## Plans for the Offensive

MONTHS of planning by all echelons of command in Italy were climaxed by the final spring offensive directives issued in March and April. To break the formidable array of defenses which the winter lull had given the Germans an opportunity to build, another carefully planned, coordinated effort would be required by the Allied armies, the activities of which had become more closely correlated as the lines were pushed northward up the Italian peninsula and into the Gothic Line. The ultimate mission remained the same as it had been throughout the entire campaign, the complete destruction of the enemy forces in Italy. The immediate mission was threefold, holding the present positions in the event of an enemy offensive, containing the maximum number of enemy divisions in the country, and finally bringing the enemy to battle in order to destroy him.

It was estimated that by the first of February the Germans had completed preparations for a withdrawal from the line of the Apennines to the line of the Adige River if necessary, but no factual evidence had been received that this plan would be put into effect at any given time. It was expected, therefore, that the enemy would make such a withdrawal only if forced to do so by Allied pressure, or if ordered to transfer such a large number of troops out of Italy for service in other theaters that he could no longer hold the present 130-mile front. A shortening of his commitment to a line running from the western edge of Lake Comacchio south to Mount Grande would allow three or possibly four divisions to be released from the Eighth Army front; removal of more than that number of units would force him to pull back at least to the line of the Ticino and Po rivers, or possibly as far as the Adige line. Since the only actual indication of a withdrawal was to be found in a thinning out of administrative formations in western Italy, Allied offensive planning was predicated on the assumption that the Germans would fall back only when we had forced them from their strong positions along the Senio River east of Bologna and in the Apennines south of this main supply base. Plans were also drawn up for peaceful occupation of northern Italy and southern Austria in event of a formal enemy surrender.

### A. OVER-ALL STRATEGY OF 15TH ARMY GROUP See Map No. 2

The strategy governing the operation of the two armies in the spring of 1945 was basically the same as it had been in the fall of 1944, when a drive to bisect northern Italy was to have followed a successful crossing of the Apennines and the debouchment of Fifth Army into the Po Valley. The same general objective was contained in Operations Instruction No. 3 issued by 15th Army Group on 12 Feb-(See Annex No. 1A.) The forthcoming offensive was to be divided into ruary. three phases: I) capture and establishment of a bridgehead around Bologna, II) development of the Po River positions, and III) crossing the Po with the object of seizing Verona, sealing the main outlet from Italy — the Brenner Pass — and develop-Although the operation was divided into three ing the Adige River positions. distinct phases, there was strong hope it could be carried out without pause between The decision to drive straight to the north on the Bologna-Verona any of them. axis was expected to cause enemy resistance in western Italy to fall of its own weight, since German and Fascist elements in that section of the country would be forced to retreat northeastward in the direction of the Brenner line before we reached Verona or be cut off against the French Alps, the Swiss frontier, and the forbidding mountains in the narrow section of Italy which bordered on Austria west of the Brenner Pass. In the event of such a withdrawal IV Corps was to take over control of western Italy with forces composed of American, British, Italian, and Brazilian troops. On completion of Phase III it was hoped that bridgeheads could be seized immediately over the Adige River and Padua and Venice captured, although this result could be achieved only if the enemy did not elect to defend the Adige line in strength. In the latter case it was anticipated we would be forced to halt, regroup, and prepare for a formal river crossing. Both Fifth and Eighth Armies were directed to begin preliminary planning to accomplish the mission as laid down by 15th Army Group.

As a result of the submission of such plans, and conferences between the Army commanders and General Mark W. Clark, 15th Army Group commander, within a month decisions had been crystallized to such an extent that on 24 March detailed orders for the offensive were issued by 15th Army Group in Operations Instruction No. 4. (See Annex No. 1B.) D-Day was set for 10 April (later changed to 9 April),

and Fifth Army was to make the main effort following preliminary attacks by Eighth Army to clear the plain east of Bologna. It was believed that the bulk of the enemy forces could be trapped and destroyed south of the Po by the execution of wide envelopment movements, west of Bologna by Fifth Army and east of the city by the British, the two spearheads to meet along the south bank of the river. General Clark expressed confidence that successful execution of the plans would inflict such a crushing blow on the enemy that it would be the last coordinated offensive the army group would be required to undertake.

