer's statement file.
24. Verbal statement by Maj Henry C Kerlin, S-3, 893rd TD Bn.
25. (1) Ltr to CG, 3d Army, fr C/S, GHQ, 8 Aug 41, subj: GHQ Antitank Units in GHQ Directed Maneuvers. Copy in 353/30 Training Directives.
(2) Memo for the Historical Officer, TDC, fr Lt Col Russell T Jones, Publications Dept. TD Sch. Copy in Historical Officer's file.
26. Ibid.
27. T/O 18-10-1, TD Hq & Hq Co Group GP, 5 Jun 42.
28. Ltr to CG, AGF fr CG, TDC, 19 Mar 42, subj: Revision of 18 Series of T/O's.
29. Cf. 10.

CHAPTER II (Cont'd)

30. Ltr to CG, all armies and Corps Areas and C/AF fr WD AGO, AG 320.2 (1-24-42)MR-M-C, 30 Jan 42, subj: Organization of TD Bn. Copy in AG file 321.
31. Plan II (Tab E), incl to memo for C/S, WD, fr AC/S, G-3, WD, G-3/43107, 11 Aug 41, subj: Organization of Antitank Units in the Army. Copy in Gen Bruce's memo notebook, in Historical Officer's file.
32. (1) Memo for Historical Officer, TDC, fr Lt Col George N Tilson, Range Officer, TDC. Copy in Historical O's file.
(2) Plan II (Tab E). Cf. 32.
33. Memo for AC/S, G-3 WD fr Col Bruce, G-3/46411, 7 Oct 41, subj: Temp Trng Scheme for TD Units. Copy in Gen Bruce's notebook. Hist. O's file.
34. Memo written by Col Bruce, 3 Jan 42, subj: Selection of Camp Site. Copy in G-3, file 685.
35. Memo for C/AAF fr Co, TDTFC, 6 Jan 42, subj: Establishment of Air Unit at Killeen, Tex. Copy in notebook of Mrs. Ruth Richmond, Sec'y to Gen Bruce, in Historical Officer's file.
36. Memo for AC/S, G-1, WD fr CO TDTFC, TD/354.16, 7 Jan 42, subj: Command of Cantonment of Killeen, Tex for TDTFC. Copy in AG file 320.
37. (1) Memo for TAG, Fr AC/S, G-1 WD, G-1/16249-61, 9 Jan 42, subj: Command of Cantonment at Killeen, Tex for TDTFC.
(2) Ltr orders, WD AGO, AG 210.30 (1-7-42) OD, 17 Jan 42. Copy in AG file 320.
38. Ltr to TAG, fr CO TDTFC, 30 Jan 42, subj: Designation of Army Camps. Copy in AG file 320.
39. Ltr to CO, TDTFC, fr WD AGO, AG 630.1(1-9-42)MSC-C-M, 11 Jan 42, subj: Change of Location of TDTFC to Killeen, Tex. Copy in AG file 320.
40. Verbal statement of Lt Col Shaffer. Cf. 9 (3).
41. Ibid.
42. SO #14, TDTFC, 28 Jan 42. Copy in AG file 300.4.
43. Memo for Col Bruce fr Col Fay Ross, pres., TD Bd. 3 Feb 42, subj: Tank Destroyer Developments. Original in notebook of Mrs. Ruth Richmond, sec'y to Gen Bruce, in Historical Officer's file.
44. Memo for TAG fr CO, TDTFC, 30 Jan 42, subj: Change of Location of TDTFC to Killeen, Texas, Copy in AG file 320.

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1. Ltr to CO, TDTFC, fr WD AGO, AG 320.2(11-5-41) MR-M-C, 27 Nov 41, subj: Organization of TDTFC. Copy in AG file 320.
2. Ltr to CO, TDTFC fr Lt Col H T Stewart, 31 Jan 42, subj: Visit to 8th CA. Copy in notebook of Mrs. Ruth Richmond, sec'y to Gen Bruce, in Historical Officer's misc. file.
3. Par 1, SO #42, WD, 16 Feb 42, Extract copy in AG file 201-Bruce (0).
4. F 1, "History of Billeting Section" prepared for CP Hood PRO. Copy in accts of post activities, in Historical Officer's file.
5. Notes on acquisition of Camp Hood reservation, Camp Hood reservation file.
6. Ltr to CC, TDTFC fr O/CE, CE-652-CEG-T, 24 Dec 41, subj: Standard Building Schedule for Tank Destroyer Battalion. Copy in AG file 600.1.
7. Par 1, SO #24, TDTFC, 24 Feb 42. Copy in AG file 300.4.
8. Summary of Report of Range Board, 14 March 1942. Copy in Historical Officer's miscellaneous file.
9. CO #5, TDC, 1 Jun 42. Copy in AG file 300.4.
10. GO #1, TDTFC, 9 Mar 42.
11. GO #11, TDC, 15 Jul 42. Copy in AG file 300.4.
12. Par. 5, SO #34, TDTFC, 11 Mar 42. Copy in AG file 300.4.

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13. GO 3, TDC, 22 May 42. Copy in AG file 300.4.
14. Par 3, SO 99, TDC, 27 May 42. Copy in AG file 300.4.
15. Par 2 c, Info Bul 10, TDC, 30 Mar 42. Copy in G-3 file 300.5.
16. (1) Info Bul 12 & 13, TDC, 11 Apr 42. Copy in G-3 file 300.5.
(2) "History of Training Brigade," Copy in Historical O's file.
17. (1) Par 6, Info Bul 10, TDC, 30 Mar 42.
(2) Par 1, SO 134, TDC, 2 Jun 42. Copy in AG file 300.4.
18. Memo for CG, AGF fr WDGS Org'n & Tng Div, WDGT 352 TD OCS (6-21-42), 26 Jun 42, subj: Establishment of TD Officer Candidate School. Copy in AG file 320.
19. GO's 13 & 14, TDC, 16 Jul 42. Copy in AG file 300.4.
20. GO's 1 & 2, TDS, 16 Jul 42. Copy in TDS GO file.
21. Record of telephone conversation, 2 Jul 42. Copy in Records of Telephone Conversations, S-X, filed in office of C/S, TDC.
22. Record of telephone conversation, 3 Jul 42. Cf. 21.
23. Ltr to CG's Second & Third Armies, VI & VII Army Corps, C/AF, fr CG, AGF, 370.5/8 (Tank Destroyer) (R)-GNOFW(5-27-42), 27 May 42, subj: Movement of TD Bns to Cp Hood, Tex, for Training. Copy in AG file 370.5.
24. Tng Memo 2, UTC, 11 Jun 42, subj: Assgmt of Bns to 1st & wd Trg Groups and Establishment of Radio Nets. Copy in UTC Tng Memo file.
25. Cf. 10.
26. See Chap. VIII, pg. 44.
27. Ltr to CG, AGF, fr CG, TDC, TD 320.12, 9 May 42, subj: Organization of Tank Destroyer Command. Copy in AG file 320.
28. Organizational Chart of Tank Destroyer Command, approved 23 May 42. Copy in AG file 320.
29. See Chap. VIII.
30. See Chap. VIII.
31. See Chap. VIII.
32. Ibid.
33. GO 18, TDC, 17 Aug 42. Copy in AG file 300.4.
34. GO 33, TDC, 28 Nov 42. Copy in AG file 300.4.
35. Par 4, Admin O 10, UTC, 19 Aug 42. Copy in UTC admin O file.
36. Cf. 10.
37. SO 76, TDC, 30 Apr 42. Copy in AG file 300.4.
38. SO 78, TDC, 2 May 42. Copy in AG file 300.4.
39. Cf. 16 (2).
40. GO 6, TDC, 12 June 42. Copy in AG file 300.4.
41. GO 8, TDC, 29 Jun 42. Copy in AG file 300.4.
42. GO 9, TDC, 1 Jul 42. Copy in AG file 300.4.
43. GO 11, TDC, 15 Jul 42. Copy in AG file 300.4.
44. Cf. 16 (2).
45. GO 16, TDC, 15 Aug 42. Copy in AG file 300.4.
46. GO 17, TDC, 17 Aug 42. Copy in AG file 300.4.
47. GO 21, TDC, 21 Aug 42. Copy in AG file 300.4.
48. 1st Ind to CG, TDTFC, fr CG, 38th CA, QM 320.2, 3 Mar 42. Copy in AG file 320.
49. SO 87, Cp Bowie, Tex, 1 Apr 42. Copy in files of QM Det., Cp Hood.
50. "Highlights of QM Operations," prepared by Cp Hood PRO. Copy in Accounts of Post Activities." Cf. 4.
51. "History of Ordnance Dept," prepared by Cp Hood PRO. Copy in "Accounts of Post Activities." Cf. 4.
52. Par 4, SO 54, TDC, 6 Apr 42. Copy in AG file 300.4.
53. "History of 1848th Prov. Bn," prepared by Cp Hood PRO. Copy in Accounts of Post Activities." Cf. 4.

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54. "Judge Advocate's Duties," prepared by Post SJA. Copy in "Accounts of Post Activities." Cf. 4.
55. GO 6, Hq 3p Hood, 21 Jul 42. Copy in Hq Cp Hood GO file.
56. Ltr to CG, AGND, fr CG, TDC, 8 May 42, subj: Training of Loss Replacements for Tank Destroyer Units. Copy in G-3 file 322.
57. Cf. 28.
58. Ltr to CG, AGF, fr CG, TDC, 320.12 GWTDO, 2 Jan 42, subj: Organization of Tank Destroyer Command. Copy in AG file 320.
59. Memo for AG/S, G-3, WD, fr C/S, GHQ, 2 Sep 41, subj: Organization of Antitank Units in the Army. Copy in Gen Bruce's memo notebook, in Historical Officer's file.
60. 2d Ind to memo for C/S, GHQ, fr CG, TDFPC, TD/320.2, 7 Jan 42, dated 23 Jan 42. Original in AG file 320.
61. GO 1, TDFPC, 9 Mar 42. Copy in AG file 300.4.
62. Memo for AG/S, G-3, WDGS, fr CG, AGF, 11 Jul 42, subj: Change in Status of Tank Destroyer Command. Copy of Draft in Historical O's miscellaneous file.
63. 1st Ind to memo for AG/S, G-3, WDGS, fr CG, AGF, 11 Jul 42. Copy of Ind in AG file 320.
64. Telegram to CG, TDC, fr CG, AGF, 20 Jul 42. Copy in AG file 320.
65. Record of telephone conversation, 22 Jul 42. Copy in Records of Telephone Conversations, SX. Cf. 21.
66. (1) Ltr to CG, TDC, fr CG, AGF, 320.2(TD) GNGCT (7-11-42), 14 Aug 42, subj: Operation of the TD Comd. Copy in AG file 320.
(2) Ltr to CG's, etc, fr CG, AGF, 320.320.2 (TD Comd)-GNGCT, 16 Aug 42, subj: Operation of the TD Comd. Copy in AG file 320.
67. GO 17, TDC, 17 Aug 42. Copy in AG file 300.4.
68. Cf. 13, Chapt. II.
69. Ibid.
70. Interoffice ref sheet to staff, TDC, fr CG, TDC, 23 Apr 42. Copy in AG file 320.
71. Ltr to CG, TDC, fr Col Thomas J Heavey, TD Bd, TDB 320.3, 12 May 42, subj: Narrative Report of Activities at Army War College, period April 27 to May 8, 1942. (S/O and Radio Conferences). Copy in TD Bd file 320.3.
72. Ltr to CG's, etc, fr WD AGO, AG 320.2 (5-20-42)MR-M-GM, 31 May 42, subj: Reorganization of Tank Destroyer Units. Copy in AG file 321.
73. Info Bul 9, TDC, 14 Mar 42. Copy in G-3 file 300.5.
74. Ltr to CG, AGF fr CG, TDC, 320.3-GNTDC, 11 Aug 42, subj: Tank Destroyer Organization. Copy in G-3 file 322.
75. GO 3, TDS, 14 Aug 42. Copy in TDS GO file.
76. (1) GO 21, TDC, 20 Aug 42. Copy in AG file 300.4.
(2) See Chapt. VIII.
(3) Cf. 16.
77. See Chapt. XII.

CHAPTER IV

1. Cf. 76 (1), Chapt. XII.
2. (1) List of Events, Opening Day of Camp Hood. Copy in G-2 file, Misc. Pub re Opening.
(2) Excerpts, address of Under Sec'y of War, 18 Sept 42. Copy in G-2 file, Misc. Pub re Opening.
3. Ibid.
4. SO 258, WD, 23 Sept 42. Extract copy in AG file 201-Bruce (O).
5. Memo for S-4, TDC, fr Hq TDC, 28 Aug 42. Copy in AG file 322, RTC.

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6. GO 27, TDC, 3 Oct 42. Copy in AG file 300.4.
7. See Chapt. VIII.
8. GO 33, TDC, 28 Nov 42. Copy in AG file 300.4.
9. Ltr to CG's, etc. fr CG, AGF, 331.1(TD)-GNGOT (10-21-42), 21 Oct 42, subj: Training Inspections, TD Units. Copy in AG file 333.
10. Memo to CG, TDC, fr Eng Inspector, TDC, 26 Oct 43, subj: Inspecting Team. Copy in AG file 333.
11. GO 23, TDC, 1 Sept 42. Copy in AG file 300.4.
12. GO 28, TDC, 13 Oct 42. Copy in AG file 300.4.
13. GO 31, TDC, 24 Nov 42. Copy in AG file 300.4.
14. 2d Ind to ltr to CG, AGF, fr CG, TDC, 16 Sept 42. Copy in AG file 320.21.
15. Ltr to CG, AGF, fr WD AGO, AG 320.2(9-16-42)PO-M-SPGAO, 7 Nov 42, subj: Allotment of Officers for Duty with the AGF (TD Section). Copy in AG file 320.21.
16. (1) Ltr to CG, TDC, fr Comdt, TDS, 320.2 GVIDM, 22 Oct 42, subj: Increase in Allotment of Officers for TDS. Copy in AG file 320.21.
(2) 1st Ind to ltr to CG, TDC, fr Comdt, TDS, 22 Oct 42. Cf. 15 (1).
17. 3d Ind to ltr to CG, R&SC, fr CG, TDC, 5 Dec 42, 320.2-GVIDP, subj: Increase in Allotment of Officers for TDS. Copy in AG file 320.21.
18. Ibid.
19. 6th Ind to ltr to CG, R&SC, fr CG, TDC, 5 Dec 42. Cf. 17.
20. (1) TDRTC Off Strength Rep for wk ending midnight, Friday, 23 Oct 42. Copy in AG file 320.21.
(2) Verbal statement of G-1, TDC.
21. (1) NO 13, TDRTC, 26 Apr 43. Copy in TDRTC GO file.
(2) TDRTC Officer Strength Rep for wk ending midnight, Friday, 23 Apr 43. Copy in AG file 320.21.
22. Ltr to Col C K Kreams, R&SC, fr G-1, TDC, 210.33-GVIDP, 1 Dec 42, subj: Conf. of Tel. Conversation. Copy in AG file 320.21.
23. Ltr to CG, R&SC, fr CG, TDC, 210.31-GVIDP, 27 Nov 42, (C), subj: Asgt Jurisdiction. Copy in AG classified file.
24. Ltr to CG, R&SC, fr CG, TDC, 300.4-GVIDP, 27 Nov 42, (C), subj: Travel Orders. Copy in AG classified file.
25. (1) 1st Ind to ltr to CG, R&SC, fr CG, TDC, 27 Nov 42, (C). Cf. 23.
(2) Cf. 24.
26. Ltr to CG, TDC, fr CG, R&SC, 320.2 GNRSP. 15 Mar 43, subj: Command Status, TDS and TDRTC. Original in G-3 file 322.
27. GO 112, 8th SC, 5 Dec 42. Copy in MRU file MR 370.5.
28. Ltr to CG's, etc. fr CG, AGF 352.11/422-GNGOT (11-18-42), 18 Nov 42, subj: TD Indoctrination Courses. Copy in G-3 file 352.11.
29. Ltr to CG, AGF, fr CG, TDC, 352.11/22 GVIDO (3-1-43), 1 Mar 43, subj: TD Special Observers Courses. Copy in G-3 file 352.11.
30. Weekly Report to C/S, TDC, fr G-3, TDC, 1 Feb 43. Copy in AG file 319.1.
31. Info Bul 7, TDC, 19 May 43. Copy in AG file 300.5.
32. Report of Special Armored Vehicle Board, 5 Dec 42, (C). Copy in TD Board classified file.
33. Par 4, pg 2, Chapt. I.
34. 1st Ind (AGF, 22 Jul 42) to ltr to CG, AGF fr CG, TDC, 472.1-GVIDC, 25 Jun 42. Copy in AG file 472.
35. Ltr to CG, AGF, fr CG, TDC, 472.1-GVIDC, 9 Nov 42, subj: Revision of T/O's, TD Units. Copy in T/O file of T/O & T/E Sctn, Pub Dept, TDS.
36. Ltr to CG, TDC, fr CG, AGF, 320.2/383 (S)-GNGCS (11-12-42), 12 Nov 42, (C), subj: Reduction of Personnel and Vehicles. Copy in AG clas file.
37. Ltr to CG, AGF, fr CG, TDC, 320.2-GVIDO (12-1-42), 1 Dec 42 (C), subj: Reduction of Personnel and Vehicles. Copy in AG classified files.

CHAPTER IV (Cont'd)

38. Final Report, Test of Towed Tank Destroyer Bn Equipped with 3 inch gun, M-1, TD Bd project 114, 12 Mar 43. Copy in TD Bd file 320.3.
39. (1) TC 18-5, 27 Jan 43.
(2) Unnumbered Memo to All Units, AUTC, 31 Mar 43, subj: TD Pnc (Towed). Copy in UTC unnumbered memo file.
40. T/O 18-35, 7 May 43.
41. OCS Charts. Originals in acad records sectn gen files, OCS Regt, TDS.
42. See Chapt. IX.
43. See Chapt. IX.
44. Par. 6, SO 106, TDS, 23 Dec 42. Copy in TDS SO file.
45. See Chapt. IX.
46. MTP 18-1, WD 1 Apr 42.
47. Cf. 27, Chapt. III.
48. Cf. 11.
49. See Chapt. X.
50. Unnumbered Memo, AUTC, to All Gp and Bn CO's, 29 Oct 42. Copy in UTC unnumbered memo file.
51. See Chapt. X.
52. See Chapt. X.
53. Weekly Report to CG, TDC, fr CO, AUTC, 25 May 43. Copy in UTC file 319.1.
54. GO 21, TDC, 21 Aug 42. Copy in AG file 300.4.
55. (1) GO 38, TDC, 15 Dec 42. Copy in AG file 300.4.
(2) GO 5, TDC, 20 Feb 43. Copy in AG file 300.4.
56. (1) See Chapt. XI.
(2) Pp 3, 4, Memo on Ord Activities. Copy in Historical Officer's file.
(3) Memo to all Units, TDC fr CG, TDC, 400.4. GWTDA, 27 Apr 43, subj: Ord Service to Units in Cantonment at Camp Hood and North Camp Hood. Copy in AG file 400.4.
57. GO 19, TDC, 17 Aug 42. Copy in AG file 300.4.
58. GO 2, TDC, 4 Feb 43. Copy in AG file 300.4.
59. GO 29, TDC, 25 May 43. Copy in AG file 300.4.