The three phases of the attack were explained in more detail. Phase I called for the breaching of the Santerno River defenses by Eighth Army and the debouchment of Fifth Army from the mountains into the Po Valley, to include the capture or isolation of Bologna. Phase II envisioned a break-through by either or both armies to encircle German forces south of the Po; the final phase (III) would include both the crossing of the river and the capture of Verona. After Eighth Army had moved from its present front line on the east bank of the Senio River and crossed the Santerno, it was to make two main thrusts northeast of Bologna, one toward the town of Budrio, 8 miles northeast of Bologna on the road to Ferrara, and another toward Bastia, on Highway 16 leading to the same city. The Bastia attack would be directed through the Argenta Gap, a narrow strip of land lying between the Reno River and Lake Comacchio and affording an avenue of advance toward Ferrara and the Po along dry land, relatively free of the numerous water courses which cut up the ground farther south. Provided success was achieved in operations through the gap, the main effort of Eighth Army would be centered in this zone. Phase II operations for the British included the blocking of German escape routes over the Reno and over the Po at Ferrara and at Bondeno, 10 miles farther west. The main worry of Eighth Army was whether the Germans would stand and fight on the Senio or fall back immediately to the Santerno, thus disrupting Eighth Army's initial attack plans.

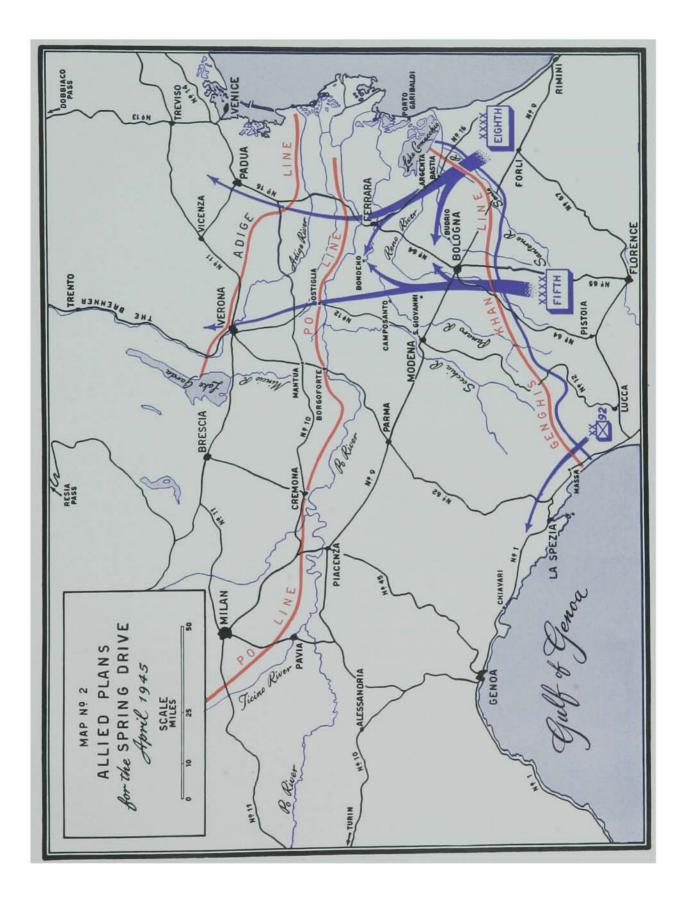
In midwinter Fifth Army had been prepared to attack northward if Eighth Army had reached the Santerno River. The same contingency was involved in the spring attack, although the exact timing was left to the command of 15th Army Group, which ordered that Fifth Army be ready to jump off on 24 hours' notice any time after D plus 2. At the request of General Truscott the definite date of 12 April was later set for the Fifth Army D Day. The principal Phase I mission for Fifth Army was to break the enemy's mountain line and reach the valley; the secondary operation was the capture or isolation of Bologna. It was felt that the Germans might leave a die-hard garrison in the city to deny us the use of the highway communications leading out of it, in which event the main drive was to bypass the city and continue on, leaving small forces to mop up the resistance. A preliminary attack 5 days before D Day of the main offensive was ordered along the Ligurian coast, designed to capture Massa and exploit toward the port and former Italian naval base of La Spezia. This operation was to be primarily of a diversionary measure, to keep the enemy off balance and to exert pressure on his western flank. It was considered possible, but not probable, that this effort would draw off part of the German tactical reserve; with this mobile reserve limited to only two divisions it was felt they would not be committed until the enemy high command was certain which of the attacks was our main effort.