CHAPTER V

1. GO 29, TDC, 25 May 43. Copy in AG file 300.4.
2. Order of the Day, fr Maj Gen Orlando C Ward, CG, TDC, 19 Oct 43. Copy in AG file 312.
3. (1) Tng Memo 10, Prov AT Bn, 32d Div, 10 Oct 41. Copy in Historical Officer's misc file.
(2) Ltr to CG, AGF, fr CG, TDC, 353 GWTDC, 28 Aug 43, subj: Battle Plays. Copy in AG file 353.
4. Verbal statement of Col Guy S. Meloy, C/S, TDC.
5. Ltr to CG, AGF, fr CG, TDC, 210.3-GWTDP, 27 May 43, subj: Assignment of Officers and Non-commissioned Officers. Copy in AG file 210.3.
6. Weekly report to C/S, TDC, fr G-3, TDC, 30 Aug 43. Copy in AG file 319.1.
7. Cf. 4.
8. (1) Unnumbered Memo, UTC, to All Units, UTC, 16 Aug 43, subj: Battle Conditioning. Copy in UTC unnumbered memo file.
(2) Memo on Battle Conditioning Course, prepared by Maj Ralph W Sleator, UTC, Dir of Battle Cond. Copy in Historical Officer's memo file.
9. Ltr to C/S, WD, thru CG, AGF, fr CG, TDC, 452 GWTDO, 22 Sep 43, subj: Organic Liaison Planes for Tank Destroyers. Copy in AG file 452.
10. Ltr Order, TDC, 25 May 42. Copy in AG file 360.

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11. Ltr to CG, AGF, fr CG, TDC, 373-GWIDO, 18 Jul 42, subj: Organic TD Obsv. Copy in AG file 360.
12. Cf. 9.
13. 1st ind to ltr to C/S, WD, thru CG, AGF, fr CG, TDC, 432 GWIDO, 22 Sept 43. Cf. 9.
14. GO 47, TDC, 12 Jul 43. Copy in AG file 300.4.
15. GO 73, TDC, 4 Nov 43. Copy in AG file 300.4.
16. GO 54, TDC, 13 Aug 43. Copy in AG file 300.4.
17. Ltr to CG, TDC, fr TAG, 322 OB-I-GWGCT-M, 2 Oct 43, subj: Discontinuance of TD BUTC, Camp Bowie, Texas. Copy in G-3 file 322.
18. Sections I & II, GO 66, TDC. Copy in BUTC GO file, TDC.
19. GO 68, TDC, 16 Oct 43. Copy in AG file 300.4.
20. GO 74, TDC, 5 Nov 43. Copy in AG file 300.4.
21. Par 22, SO 198, TDC, 18 Aug 43. Copy in AG file 300.4.
22. Par 1, Weekly Directive 23, AGF, 8 Jun 43. Copy in AG file 300.4.
23. (1) Sec III, GO 56, WD, 14 Sept 43.
(2) Ltr to CG, TDC, fr CG, AGF, 250.4 (1 Oct 43) GWGAP, 1 Oct 43, subj: GCM Jurisdiction. Copy in AG file 250.4.
24. Record of tel conv 18 May 42. Copy in Recs of Tel Convs, S-I, filed in office of C/S, TDC.
25. (1) GO 17, TDC, 13 Apr 43. Copy in AG file 300.4.
(2) GO 28, TDC, 25 May 43. Copy in AG file 300.4.
(3) GO 34, TDC, 1 Jun 43. Copy in AG file 300.4.
26. Ltr to CG, AGF, fr CO, WAAC Det, TDC, 3 Jun 43, subj: Replacement of Male Military Personnel by WAAC Personnel. Copy in AG file 320.2.
27. 4th ind to ltr to CG, AGF, fr CO, WAAC Det, TDC, 3 Jun 43. Cf. 26.
28. Verbal statement of Lt Col Asa C. Black, S-1, TERTU.
29. (1) Ltr to CG's, RASC, TDC, fr WD, AGO, AG 320.2 (WAC) (22 Sep 43) PR W GWGCT, 25 Sept 43, subj: Orgn & Reorgn of Certain WAC Units. Copy in AG file 320.2.
(2) Ltr to CG, AGF fr CG, TDC, 320.2 (WAC) GWIDP, 14 Oct 43, subj: Orgn and Reorgn of Certain WAC Units. Copy in AG file 320.2.
30. (1) Weekly rep to C/S TDC, fr G-4 TDC, 6 Jul 43. Copy in AG file 319.1.
(2) Weekly rep to C/S TDC, fr G-4 TDC, 20 Oct 43. Copy in AG file 319.1.
31. Wkly rep to C/S TDC, fr Sig Sctn TDC, 19 Jul 43. Copy in AG file 319.1.
32. Wkly rep to C/S TDC, fr Sig Sctn TDC, 19 Oct 43. Copy in AG file 319.1.
33. Wkly rep to C/S TDC, fr G-1 TDC, 2 Aug 43. Copy in AG file 319.1.
34. Wkly rep to C/S TDC, fr G-4 TDC, 22 Jun 43. Copy in AG file 319.1.
35. (1) Wkly rep to C/S TDC, fr G-1 TDC, 14 Dec 43. Copy in AG file 319.1.
(2) Wkly rep to C/S TDC, fr G-1, 22 Sept 43. Copy in AG file 319.1.
36. Verbal statement of Col Brenner P Purdue, dir, tactics Dept TDS. Typed copy in Historical Officer's interview file.
37. See Chapt. VIII.
38. See Appendix - Chapt. V - ltr 12 Oct 43.
39. WD G-3/43107 - G-3 JTD, 19 Apr 41.
40. Wkly rep to C/S TDC, fr G-3 TDC, 21 Sep 43. Copy in AG file 319.1.
41. Wkly rpt to CofS TDC, fr G-4 TDC, 11 Aug 43. Copy in AG file 319.1.

CHAPTER VI

1. See Appendix for Chapt. VI.
2. Excerpts fr ltr to Gen Hester fr Gen McNair, 25 Oct 43. Copy in CG's file.
3. Ibid.
4. Ltr to CG TDC, fr CG AGF, 320.2(TDC)(R)(13 Feb 44) GWICT, 13 Feb 44, subj: Reorg of the TD Center. Copy in AG file 320, TDC.

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5. Ltr to CG TDC, fr CG AGF, 320.2(TDC)(R)(13 Feb 44) GNCOT, 14 Feb 44, subj: Reorg of the TD Center. Copy in AG file 320, TDC.
6. Verbal statement of Col Meloy, C/S TDC.
7. Ibid.
8. Ltr to CG, Second Army, fr CG AGF, 321/101 (TD Unit)(R)(21 Feb 44) GNCOT, 21 Feb 44, subj: Inactivation of Hq & Hq Co, 2d TD Brigade. Copy in AG file 321 TD Units.
9. Hereafter referred to as GNT Section.
10. Ltr fr CG AGF to CG TDC, 320.2 (TDC)(R)(13 Feb 44) GNCOT, subj: Reorganization of the TDC, 13 Feb 44. Copy in AG file 320.
11. In accordance with ltr, 333.1/1504 (22 Aug 43) GNCOT, Hq AGF, subj: Tng Inspections, AA, Armored and TD Units, 22 Aug 43.
12. Ltr fr CG RASC to CG TDC, 320.2 (TDC)GNCST, subj: Delegation of Comd Responsibilities, 23 Mar 44. Copy in AG file 300.
13. Letter Orders No. 1 fr Hq TDC to Maj Gen John H. Hester, 210.453, GNCNA, subj: Travel Orders, 8 Apr 44.
14. See ltr 3 Sept 43. Chapt. VI Appendix.
15. GO 1, Hq IRTC, 10 Mar 44. Copy in file Hq IRTC.
16. Verbal statement by Gen A O Gorder to TDC Historical Officer 1-9-45.

CHAPTER VII

1. GO TDC 26 Jun 44.
2. Verbal statement of C/S TDC in interview with Historical O, 25 Oct 44.
3. (1) For complete list of personnel present at those conferences see Annex "C".
(2) Ltr to CG's, Second and Fourth Armies, III and XVIII Corps, Airborne Center, RASC, TDC, fr Hq AGF 337/420 (9 Jun 44) GNCOT, subj: Conference, 9 Jun 44. Copy in AG file 337.
4. 2d Ind to ltr fr TDS to CG AGF, subj: Proposed Conf at Cp Hood for Army Corps & Div Commanders, 14 Jul 44. Copy in AG file 337.
5. Ibid.
6. Statement by TDC Historical Officer who attended conferences and noted questions raised.
7. For references see file 370.5, 609th TD Battalion file.
8. Letter Orders No. 37 (OYT), TDS file GNRTH 353, dtd 20 Aug 44.
9. Extract of TWX fr Hq TDC to CG AGF, 23 Sep 44. AG file 337.
10. Ltr to Comdt, Armored Sch, fr CG RASC, 352 GNCST, subj: Consolidation of Armored, Cavalry (Mech) & TD OCS's at Ft Knox, Ky, 5 Oct 44. Copy in AG file 352 General.
11. Ltr fr Hq AGF to CG TDC, 475/243 (C)(22 Sep 44)GNCOT-1/96978, subj: Review of Developments, 22 Sept 44.
12. Ltr Hq TDC, GNRNS 475, 25 Oct 44, subj: Review of Developments. Copy in AG file 475.
13. Copy of Letter in Appendix, Chapt. VII.
14. Ltr Hq TDC, 2 Dec 44, subj: Review of Developments, copy in AG file 475.
15. Ltr Hq AGF, 320.3/1 (Redpl)(S)(10 Feb 45)GNCOT-3/15347, 10 Feb 45, subj: Redeployment T/O's & T/E's, copy in AG file 320.3.
16. Ltr Hq TDC, 320.3 GNRNC (16 Feb 45)(S) 16 Feb 45, subj: Redeployment T/O&E's, copy in AG file 320.3.
- * Other improve. as indicated by this study and review are recorded in Appendix I.
17. FM 18-5, 16 Jun 42; War Dept Training Circular 88, 24 Jun 43; FM 18-5 (Revised), 18 Jul 44.
18. Ltr Hq AGF, 353/5 (TD)(R)(5 Feb 45)GNCOT, 5 Feb 45, subj: Continuance of Instruction on Towed TD's. Copy in AG file 353, General, 1945.

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19. Ltr Hq AGF, 334/127 (R)(13 Dec 44) GNRQT, 13 Dec 44, subj: Army GF Bn. Copy in TDC AG file 334.
20. Ltr Hq H&OC, 320.2 GNRST (TD Center) 28 Dec 44, subj: Delegation of Comd Responsibility. Copy in AG file 320.2.
21. Memo by C/OLT to TDC Historical Officer, subj: Activities ODT Section 1 May 1945. Copy in Interview File TDC.
22. Ibid.

CHAPTER VIII

1. GO 1, Hq TDC, 19 Mar 45, copy in AG general order file, 1945.
2. TWX, 14 Mar 45, copy in AG file, 201-Dawley.
3. Ltr CG TDC fr Hq AGF, GNRQT-5, 319.1 (8 May 45) subj: Status of Tanks & TD's in Post War Army, and enclosures of copies of letters frn CG's ETO - 319.1 TDC, Gen Gorder's file.
4. Ibid.
5. Ibid.
6. Cf. 4, P. 73; cf. 18, P. 74; cf. 12, P. 82.
7. Gen Gorder's statement to Historical Officer 4/1/45.
8. Cf. 4, P. 90.
9. Ibid.
10. Memo to Historical Officer by ODT Section. Historical file 210.31 TDC.
11. (1) Verbal statement, Chief ODT Section TDC to JDC, Historical Officer, 5/1/45.
(2) ODT Report - June 45 - TD Historical file 210.31.
12. Ltr fr Gen Bruce to Lt Col E A Dunnam. Copy to TD Historical file (except).
13. ODT Report to Historical Officer TDC, 2 Jun 45. TDC Historical file 210.31.
14. Ibid.
15. Statement by Lt Col V W Pyland. Copy in TD Historical Journal 14 May 45.
16. Ltr Hq AGF, 353/101 (Assault)(C)(21 May 45) GNRQT 6/27508, 21 May 45, subj: Test on Japanese Field Fortifications, in AG file 353.
17. Ibid.
18. Verbal statement Col Pyland to TDC Historical Officer, July 45.
19. Ibid.
20. Weekly report, TD Board, 6 Jun 45.
21. Ltr Hq AGF, 353 (Assault)(23 May 45) GNRQT 6/27702, 23 May 45, subj: Ref Material for Japanese Field Fortifications Project. AG file 353.
22. Ltr Hq AGF, 353/101 (Assault)(S)(29 May 45) GNRQT-6/28361, 29 May 45, subj: Test of Materiel Against Japanese Field Fortifications. AG file 353.
23. Ibid.
24. Ltr, CG, TDC, to Col George M Dean, Hq, AGF, 31 May 45, AG file 353.
25. Par 3, SO 57, Hq TDC, 11 Jun 45 (S). TDC SO file.
26. Ltr Hq TDC, GNRNO 353, 15 Jun 45, subj: Combined Arms Tests in the Reduction of Japanese Field Fortifications. AG file 353.
27. Ltr Hq AGF, 353/101(Assault)(S) (29 May 45) GNRQT-6/28361, 29 May 45, subj: Test of Materiel Against Jap Field Fortifications, AG file 353.
28. Ltr Hq AGF, 353/101 (S)(Assault)(26 Jun 45) GNRQT-6/31892, 26 Jun 45, subj: Test of Materiel Against Japanese Fortifications. AG file 353.
29. Verbal statement of Lt Col E A Dunnam, TDC Historical Officer who acted as S-4 for Sphinx Project.
30. Verbal statement of Gen Althaus to Td Historical Officer, 1 Aug 45.
31. Ibid.
32. Ibid.

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33. Verbal statement of Gen Althaus and Gen Gorder to Ground Historical Officer, 24 Jul 45.
34. War Department TC No. 34, 11 Aug 45.
35. Personal ltr, Hq AMF from Maj Gen A W Waldron to CG, TD Sphinx Project. Copy in TDS Sphinx file.
36. History of 3th TD Group. Historical file TDC.
37. History of 704th TD Bn. Historical file TDC.

CHAPTER IX

1. (1) Verbal statement of Col Ray C Montgomery to TD Historical Officer, 1 May 1945.
(2) Memo in Gen Bruce's notes on historical record. Copy in TDC Historical file - Gen Bruce's notes.
2. Cf. 9, pg 14, Chapt. II.
3. Cf. 45, pg 25.
4. GO 1, TDT&FC, 9 Mar 42. Copy in TDC AG file 300.4.
5. Ibid.
6. Info Bul 10, TDC, 30 Mar 42. Copy in AG file 300.5.
7. Cf. 13, p 5, Chapt. I.
8. Memo No. 18, 24 Feb 42, RJ1/cs-Automotive Test & Research Divn, Aberdeen Proving Ground, Md. Copy in TD Bd Vehicle file.
9. Notes & memos Gen Bruce to Pres. TD Bd - TD Bd file T70 - M18.
10. (1) Copy memo fr AC/S, G-3, to AC/S, G-4, G3/46176, 30 Jul 41, TD Bd file Military Characteristics.
(2) Copy memo fr AC/S, G-3, to AC/S, G-4, 3/46176, 11 Aug 41, subj: Mil characteristics for dev of new eqipt, a SP mount, for large cal. antitank gun, TD Bd Mil Characteristics file.
11. Memo TDTFC, 2 Dec 41. Vehicle Digest file, TD Bd.
12. Cf. 10.
13. (1) Verbal statement of Col Montgomery to TDC Historical Officer, 1 May 45.
(2) OCM Item 18039, discussion of characteristics, 3 Apr 42. Copy OCM Records, TD Bd.
14. Verbal statement, Bd Recorder Lt Col Crosby to TDC Historical Officer, 1 May 1945.
15. Copy ltr fr Capt Cushman to CG TDC, 24 April 1942, subj: Dev of T49, TD Bd file 473.1/15 C85.
16. OCM Item 18039, 3 Apr 42. Copy OCM Records, TD Bd.
17. Cf 11, p 14, Chapt. II.
18. Cf 26, p 20, Chapt. II.
19. Cf 14-15-16, pp 7, 8, Chapt. I.
20. Cf 25, p 20, Chapt. II.
21. Cf 29, p 21, Chapt. II.
22. TO/E - TD Bn, 5 Jun 42.
23. List of Board Projects - Appendix, Chapt. IX.
24. Weekly Progress Reports TD Bn - Jan, Feb, Mar 1942.
25. Verbal statement of Col B F Purdue, Director of Tactics Dept, TDS. Copy in Historical Officer's Interview file.
26. Cf. 25.
27. P 12, Memo on TD Bd Activities, prepared by Col H L Hoyt, TD Bd. Copy in Historical Officer's memo file.
28. Ibid.
29. PP. 10, 11, Memo on TD Bd Activities. Cf. 27.
30. T/O 18-26, 8 Jun 42.

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31. Ltr to CG TDC fr CG AGF, 472.1/158 GNRQT (6-25-42) 22 Jul 42, subj: TD Weapons. Copy in AG file 472.
32. P 11, Memo fr Col Jones. Copy in Historical Officer's file.
33. Ltr to CG, AGF, fr CG, TDC, 472.1/GNIDC, 9 Nov 42, subj: Revision of T/O's TD Units. Copy in AG file 472.
34. Ltr to CG, TDC, fr CG, AGF, 320.2/383(S) GNGCS (11-12-42) 12 Nov 42 (C), subj: Reduction of Pers & Vehicles. Copy in AG classified file.
35. T/O 18-25 & T/E 18-25-M, 27 Jan 43.
36. (1) Ltr to CG, TDC, fr CG, AGF, 320.2/180 (TD) GNRQT T/26840 (1-1-43), 1 Jan 43, subj: Formation of Towed TD Bn for Test Purposes. Copy in AG file 320.
(2) P 7, Memo fr Col Jones. Cf. 32.
37. T/O 18-35, 7 May 43.
38. Pp. 1, 2. Memo fr Col Jones. Cf. 32.
39. T/O 18-10-1, 5 Jan 42.
40. P 10, Memo fr Col Jones. Cf. 32.
41. T/O&E 18-10-1, 26 May 43.
42. P 9, Memo fr Col Jones. Cf. 32.
43. P 11, Memo fr Col Jones. Cf. 32.
44. Verbal statement of Col Hoyt to TDC Historical Officer.
45. (1) TD Bd Historical file - Bd Procedure.
(2) Monthly Progress Reports, Jan, Feb, Mar, Apr. TD Bd Progress Reports file
46. Project File - TD Bd. Apr 1942.
47. Cf. 9, pg 14.
48. SO 115, Hq AGF, 31 Jul 42, Copy in AG file 201-Montgomery.
49. Memo fr Col Montgomery to CG, TDC, 9 Sept 42, approved by CG, TDC, 11 Sep 42. subj: Reorganization TD Bd. Copy in TD Bd organization file.
50. Verbal statement of Lt Col Crosby, recorder, TD Bd, to TDC Historical Officer, 1 May 45.
51. Project No. 264, list of projects, Appendix, Chapt. IX.
52. Verbal statement by Col Ray C. Montgomery, Pres. TD Bd. 1 May 45.
53. P. 14, Memo on TD Bd Activities. Cf. 27.
54. TD Bd Project No. 188. Subj: Test of Telescopic Sight 108. 10 Feb 43. Copy in TD Bd project file.
55. P. 33, Memo on TD Bd Activities. Cf. 27.
56. TD Bd Project 155, subj: Test of Azimuth Indicator for 3" GMC M-10. 2 Aug 43. Copy in TD Bd project file.
57. Memo on TD Bd Activities. Cf. 27.
58. Ibid.
59. P. 41, Memo on TD Bd Activities. Cf. 27.
60. Pp. 41, 42, Memo on TD Bd Activities. Cf. 27.
61. P. 42, Memo on TD Bd Activities. Cf. 27.
62. P. 43, Memo on TD Bd Activities. Cf. 27.
63. Cf. 61.
64. TD Bd informal project. Subj: Study of Radio Maintenance, 31 Jul 43. Copy in TD Bd file 413.44.
65. Cf. 62.
66. TD Bd Projects 68, subj: Test of AT rocket grenade launcher M-1, 8 Oct 42. Copy in TD Bd project file.
67. Ltr to CG TDC, fr CG AGF, 461 GNRQT/19882(10/22/42) 22 Oct 42, subj: Prep of Tng Literature on Use of Rocket AT 2.36" M6 & M7. Copy in TD Bd file 461.
68. WD Training Circular 104. 15 Dec 42.
69. Ltr to CG, AGF, fr CG TDC, 473.1, 31 Mar 42, subj: TD Guns & Motor Carriages. Copy in AG file 473.1.