In Phase II Fifth Army was to exploit success in the valley by driving northward in the corridor between the Reno and Panaro rivers, then strike east along the south banks of the Po to join Eighth Army in the Bondeno or Ferrara area, and complete the encirclement of the enemy. After our forces had captured the road junction of San Giovanni, 10 miles northwest of Bologna, a secondary effort was to be exerted to seize crossings over the Panaro River to the west and then move to the north again in the corridor between the Panaro and Secchia rivers, striking toward the Po at Ostiglia.

All forces were instructed to make every effort to capture existing bridging and ferrying equipment which would enable a crossing of the main river to be undertaken before our own bridging equipment was brought up, thus speeding the opening of the third phase of the operation; all available forces were to be moved into any such bridgehead which might be established. Air support was to include participation by a large percentage of the Mediterranean Theater's heavy bomber groups, while tactical air support would initially be given to Eighth Army, the priority shifting to Fifth Army when the latter opened its attack. Naval support was planned on each coast, primarily in the form of deceptive measures designed to delude the enemy into believing amphibious landings were about to be undertaken off Porto Garibaldi, on the narrow spit separating Lake Comacchio from the Adriatic Sea on the east, and near Chiavari, halfway between La Spezia and Genoa on the Ligurian Sea on the west.

### B. FIFTH ARMY PLANS

1. The Alternatives. The Fifth Army plan to break through the German lines south of Bologna and carry out its Phase I mission in the Allied spring offensive was the product of discussion and revision of half a dozen plans which had been considered at one time or another throughout the winter. The direction of the projected main effort was shifted farther to the west as the date for the attack was farther advanced, since the later the date the assault began the less difficult it would be to



operate in the high ground on the left of II Corps and the right of IV Corps. When it was considered possible that an attack might have to be launched in early February in order to prevent withdrawal of additional German troops, weather conditions in the mountains virtually limited the possibilities to a thrust north from Mount Grande down the Sillaro Valley on the right of II Corps where the ground was lower and snow less likely to interfere with operations. Preliminary plans were drawn in January for an attack here, where the lines were closest to Highway 9, to cut this route and assist Eighth Army by turning the flank of the German river line defenses across the lower Po Valley. The big disadvantages of this proposal were that no more than two divisions could be employed simultaneously due to the restricted road net, Bologna still would be left to be dealt with after the valley was reached, and a main supply route over the Apennines still would not be opened.

When 15th Army Group decided not to launch an offensive until 1 April or later, planning emphasis was placed on Highway 65 and Highway 64, either one of which could serve as a main supply route for the Army once our troops had reached the valley. Furthermore, both roads led directly to Bologna. Consideration was given to other possible avenues of approach to the flatlands, but all were rapidly ruled out as impractical. Highway 12, farther to the west and the only other major trans-Apennine road the south end of which was controlled by Fifth Army, was extremely crooked, contained many steep grades, and was mostly in enemy territory. Other minor roads over the mountains failed to provide facilities for a sufficient volume of traffic even to be considered. All planning, therefore, was directed at the two paved highways on which we had already advanced, the main decision required being whether to attack down one or both, concentrate west of Highway 65, or entirely west of Highway 64.

Highway 65 offered the most direct approach. Along this road the lines were already within 12 miles of Bologna, while on Highway 64 in early February our most advanced elements were more than 20 miles from the city. The terrain was most favorable for an advance down Highway 65, although Mount Sole and Mount Adone, two rugged peaks set in ridge lines bordering the Setta Valley between the road and the Reno River to the west, would have to be cleared. The road net was the best in the Army sector and was capable of supporting at least five divisions. The greatest disadvantage was the bristling array of defenses which the Germans had prepared on all the high ground along the highway and covering it almost the entire distance to Bologna.

The Highway  $6_4$  route provided another good approach to the objective through an area which was not as heavily fortified. It held out the possibility of a close envelopment of Bologna from the northwest and also afforded means of supplying five divisions. This road, following the course of the Reno River and being partially defiladed from the west much of the distance, was the more protected of the two. The long ridge, however, which formed this defilade extended for approximately 15 miles parallel to the road from Mount Belvedere on the south to Mount Pigna and Mount Pero on the north, slightly beyond the German strongpoint of Vergato. This entire ridge line would have to be swept clear of the enemy before the road could be used for much of its length. As on Highway 65 the Mount Sole area would also have to be captured to enable an advance to be made down this road.