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70. Cf. 27.
71. SO 169, Hq AGF, 25 Feb 42. SO file TDC 1942.
72. Correspondence file, TD Bd and Lt Col W. E. Sherwood. File project 109, TD Bd.
73. Pp. 25-26, Memo on TD Bd Activities. Cg. 27.
74. Ltr fr CG AGF, 2 Jul 42, subj: Redesignation of T49. TD Bd file 473.1/15.
75. Memo for record, subj: Pilot Model Test of T49, 3 Sep 42. Copy in Vol I Lt Col Col W. E. Sherwood file, T49 - Project 109.
76. Verbal statement of Col R. C. Montgomery.
77. OCM Item 19185, 19 Nov 42. TD Bd OCM file.
78. Memo for record, 22, 23 Dec 42, subj: Conference on Proposed GMC 76mm Gun at Detroit, Mich. Copy in W. D. Sherwood memo file, Vol II, TD Bd file, project 109.
79. Item 19438, OCM Items.
80. Project file 109, TD Bd project file.
81. Special reports on T70 Production Models. Project file 109, TD Bd.
82. Verbal statement of Col Westover, C/S TDC, 1 May 45 to TDC Hist. O.
83. Projects 110, 198, 215, 223, TD Bd project file.
84. Americal Press, Temple Daily Telegram, 21 May 45.

CHAPTER X

1. P 1, Cir, TDC, Apr 42. Copy in historical file, OCS Regt, TDS.
2. (1) Ltr to CO, TDTEFC, fr WD AGO, AG 320.2(11-5-41)MR-M-C, 27 Nov 41, sub: Orgn of TDT&FC. Copy in AG file 320.
(2) SO 3, TDTEFC, 3 Dec 41. TDS SO file.
3. (1) Verbal statement by Lt Col E. J. Howell, Sec TDS. Hist file, OCS Reg't, TDS.
(2) SO 9, TDC, 27 May 42. TDS SO file.
1. Ltr to CO, TDTEFC, fr WD AGO, AG 320.2(11-5-41) MR-M-C, 27 Nov 41, subj: Organization of TDT&FC. Copy in AG file 320.
2. P 1, Cir, TDC, Apr 42. Copy in historical file, OCS Reg't, TDS.
3. SO 3, TDTEFC, 3 Dec 41, Copy in TDS SO file.
4. (1) Verbal statement by Lt Col E. J. Howell, Sec'y, TDS. Copy in historical file, OCS Reg't, TDS.
(2) SO 9, TDC, 27 May 42. Copy in TDS SO file.
5. Cf. 1.
6. (1) Ltr to CO TDTEFC, fr A/Comdt TDS, 15 Jan 42, subj: Courses of Inst, TDS. Copy in TDS file 352.
(2) Verbal statement by Brig Gen H. T. Mayberry, Comdt TDS. Copy in Historical Officer's interview file.
8. List of personnel assigned to TDC, 20 May 42. Copy in notebook of Mrs. Ruth Richmond, sec'y to Gen Bruce. In Historical Officer's file.
9. Ltr to TAG, fr CO TDTEFC, 20 Jan 42, subj: Request for Officer Personnel, TDS. Copy in AG file 320.21.
10. Memo on School problem by Col Logan Berry to TDC Historical Officer, 9 Oct 45. Copy in TD Historical Officer's interview file.
11. Ibid.
12. (1) Ibid.
(2) Cf. 11, Chapt. IX.
13. Cf. 4 (1).
14. (1) Ltr to CG's, All Corps Areas & AF, C's of WD Arms & Services, fr TAG, AG 320.2 (6-28-41) MT-A-M, 8 Jul 41, subj: Rotation of Instructors at RTC's and Service Schools. Copy in TDS file 320.
(2) Ltr to CG's R&SC, AA Comd, AF, TDC, fr CG AGF, 353.16/2 GNGAP, 7 April 1942, subj: Instructors at Service Schools & RTC's. Copy in TDS file 320.

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15. Cf. 4, (1).
16. Cf. 6, (2).
17. Ltr to CG AGF, fr A/Comdt TDS, 24 Mar 42, subj: Orientation Course for Officers. Copy in TDS file 352.
18. Ltr to A/Comdt TDS fr CG AGF, 353/43 (TDS) GNTRG (4-8-42), 8 Apr 42, subj: TD Orientation Course, 4 May-30 May 42, Cp Hood, Tex. Copy in TDS file 352.
19. Enrollment records of Officers Orientation courses. Original in sec'y's office, TDS.
20. See Chapt. III.
21. Cf. 4 (1).
22. Cf. 16 (2) Chapt. III.
23. (1) Ltr to A/Comdt TDS, fr CG AGF, 352.11-18 (TDS) GNTRG (4-27-42) 27 Apr 42, subj: 2d TD Orientation Course. Copy in TDS file 352.
(2) Cf. 19. (3) Par 1, SO 104, TDC, 2 Jun 42. Copy in AG file 300.4.
24. CO 5, TDC, 1 Jun 42. Copy in AG file 300.4.
25. (1) Ltr to CG AGF, fr A/Comdt TDS, 26 Mar 42, subj: Book Shop at TDS. Copy in TDS file 461.
(2) 2d Ind to ltr to CO TDS fr CG AGF, 26 Mar 42, Cf. 25 (1).
(3) Ltr to CG, SOS, fr A/Comdt TDS, 16 Apr 42, subj: Reproduction Plant, TDS. Copy in TDS file 413.
(4) Ltr to WFB fr GAG, SPQNOP 400/312 (Cp Hood) REQ, GN 537-14-42, 30 Apr 42, subj: Printing Equipment Required - TDS. Copy in TDS file 413.
(5) Cf. 4 (1).
26. Ltr to CG TDC fr A/Comdt TDS, 27 Apr 42, subj: Program of Instr, OCS. Copy in TDS file 352.
27. Memo for CG AGF fr WDCS Orgn's & Tng Div, WDGCT 352 TD OCS (6-21-42), 26 June 42, subj: Establishment of TD OCS. Copy in AG file 320.
28. GO's 11, 12, TDC, 15 Jul 42. Copy in AG file 300.4.
29. GO's 13, 14, TDC, 16 Jul 42. Copy in AG file 300.4.
30. GO's 1, 2, TDS, 16 Jul 42. Copy in TDS GO file.
31. Memo for PRO, 7 Oct 42. Copy in Acad Records sectn gen file, OCS Reg't. TDS.
32. See Chart in Appendices, Chapt. X.
33. (1) Ltr to CG & R&SC fr CG TDS 6 Aug 43, subj: Inactivation of Acad Division TDS. Copy in TDS file 352.
(2) GO 3 TDS, 7 Sep 43. Copy in TDS GO file.
34. Ibid.
35. Telegram to CG TDC fr CG AGF 30 Jul 42. Copy in AG file 320.
36. Ltr to CG TDC fr CG R&SC 320.2 GNRSF, 15 Mar 43, subj: Comd Status, TDS & TDRTC. Orig in G-3 file 322.
37. Ltr to CG TDC fr CG R&SC, GNRSP 320.2, 11 Nov 43, subj: Comd Status, TDS & TDRTC. Orig in AG file 300.
38. Ltr to CG TDC fr CG R&SC, 320.2 GNRST (TDC) 28 Dec 44, subj: Delegation of Comd Resp. Copy in AG file 321.2.
39. Ltr to all comdrs concerned fr Sec'y of War, WD, AG 352(7-4-42) NO-GN-PS-N, 11 Jul 42, subj: Quotas for TD OCS, Class No. 1. Copy in TDS file 352.
40. GO 3, TDS, 14 Aug 42. Copy in TDS GO file.
41. OCS Charts. Originals in acad records section gen files, OCS Regt, TDS.
42. Cf. 27.

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- 43. (1) P. 18, Report of Proceedings of Faculty Bd, TDS, 19 Nov 42. Copy in acad records sectn dead files, OCS Reg't, TDS.
(2) Memo to All OC's fr Comdt TDS, 2 Oct 42, subj: Academic & Leadership Standards. Copy in acad records sectn gen files, OCS Reg't, TDS.
(3) Memo to CO, OCS Reg't, fr director, OCS dep't, 12 Dec 42, subj: Reports on Officer Candidates. Original in acad records sectn gen files, OCS Reg't, TDS.
(4) Ltr to AT Officer, Western Defense and 4th Army, fr CG TDC, 19 Aug 42, subj: Educational and Experience Standard of Applicants for TD OCS. Copy in acad records sectn gen files, OCS Reg't, TDS.
- 44. Cf. 43, (1).
- 45. P. 3, Memo to CO, OCS Reg't, TDS, fr Director, OCS Dep't, TDS, 12 Dec 42, subj: Reports on Officer Candidates. Copy in acad records sectn gen files, OCS Reg't TDS.
- 46. See efficiency reports, Appendices Chapter X.
- 47. Ltr to TAG, fr CG, P&SC, 352 (TD) GNRST, 22 Dec 42, subj: Officer Candidate Course, TDS, Camp Hood, Texas. Copy in acad records sectn gen files, OCS Reg't TDS.
- 48. OCS Weekly Schedule, 11 Apr 43, TDS. Copy in acad records sectn dead files, OCS Reg't, TDS.
- 49. (1) Ltr to CG, TDS, fr CG AGF, 352 (AAA-OCS) (5 Jul 43) GNAGS, 28 Jul 42, subj: Volunteer Officer Candidates. Copy in acad records sectn gen files, OCS Reg't, TDS.
(2) Ltr to Comdt TDS, fr TAG 352 (TDS) GNEST, 24 May 43, subj: Officer Candidate Course, TDS, Camp Hood, Texas. Copy in acad records sectn gen files, OCS Reg't, TDS.
- 50. Master Schedule, OCS, Course, 8 Jul 42. Copy in operations dep't master schedule and master program file, TDS.
- 51. Master Schedule for OCS Courses, TDS, 9 Mar 43. Copy in acad records sectn dead files, OCS Reg't, TDS.
- 52. (1) Cf. 49 (1).
(2) OC Weekly Schedule, TDS, 12 Jul 43. Copy in acad records sectn dead files, OCS Reg't, TDS.
- 53. (1) Revised Master Schedule for OCS Courses, 6 Nov 42. Copy in acad records sectn gen files, OCS Reg't, TDS.
(2) Summary of Hours with Practical Work in Schedule of OCS as compiled fr OCS Master Schedule, 2 Jul 43. Copy in acad records sectn gen files, OCS Reg't, TDS.
- 54. See Annex "D".
- 55. (1) Consolidated Daily Strength Return, 15 Nov 43. Copy in TDS file 320.2.
(2) Report of Status of OCS, 15 Nov 43. Copy in TDS file 320.1.
- 56. Study (R), TD School Classification Department, 20 Dec 43, subj: Personnel Research Report -- Experiment in Combat Adaptability. 3 Parts.
- 57. GO 5, TDS, 15 May 44.
- 58. (1) Master Schedule for Officers' Automotive Maintenance Course, No 1 (17 Aug to 6 Nov 42) TDS, 18 Jul 42. Copy in oper dept master sched & master program file, TDS.
(2) Master Schedule for Officers' Pioneer Course No. 1 (17 Aug to 12 Sep 42) TDS, 16 Jul 43. Copy in oper dept master sched & master program file TDS.
(3) Schedule for Officers' Tactical Course, 14 Sep 42. Copy in oper dept master sched & master program file TDS.
(4) Master Schedule for Enl Pioneer Course No. 1 (17 Aug to 12 Sep 42) TDS, 16 Jul 42. Copy in oper dept master sched & master program file TDS.
(5) Ltr to CO, 3d TD Gp, fr CO, TDS, 22 Aug 42. Copy in TDS file 352.11.

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59. (1) Cf. 58 (1).
(2) Master Schedule for Officer's Automotive Maintenance Course, 29 Jul 43, TDS. Copy in oper dept master sched & master program file TDS.
(3) Ltr to CG RASC fr CO TDS, 352.11 GWTDR, 11 Aug 42, subj: Initial Courses at the TDS. Copy in TDS file 352.11.
(4) Ltr to CO, 3d TD Gp, fr CO, TDS, 22 Aug 42. Copy in TDC file 352.11.
(5) Cf. 4.
(6) Cf. 58 (2).
(7) Cf. 59 (3), (4) & (5).
(8) Ltr to CG RASC, fr Comd't, TDS, 352.11-GWTDM, 23 Sep 42, subj: Off & Enl Pioneer Courses, TDS. Copy in TDS file 352.11.
(9) 2d Ind to ltr to CG RASC, fr Comd't TDS, 352.11-GWTDM, 23 Sep 42. Cf. 59 (8).
(10) Cf. 58 (2).
(11) Cf. 58 (3).
(12) Cf. 59 (3), (4), & (5).
60. (1) Master Schedule for Officer Orientation Course - Basic, TDS. Copy in oper dept master sched & master program file, TDS.
(2) Statistical Report of Students, TDS, 1 Dec 43. Copy in acad records actn "Statistical Report of Students, TDS" file, TDS.
61. (1) Memo to CG AUTC, pres, TD Bd, CG, Tng Brig, JO TDMTC, CG TDS, CO BUTC, fr CG TDC, 352.11, 28 Nov 42, subj: Officers Orientation Courses. Copy in TDS file 352.11.
(2) Charts of Courses, TDS, Original in acad records actn gen files, TDS.
62. Master Schedule for Officers' Orientation Course-Advanced (4 wks, 192 hrs), TDS, 5 Dec 42. Copy in oper dept master sched & master program file TDS.
63. Ltr to CG TDS, fr CO 818th TD Bn, 5 Feb 43, subj: Officers' Advanced Tactical Course, TDS. Copy in TDS file 352.3.
64. Master Schedule for Officers' Adv Tactical Course, TDS, 25 Jan 43. Copy in oper dept master sched & master program file, TDS.
65. Ltr to CG RASC, fr Comd't TDS, 26 Jun 43, subj: Revision of Master Schedule for Officers' Advanced Course. Copy in TDS file 352.3.
66. 6th Ind to ltr to CG RASC, fr Comd't TDS, 26 Jun 43. Cf. 63.
67. (1) 7th Ind to ltr to CG RASC, fr Comd't, TDS, 4 Aug 43, subj: Revision of Master Schedule for Officers' Adv Course. Copy in TDS file 352.3.
(2) 8th Ind to ltr to CG RASC, fr Comd't, TDS, 4 Aug 43. Cf. 67 (1).
(3) Master Schedule for Officers Adv Tactical Course, TDS. Copy in oper dept master sched and master program file. TDS.
68. (1) Ltr to CG RASC, fr Comd't, TDS, 10 Feb 43, subj: Officers Communications Course, TDS. Copy in TDS file 352.26.
(2) 7th Ind to ltr to CG RASC, fr Comd't, TDS, 10 Feb 43. Cf. 68 (1).
(3) Master Schedule for Officers' Communications Course, TDS, 12 Apr 43. Copy in operations dept master schedule and master program file, TDS.
69. (1) Ltr to CG AGF, fr CG TDC, 352 (TD) GWTDO, 18 Aug 43. Subj: Advanced Automotive Course 76mm Gun Motor Carriage T-70. Copy in TDS file 352.2.
(2) 2d Ind to ltr to CG AGF, fr CG TDC, 352 (TD) GWTDO, 18 Aug 43. Cf. 69 (1).
(3) 2d Ind to ltr to CG TDS, fr CO 647th TD Bn, 13 Oct 43, subj: Enl Course. Copy in TDS file 352.2.
(4) Master Schedule for Officers' Adv Automotive Course, TDS. Copy in oper dept master sched & master program file, TDS.
70. Ltr to TAG, fr CG RASC, GNRST 352, 16 Sep 43, subj: Full-Track Vehicle Course (Formerly Adv Automotive Course) TDS. Copy in TDS file 352.2.
71. Monthly Strength Report, TDS, 1 Jan 1943. Copy in TDS file 320.2.

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72. Ltr to CG TDC, fr CG TDS, 319.1 GMRFA, 14 Feb 44, subj: Weekly Report, 14 Feb 44. Copy in OS file 14.1 TDS.
73. Verbal statement, Capt F E Smith, Adj TDS, to TDS, Hist O, 1 Nov 45.
74. Weekly Strength Report from HQ Morning Reports 1 Mar and 31 Oct 1944.
75. (1) GO 8, TDS, 30 Jun 44. Copy in TDS GO file.
(2) Verbal statement of TD Historical Officer who attended demonstrations of TD employment.
76. TDS GO 11, 17 Nov 44. TDS GO file, 1944.
77. AGF ltr file 370.5/129 TD Units (R) 10 Nov 44, GMRCT, subj: Trf of 606 TD Bn.
78. Memo on TDS problems by Col. Logan Berry to TDC Historical Officer, 9 Oct 45. Copy in TD Historical Officer's interview file.
79. Statement by General Althaus to TD Historical Officer, 6 Nov 45.
80. Cf. 78.