A third possibility was also thoroughly discussed. This possibility was to turn to the northwest after Vergato had been taken, moving over into the valley of the Panaro River and forging down this corridor to capture Modena, cut Highway 9, and envelop Bologna from the west. Such an operation, also feasible for five divisions from the standpoint of supply, would probably meet the least initial resistance, but contained several drawbacks. It would necessitate a crossing over the Panaro, it would strike the Po Valley almost 20 miles west of Bologna, and it was hazardous in that it would create a salient extending far to the northwest of the main body of the Army, inviting an enemy counterattack which might nip off the forward elements. Before an attack in this area could be undertaken at all the Belvedere— Pigna ridge also would have to be uncovered, and the successful outcome of a move in this direction would fail to open Highway 64 until Bologna had been taken.

A study of these possibilities convinced General Truscott that two of them could be discarded almost immediately. The direct attack down Highway 65 was eliminated because it would probably prove too costly in men and material. The wide hook through the Panaro Valley presented the great hazard of a thrust with both flanks exposed, and would also bring our troops into the valley at such a distance from Bologna that the capture of the city might be long delayed and the Fifth Army mission as outlined by 15th Army Group only partially fulfilled. Consequently all future planning was restricted to the area west of Highway 65 and immediately west of Highway 64, the left limits bounded roughly by the road net which paralleled the latter road about 5 miles to the west and which struck Highway o no more than 5 or 6 miles west of Bologna. Clearing of the Belvedere-Pigna ridge system by the 10th Mountain Division was carried out in late February and early March after it had been decided to launch this limited objective attack as a preliminary operation entirely separate from the main offensive. Whether or not to clear the entire length of the ridge was left an open question; when the attacking forces reached Castel d'Aiano during the first week of March, thus completing the capture of about three-fourths of the ridge, a halt was called to avoid focusing too much enemy attention on this section of the Army line and forcing us to commit additional troops.

2. The Plan Adopted. By mid-March the final spring plan — Operation Craftsman — had been almost completely shaped; there remained only a few details to be decided. Fifth Army was to attack with both corps abreast, the main effort initially astride Highway 64 until the valley of Setta Creek had been cleared and the road junction of Praduro, 15 miles north of Vergato, had been captured, at which time the bulk of the troops would be concentrated west of the highway. A minor effort would be made down Highway 65, but positions along this route were expected to fall relatively easily after the dominating high ground west of the road had been taken. Operations after the main enemy line had been broken were to be decided according to the situation existing at that time and were not included in the instructions.

On the west coast the 92d Division was to carry out the diversionary attack ordered by 15th Army Group, beginning on D minus 4. This effort might draw in the local reserves in the area; at the very least our attack would engage the bulk of the 148th Grenadier Division holding the opposing front line. The 442d Regimental Combat Team would be ready for action by 1 April, and the diversion was to be launched very shortly thereafter, early enough to permit, if possible, some of the supporting troops to return to the main front in time for the attack there.

On the main front there remained to be made a major decision on timing, whether the two corps would attack simultaneously or IV Corps should attack first. The massing of enemy artillery fire against IV Corps, should that unit jump off earlier than II Corps, could be balanced against the fact that all of the artillery of II Corps would be available for counterbattery fire in support of IV Corps and that all air support could be concentrated on the left. A staggered attack would allow the enemy to move local reserves into action against IV Corps, but these reserves would probably become so involved that they could not move back later to oppose II Corps. It was not believed that the early attack on the left would greatly violate security, since the enemy already would be expecting an attack along the entire front at any moment, and tactical surprise as to the exact time and place still could be obtained by II Corps forces. The early seizure of the north anchor of the ridge at Mount Pigna would permit engineers to start work on two important bridges over the Reno and a small creek at Vergato, provide troop assembly areas south of Vergato, release 6 South African Armoured Division forces from protecting the left flank of II Corps, allowing them to assist in the capture of Mount Sole, and in general bring the IV Corps line up even with that of II Corps. The terrain beyond the northern end of the ridge at Mount Pigna was more closely related to the Sole area, and a simultaneous advance by the two corps north of this line would permit mutual support. Consequently it was decided to begin the II Corps attack at Army command on 24 hours' notice any time after the IV Corps main effort had started.