CHAPTER XI

1. GO 1, TMTC, 9 Mar 42. Copy in GO file, TDC, 1942.
2. Memo for the GO 93d AT Bn, fr AG/S, G-3, WD, G-3/46351, 28 Jul 41, subj: Test of TD Bn. Copy in Historical Officer's misc. file.
3. MFP 18-1, WD, 1 Apr 42.
4. Chart of Original Plans for Organization of UTC, 20 Mar 42. Copy appended to this Chapt. as chart "A".
5. List of Organizations Trained in UTC, prepared for Historical Officer by Hq UTC. Copy in Historical Officer's file.
6. Record of tel conv, 3 Jul 42. Copy in Records of Tel Convs, S-X filed in office of G/S, TDC.
7. Par 3, SO 101, TDC, 29 May 42. Copy in AG file 300.4.
8. Memo on UTC Activities, prepared by Col Noble J. Wiley Jr, SX, UTC. Copy in Historical Officer's memo file.
9. Memo on BCC, prepared by Maj Ralph W Sleator, UTC, Director of BCC. Copy in Historical Officer's memo file.
10. (1) TM 1, UTC, 10 Jun 42. Copy in UTC Training Memo file.
(2) TM 3, UTC, 1 Aug 42. Copy in UTC Training Memo file.
11. Ibid.
12. Cf. 10.
13. Ibid.
14. Cf. 8.
15. (1) Cf. 8.
(2) Par 1, Unnumbered Memo, UTC, to All Gps and Bns, UTC, 15 Jun 42. Copy in UTC unnumbered memo file.
16. TM 2, UTC, 11 Jun 42. Copy in UTC TM file.
17. TM 3, UTC, 1 Aug 42. Copy in UTC TM file.
18. See Chapt. XIV.
19. Cf. 33, Chapt. III, GO 18, TDC, 17 Aug 42. Copy in AG file 300.4.
20. GO 33, TDC, 1 Sep 42. Copy in AG file 300.4.
21. Unnumbered Memo AUTC, 14 Sep 42. Copy in UTC Unnumbered Memo file.
22. TM 6, AUTC, 13 Mar 43. Copy in UTC TM file.
23. GO 28, TDC, 13 Oct 42. Copy in AG file 300.4.
24. Cf. 16.
25. Unnumbered Memo, AUTC, to All Group and Bn CO's, 29 Oct 42. Copy in UTC Unnumbered Memo file.

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26. (1) Cf. 8, p. 163.
(2) Training Schedules of UTC Tng Sched File.
(3) Tng Schedules of EUTC in EUTC Sched Files.
(4) MTP 18-2, 11 Jul 45, TDRIC MTP file.
27. Tng Memo 4, 2d Tng Gp, 30 Jul 43. Copy in UTC file 353.4.
28. Ibid.
- XX Note: A few of the highlights of the Training Groups and Battle Conditioning Department activities are recounted here so that the reader may compare their activities with subject matter of MTP 18-5, 11 Jul 45.
29. Weekly Report to CG, TDC, fr AUTC, 18 Mar 43. Copy in UTC file 319.1.
30. Weekly Report to CG, TDC, fr CG, AUTC, 29 Jun 43. Copy in UTC file 319.1.
31. Cf. 9.
32. Ibid.
33. Ibid.
34. Ibid.
35. (1) Unnumbered Memo, UTC, to All Units, UTC, 16 Aug 43, subj: Battle Conditioning. Copy in UTC unnumbered memo file.
(2) Cf. 9.
36. Verbal statement by Maj. Ralph W. Sleator, director, BC Dept., UTC.
37. (1) Cf. 10.
(2) Wkly Report to CG, TDC, fr CG, AUTC, 20 Jul 43. Copy in UTC file 319.1.
(3) Wkly Report to CG, TDC, fr CG, UTC, 28 Sep 43. Cf. (2).
38. (1) Cf. 35.
39. Ibid.
40. Cf. 9.
41. Memo "A", 1st TD Tng Gp, 6 Mar 43. Copy in UTC file 353.01.
42. Memo "B", 1st TD Tng Gp, 6 Mar 43. Copy in UTC file 353.01.
43. Ibid.
44. Ibid.
45. TM 5, AUTC, 2 Nov 42. Copy in UTC TM file.
46. Unnumbered Memo, AUTC, to All Group and Bn CO's, 16 Nov 42. Copy in UTC Unnumbered Memo file.
47. SO's 2, 3 and 5, TDRIC. Copies in TDC SO file, TD Sch.
48. (1) GO 31, TDC, 24 Nov 42. Copy in AG file 300.4.
(2) GO 35, TDC, 7 Dec 42. Copy in AG file 300.4.
49. Tng Memo 1, AUTC, 5 Jan 43. Copy in UTC tng memo file.
50. (1) TO 18-5, 27 Jan 43.
(2) Unnumbered Memo to All Units, AUTC, 31 Mar 43, subj: TD Bns (Towed). Copy in UTC unnumbered memo file.
51. Unnumbered Memo, AUTC, to All Units, AUTC, 1 May 43. Copy in UTC Unnumbered Memo file.
52. GO 1, AUTC, 5 May 43. Copy in UTC GO file.
53. Weekly Report to CG, TDC, fr CG, UTC, 25 May 43. Copy in UTC file 319.1.
54. GO 54, TDC, 13 Aug 43. Copy in AG file 300.4.
55. Wkly Report to CG, TDC, fr CG, AUTC, 24 Feb 43. Copy in UTC file 319.1.
56. Unnumbered Memo to All Unit CO's, AUTC, 9 Jul 43. Copy in UTC Unnumbered Memo file.
57. Unnumbered Memo, AUTC, to CG's 1st & 2d TD Brigades, CO all Groups & Bns, subj: Specialist School. Copy in UTC file 220.63.
58. Ltr orders 1, TDC, 210.72, 1 Jan 44, subj: Assumption of Comd, AG file 210.72.
59. Ltr to CG fr CG, AGF, 360.09/1 (P) (26 Aug 43) subj: Combat Intel Tng Test, 26 Aug 43. Copy in AG file 350.09.
60. Ltr to CG TDC, fr CG AGF, 320-2(TDC) (R) (13 Feb 44) subj: Recorg of TDC. Copy in AG file 320 TDC.

CHAPTER XI (Cont'd)

61. GO 47, WD, 18 Aug 43.
62. GO 48, TDC, 12 Jul 43. Copy in AG file 300.4.

CHAPTER XII

1. GO 1, TIMEC, 9 Mar 42. Copy in AG file 300.4.
2. P. 1, "History of Training Brigade," prepared by Maj Milton H. Baughn, Jr. S-3, Tng Brig. Copy in Historical Officer's file.
3. Telegram to CG TDC, fr C/AF, 3 Apr 42. Copy in AG telegram file.
4. SO 76, TDC, 30 Apr 42. Copy in AG file 300.4.
5. SO 78, TDC, 2 May 42. Copy in AG file 300.4.
6. Cf. 2.
7. Par. 12, SO 138, 31st Infantry Division, 1 June 42. Copy in Tn Brig correspondence
8. P. 3, "History of Training Brigade." Cf. 2.
9. GO 5, TDC, 1 Jun 42. Copy in AG file 300.4.
10. P. 4, "History of Training Brigade." Cf. 2.
11. GO 8, TDC, 29 Jun 42. Copy in AG file 300.4.
12. P. 8, "History of Training Brigade." Cf. 2.
13. GO 15, TDC, 15 Jul 42. Copy in AG file 300.4.
14. GO 9, TDC, 1 Jul 42. Copy in AG file 300.4.
15. GO 21, TDC, 21 Aug 42. Copy in AG file 300.4.
16. SO 26, TDC, 1 Oct 42. Copy in AG file 300.4.
17. P. 15, "History of Training Brigade." Cf. 2.
18. (1) GO 38, TDC, 15 Dec 42. Copy in AG file 300.4.
(2) GO 5, TDC, 20 Feb 43. Copy in AG file 300.4.
19. P. 16, "History of Training Brigade." Cf. 2.
20. P. 17, "History of Training Brigade." Cf. 2.
21. P. 19, "History of Training Brigade." Cf. 2.
22. GO 47, TDC, 12 Jul 43. Copy in AG file 300.4.
23. GO 73, TDC, 4 Nov 43. Copy in AG file 300.4.
24. Supplement of "History of Training Brigade," prepared by Maj Milton H. Baughn, Jr., S-3, Tng Brig. Copy in Historical Officer's file.
25. P. 12, "History of Training Brigade." Cf. 2.
26. Ibid.
27. Cf. 25.
28. P. 1, Memo on Ord Activities, prepared by Capt James T. Lewis, Jr., Ord Dept. Copy in Historical Officer's file.
29. Pp 1, 2, Memo on Ord Activities. Cf. 28.
30. GO 29, TDC, 19 Oct 42. Copy in AG file 300.4.
31. Pp 3, 4, Memo on Ord Activities. Cf. 28.
32. GO 12, TDC, 19 Mar 43. Copy in AG file 300.4.
33. P. 13, "History of Training Brigade." Cf. 2.
34. P. 14, Memo on Ord Activities. Cf. 28.
35. Ibid.
36. P. 1, Memo on Ord Activities. Cf. 28.
37. P. 2, Memo on Ord Activities. Cf. 28.
38. Memo to All Units, TDC fr CG TDC, 300.4 GWYDA, 27 Apr 43, subj: Ord Serv to Units in Cantonment at Cp Hood & No Cp Hood. Copy in AG file 400.4.
39. P. 3, Memo on Ord Activities. Cf. 28.
40. P. 5, Memo on Ord Activities. Cf. 28.
41. Ltr to CG, FMGC fr CG, AGF, 451.01, 22 Jul 43, subj: Spare Parts Policy for Ground Force Units. Copy in AG file 451.

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42. P. 6, Memo on Ord Activities. Cf. 28.
43. P. 7, Memo on Ord Activities. Cf. 28.
44. Ibid.
45. GO 6, TDC, 12 Jun 42. Copy in AG file 300.4.
46. P. 5, "History of Training Brigade." Cf. 2.
47. GO 2, TDC, 4 Feb 43. Copy in AG file 300.4.
48. GO 55, TDC, 12 Aug 43. Copy in AG file 300.4.
49. GO 17, TDC, 17 Aug 42. Copy in AG file 300.4.
50. P. 9, "History of Training Brigade." Cf. 2.
51. Ltr to CG's, 4th, 5th, 6th, and 8th SC's fr WD AGO, AG 322, OBI-SPMOJ-M, 7 Aug 43, subj: Reorg and Redesign of 374th, 375th, 377th and 379th Engineer Bns, Separate. Copy in Adj files, 374th Eng Gen Serv Regt.
52. Cf. 9.
53. GO 16, TDC, 15 Aug 42. Copy in AG file 300.4.
54. GO 24, TDC, 2 Sep 42. Copy in AG file 300.4.
55. (1) Par. 4, SO 78 TDC, 2 May 42. Cf. 5.
(2) Par. 10, SO 256 TDC, 28 Nov 42. Copy in AG file 300.4.
56. (1) Par. 1, SO 246, TDC, 16 Nov 42. Copy in AG file 300.4.
57. (1) Par. 14, SO 46, TDC, 22 Feb 43. Cf. 56 (2).
(2) Par. 13, SO 107, TDC, 4 May 43. Copy in AG file 300.4.
58. (1) Par. 14, SO 107, TDC, 4 May 43. Cf. 57 (2).
(2) Par. 16, SO 173, TDC, 20 Jul 43. Copy in AG file 300.4.
59. Par. 17, SO 173, TDC, 20 Jul 43. Cf. 58 (2).
60. Par. 1, GO 5, TDC, 17 Feb 44. Copy in AG file 300.4.

CHAPTER XIII

1. Cf. 15, P. 16.
2. Cf. 16, P. 16.
3. Ltr to CG, AGF, fr CG, TDC, 8 May 42, subj: Tng of Loss Repls for TD Units. Copy in TDC G-3 file 322.
4. Cf. 58, P. 40.
5. Ltr to CG, AGF, fr CG, R&SC, 320.2 GMRST, 19 Aug 42, subj: Establishment of TDRTC. Copy in TDC AG file 320.
6. GO 27, TDC, 3 Oct 42. Copy in AG file 320.
7. Par. 1, SO 5, TDRTC, 14 Oct 42. Copy in TDRTC SO file, Hqs TDRTC.
8. Ltr to CG, AGF, fr CG, R&SC, 320.2 (TD) GMRSE, 17 Aug 42, Subj: Size of Proposed TDRTC. Copy in G-3 file 322.
9. Telegram to CG, TDC, fr CG, AGF. Copy in file 201-Gillfillan, J. E.(O), Hqs TDRTC.
10. Cf. 26, p. 53.
11. P. 1, "TDRTC Sch, Chronological Events." Copy in Documentation of History, TDRTC.
12. Ibid.
13. Ltr to CG, TDC, fr CG, TDRTC, 319.1, 16 Nov 42, subj: Weekly Reports. Copy in AG file 319.1.
14. MTP 18-1, WD 1 Apr 42.
15. Cf. 13.
16. (1) Par 1, GO 9, TDRTC, 23 Dec 42. Copy in TDRTC GO file.
(2) P. 7, History of TDRTC. TDC Historical file.
17. P. 4, MTP 18-2, copy in Documentation of History, TDRTC.
18. TDRTC Tng Schedules - Jan, Feb, Mar 43. TDRTC Tng Sched file.
19. SO 60, TDRTC, 17 Dec 42. Copy in TDRTC SO file Hq TDRTC.
20. Psychiatric Orient. Lectures. Copy in Documentation of Hist, TDRTC.

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21. Par 1, GO 24, TDRTC, 30 Sep 43. Copy in Documentation of Hist, TDRTC.
22. Par 1, Memo 68, Hq, Cp Hood, 12 Mar 43. Copy in Documentation History in TDRTC file.
23. P 1, TDRTC Sch Chronological Events. Copy in Documentation of History, TDRTC.
24. Ibid.
25. Ibid.
26. P 2, TDRTC Sch Chronological Events. Copy in Documentation of History, TDRTC.
27. Ibid.
28. GC 1, TDRTC, 25 Apr 43, copy in Documentation of Hist. TDRTC file.
29. Info Bul's A, B & C, TDRTC, 28 May 43, subj: Opening of No Cp Hood, Texas. Copy in Documentation of History, TDRTC file.
30. P. 62.
31. P. 14, "History of TDRTC, 1 Sep 42-Oct 43," prepared by Colonel Christian Hildebrand, SX, TDRTC. In Historical Officer's file.
32. Par 1, GO 15, TDRTC, 29 May 43. Copy in Documentation of History, TDRTC. In Historical Officer's file.
33. P. 14, "History of TDRTC." Cf. 31.
34. Par 1, GO 17, TDRTC, 8 Jun 43. Copy in Documentation of History, TDRTC. Cf. 32.
35. Ltr to CG, AGF, fr CG, R&SC, 320.2 GNRST, 22 May 43, subj: Redesignation of TD Tng Bns in the TDRTC. Copy in G-3 file 322.
36. Par. 1, GO 21, TDRTC, 4 Aug 43. Copy in "Docum. of Hist. TDRTC." Cf. 32.
37. Par 1b, ltr to CG, TDC, fr CG, TDRTC, 319.1, 16 Oct 43, subj: Weekly Report. Copy in AG file 319.1.
38. Ltr to CG, TDC, fr CG, R&SC, 320.2/02, TDRTC, 1 Oct 43, subj: Reorg of RTC, Cp Hood, Texas. Copy in G-3 file 322.
39. Map of Proposed ASTP. Copy in "Docum. of Hist. TDRTC." Cf. 32.
40. Par 2, ltr to CG, TDC, fr CG, TDRTC, 319.1, 16 Oct 43, subj: Weekly Report. Copy in AG file 319.1.
41. P. 16, "History of TDRTC." Cf. 31.
42. P. 16, "History of TDRTC." Cf. 31.
43. Par 1b, ltr to CG, TDC fr CG, TDRTC. Cf. 37.
44. Ibid.
45. Ltr to CG, TDRTC, fr CG, R&SC, 233 GNRST (ASTP-BTC), 16 Nov 43, subj: Org of the ASTP BTC, Cp Hood, Tex. Copy in 353 ASTP file TDRTC.
46. Ltr to CG, ASTP-BTC fr CG, R&SC, 322 GNRST (ASTP-BTC), 9 Dec 43, subj: ASTP. Copy in 353 ASTP TDRTC file.
47. Ltr to CG, TDRTC, fr CG, R&SC, 322 GNRST (TDRTC) 23 Nov 43, subj: Standardization of RTC. Copy in 322 file TDRTC master plan.
48. Ltr to CG, TDC, fr CG, TDRTC, 322 GNRHP, 16 Nov 43, subj: Retention of Officers beyond their Release Date under the Rotation Plan. Copy in 352.16 TDRTC file.
49. GO 34, TDRTC, 3 Dec 43. Copy in GO file, TDRTC.
50. Ltr to CG, AGF, fr WD A/C AG 220.3, 14 Jan 44, subj: EM-Utilization of Manpower based on Physical Capacity. Copy in 220.3 TDRTC file.
51. GO 7, TDRTC, 15 Feb 44. Copy in GO file, TDRTC.
52. Ltr, Hq R&SC, 21 Dec 44, GNRST 353, subj: Org and Adv Tng of TDRTC Graduates. Copy in "Documentation of History, TDRTC" file.
53. R&SC Monthly Ineffectives Report.
- * Cf. MTP, WD, 1 Apr 42 and MTP, 11 Jul 45.

CHAPTER XIV

1. Final Report, TDITC (General, p. 2). Copy in Historical Officer's file.
2. Ltr to CG, AGF, fr CG, TDC, 320.2/03, 26 Sep 42, subj: Activation of Hq & Hq Co, Activation and BUTC, TDC. Copy in G-3 file 322.
3. Ltr to TAG fr CG, AGF, 320.2/138 (TD) GNGCT/11856 (10-22-42), 22 Oct 42, subj: Orgn of TD BUTC. Copy in G-3 file 322.
4. Ibid
5. F. 50 Chapt. IV.
6. Ltr to CG, AGF, fr CG, TDC, 600.1 GWTDC, 17 Sep 42, subj: Request for Construction and Authorization. Copy in G-3 file 322.
7. Cf. 8, p. 50.
8. Ibid.
9. Cf. 1.
10. Ibid.
11. Final Report, TDITC (General, p. 2; Appendix 8, a-3). Cf. 1.
12. GO 3, TDITC, 18 Feb 43. Copy in BUTC GO file, TDC.
13. Ltr to CG, AGF, fr CG, TDC, 353.01/9-GWIDO (2-17-43), 17 Feb 43, subj: Tng of TD Bns with Negro Enl Pers. Copy in Historical Officer's Misc. file.
14. Final Report, TDITC (General, p. 3; Appendix 8, a-1). Cf. 1.
15. Final Report, TDITC (General, incl D, p. 4, par 6). Cf. 1.
16. Final Report, TDITC (General, incl D, p. 5, par e). Cf. 1.
17. Final Report, TDITC (General, incl D, p. 6, par f). Cf. 1.
18. Final Report, TDITC (General, incl D, p. 5, par d). Cf. 1.
19. Ibid.
20. Verbal statement by Lt Col Geo. T. Cunston, S-3, ITC.
21. Par 35, SO 105, TDC, 1 May 43. Cf. 18.
22. Final Report, TDITC (General, p. 4). Cf. 1.
23. Ltr to TDC fr CG, AGF, 321/7 (TD Units) (R) (GNGCT) (5-8-43), 8 May 43, subj: Reorg of TD Units in Accordance with New T/O's. Copy in G-3 file 322.
24. Final Report, TDITC (General, incl B, p. 9). Cf. 1.
25. Final Report, TDITC (General, incl D, p. 7). Cf. 1.
26. Par 7, ltr to CG, TDC, fr CG, AGF, 353.01/68 GNGCT, 4 Jun 43, subj: Tng Periods. Copy in G-3 file 322.
27. GO 54, TDC, 13 Aug 43. Copy in BUTC GO file, TDC.
28. Final Report, TDITC (General, p. 4). Cf. 1.
29. Ltr to CG, TDC, fr TAG, 322 OB-I-GNGCT-M, 2 Oct 43, subj: Discontinuance of TP BUTC, Camp Bowie, Texas. Copy in G-3 file 322.
30. Final Report, TDITC (General, p. 4). Cf. 1.
31. Final Report, TDITC (General, p. 5). Cf. 1.