Within the II Corps zone two main attacks were to be launched, one on Mount Sole and another on Pianoro and the hill masses to the west of Highway 65, including Mount Adone. Staggering these attacks would permit concentration of air and artillery support on each in turn, and would cause little difference in the enemy reaction. Units engaging in the attack on Mount Sole also preferred a night attack in view of the terrain and enemy capabilities. Decision in the matter was left up to General Keyes, subject to approval by the Army commander; the attack on Mount Sole accordingly jumped off at 2230, 15 April, and the drive on Pianoro at 0300 the following morning.

Some question also arose over the troop list for the attack. The 365th Infantry, the 371st Infantry, the BEF, and the Legnano Group were considered defensive units, not to be employed in the main effort. By attaching separate offensive organizations to the 92d Division to replace two of its organic regiments, the division could be used in the diversionary attack. The other units would be useful in manning the long section of the IV Corps line which would be inactive as far as the main offensive was concerned. The 85th Division, having received extensive river-crossing training and being the most rested, would be used as an exploitation force. Taking these facts into consideration the principal units allotted to IV Corps were the 10th Mountain Division; the 1st Brazilian Division; the 1st Armored Division; the 371st and 365th Infantry; the 91st Cavalry Reconnaissance Squadron; the 751st Tank Battalion; Company A, 760th Tank Battalion; and the 701st and part of 894th Tank Destroyer Battalions. II Corps had under command the 34th Division; the 88th Division; the 91st Division; the Italian Legnano Group; the 6 South African Armoured Division; the 752d and 757th Tank Battalions; and the 804th and 805th Tank Destroyer Battalions. The 92d Division, operating under Army control, had only the 370th Infantry of its own divisional troops remaining, but was reinforced by the 442d Infantry; the 473d Infantry; the 758th Light Tank Battalion; the 760th Tank Battalion (less two companies); the 670th Tank Destroyer Battalion, and the 894th Tank Destroyer Battalion (less Company C and the Reconnaissance Company). The 85th Division constituted Army reserve.

Fifth Army Operations Instruction No. 7, issued on 1 April (See Annex No. 1E), laid down the method finally devised to break through the hard core of enemy resistance. The corps would attack abreast; after the initial phase an armored reserve was to be set up to enable General Truscott to direct this crushing weight down whichever avenue of approach seemed to offer the greatest exploitation value when the main defenses had been cracked. Once in the valley hard-hitting, infantry-armored task forces would be employed to cut up the enemy rear installations. Speed and the maintenance of constant contact with the Germans were to be stressed. Three phases, Green, Brown, and Black, were set up as control lines. The II Corps effort would begin after IV Corps reached the Green Line and so brought forward elements of the two corps abreast. In the opening Green Phase IV Corps was directed to attack with the 10th Mountain Division on the left in the rugged country west of Highway 64 and the 1st Armored Division on the right driving north along the highway. (See Map No. 4.) The mountain units were to seize Mount Pigna and Mount Mantino, the latter peak 2 miles east and slightly north of Mount Pigna, while the armored elements captured Vergato and took Mount Pero, a dominant height about 1 mile north of the town and slightly west of Highway 64. The Brazilian and the 92d Division units would protect the left flank and follow up any enemy withdrawals on Highway 12 and in the upper Panaro Valley. Both corps were involved in the Brown Phase. IV Corps was to continue pushing northeast parallel to Highway 64. II Corps was to attack with all its divisions in the line, the South Africans against Mount Sole, the 88th Division against Monterumici directly east of Sole, the 91st Division against Mount Adone, Mount dei Frati, and the village of Pianoro on Highway 65, and the 34th Division east of the highway against (See Map No. 5.) The Legnano Group was to patrol aggressively Dei Mori Hill. on the extreme right of II Corps, maintaining contact with 13 Corps.

For IV Corps the Black Phase involved further advances ranging from 3 to 5 miles, including the seizure of Mount Moscoso and Mount Bonsara, while II Corps was charged with the capture of Praduro and Mount della Capanna. The 85th Division, after remaining in reserve during the first two phases, was to be passed through the 1st Armored Division before or immediately after the Brown Line was reached, when it would come under control of II Corps. The intercorps boundary, initially along the Reno River, would shift approximately 4 miles west of Highway 64, leaving IV Corps attacking with only the 10th Mountain Division in a narrow zone. The 85th Division was also to be held available for commitment east of the Reno, if the situation so required, to assist the divisions of II Corps in that zone to reach the Black Line.

Formation of the exploitation force was provided for during this phase. The 1st Armored Division was to assemble in the area west of Vergato when relieved by the 85th Division, and the 6 South African Armoured Division was to be pinched out by II Corps at the Black Line and assembled at Lagaro, southeast of Vergato. Both armored units were to come under Army control, prepared to use any available routes west of Highway 64 to push forward into the valley in either corps zone with the mission of seizing the line of the Panaro River, the Americans west of the town of Camposanto, pointed roughly at Modena, and the South Africans east of Camposanto to complete the encirclement of Bologna and drive toward contact with Eighth Army at Bondeno. Each armored division would thus have a zone measuring roughly 10 miles along the river bank.

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Plans for operation in the valley were based on three separate assumptions of enemy reaction: light resistance in which we would break through to the flatlands in a week or less; moderate resistance, which might require 10 days or 2 weeks of fighting in the mountains; and heavy resistance in which our rate of advance would be as little as  $\frac{1}{2}$  mile per day. Should either of the first two be encountered, it was considered the advance could be continued, but in the event of stiff and bitter action we probably would be unable to continue the attack beyond the line of the Panaro River. Maximum permanent losses which it was believed the enemy could inflict were estimated at 100 men per division each day.

The diversion by the 92d Division along the west coast was directed through rough country about 4 miles inland from the sea, where unsuccessful attacks had been made in early February. The division, strengthened by the crack 442d Infantry and the rapidly improving ex-antiaircraftmen of the 473d Infantry, was assigned the task of advancing along a general ridge line which extends from Mount Folgore, through another Mount Belvedere, and on north to Mount Brugiana, a total distance of 6 miles. By moving through the mountains we would outflank the strong Gothic Line defenses still existing on the narrow coastal plain, and the troops would be protected from the heavy coast defense guns at Punta Bianca south of La Spezia, fire from which had been largely responsible for smashing our earlier attacks in this vicinity. Clearing of the ridge would allow thrusts to be made down into the coastal plain and eventually into the town of Massa. The immediate mission for the division was the capture of Massa and the clearance of the flat coastal strip as far north as the town.

3. Deception and Support. An elaborate program of deception to insure surprise for the Fifth Army share of the spring offensive was worked out, designed to create the illusion that II Corps, composed of the 85th and 88th Divisions and supporting units, was moving to join Eighth Army, and that the entire Fifth Army front had been taken over by IV Corps. Most of the "movement" was simulated, but to add reality some actual shifts did take place. All divisional markings and insignia were removed from vehicles and personnel involved. The secrecy was further highlighted by establishment of dummy radio nets for some units, and imposition of radio silence on others.

Since surprise was one of the most sought factors for the actual opening of the offensive, no strong pre-H Hour artillery barrage was planned. In its place a 20-day program of increased artillery fire was put into effect along the entire front, progressively building up until in the final week preceding D Day a special preparatory program more than doubling the earlier rate of increase was fired. (*See Annex No. 1D.*) These programs, simulating preparatory barrage fire, were carried on in conjunction with infantry raids, aimed at determining enemy positions and attitude, and

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to obtain prisoners. Only targets which were active or known to be active were engaged. These included hostile artillery firing on our troops, gun positions located by photo interpretation that were known to be active by sound, flash, or observation, active mortars, enemy installations and defenses, and profitable targets of opportunity. Unobserved counterbattery missions were fired only when our own troops were being shelled, and there was no appreciable increase in harassing fire, except when included in programs for deceptive purposes to deceive the enemy as to D Day and H Hour. This long softening-up program was deemed essential in view of the strong defenses which had been built up and the fact that no heavy aerial bombardment would be available until just prior to the opening of the main attack. Certain units which were moved into new positions just prior to the opening of the offensive were not included in the build-up of fires. The 527th and 536th Field Artillery Battalions (8-inch howitzers) were allowed to fire only one piece per day, while one battery of the 530th Field Artillery Battalion (155-mm gun) attached to II Corps, and the 765th and 766th Field Artillery Battalions (155-mm howitzers) were limited to registration missions only. No firing was done by the 240-mm howitzers of the newly-arrived 11 Battery, British 54 Superheavy Regiment.

Special allocations of ammunition from stocks which had been saved by the reduced artillery firing earlier in the year were made available for the stepped-up shooting. A total increase of fire of 328,909 rounds over the basic rate was authorized for the 20-day period, divided as follows:

Weapon	II Corps Number	IV Corps r of Guns	Five Days rounds/gun	Eight Days rounds/gun	Seven Days rounds/gun
75-mm howitzer	18	51	20	56	245
75-mm gun	42	25	30	96	420
76-mm gun	32	10	50	120	273
3-inch gun	22	72	30	96	244
90-mm gun	12	••	100	224	671
105-mm howitzer	228	114	20	56	<b>24</b> 5
155-mm howitzer	84	24	25	64	161
155-mm gun	24	12	20	48	112
8-inch howitzer	2	I	20	48	116
25-pounder	104	24	25	56	<b>2</b> 45
4.5-inch gun	• • •	16	25	64	140
4.5-inch howitzer	16	32	25	64	140

Ammunition available for American artillery weapons of Fifth Army at the beginning of the spring offensive included the following:

Weapon	Number of Weapons	Rounds Available
75-mm howitzer	71	227,334
75-mm gun	290	316,939
76 <b>-</b> mm gun	193	<b>349, <sup>1</sup>7</b> 5
3-inch gun	144	246,741
90-mm gun	32	352,073
105-mm howitzer M2	3 <sup>8</sup> 7	1,455,969
105-mm howitzer M3	102	163,794
155-mm howitzer M1 155-mm howitzer M1917–18	132	249,427 113,361
155-mm gun	48	32,989
8-inch howitzer	27	6,670
81-mm mortar	577	284,930
4.2-inch mortar	76	214,905

Support by the air force was of critical importance in the success of the spring drive. The enemy was well entrenched and almost on a parity with us as regarded infantry and artillery; only in armor and in air power did we have a clear-cut ad-In April 1945 that advantage could be concentrated on the battlefield vantage. itself, for the Allied air force had long ago gained mastery of the Italian skies and long-range interdiction of the roads and railroads leading into Italy had been achieved during the early spring. Plans accordingly were drawn up for the utmost employment of air power in close coordination with action on the ground. Before the attack our planes continued their normal activities, interdicting the Po River crossings, destroying enemy motor transport, and harassing enemy supply behind the lines. On the respective D Days for Eighth and Fifth Armies large formations of heavy bombers were to strike the forward enemy areas - the first time these craft had been so used since the days of Anzio and Cassino. While the heavy bombers disrupted the supply lines and struck terror into the enemy, the fighter-bombers and medium bombers would carry out a heavy, sudden blitz against command posts, dumps, gun installations, and all the other vital enemy points which had been catalogued during the previous months of inactivity. The system of ground-air control which had been developed during the winter was expanded and prepared to deal with targets of opportunity that might rise after our attack got under way and the prepared programs were over. Coordination between the ground and air elements extended from the front lines all the way up to the Army headquarters, where operating headquarters of XXII TAC were installed next to those of the Army commander.

### C. PREPARATIONS OF THE ARMS AND SERVICES

1. Supply Plans. Plans for the support of the approximately 270,000 troops of all nationalities comprising Fifth Army considered primarily the methods to be employed once the forces had reached the Po Valley, since the normal procedure which had been followed all winter would cover operations generally up to the fall of Bologna. Until that city was taken and made available for use as a supply base, the Army would have to sustain itself out of the base dumps which had been built up in the Florence area. Supplies of ammunition on hand for the beginning of the attack were estimated as being sufficient to support a 45-day sustained offensive. Food, ammunition, and gasoline to carry five divisions for 3 days were stocked by II Corps in forward areas, and plans were laid for establishment of similar dumps to supply two divisions in the attack in the IV Corps zone. Supply depots around Pisa were well prepared to support the operations of the 92d Division on the west coast.

Truck transportation would provide the only means of supply, since reconstruction work on the Prato-Bologna railroad was not expected to have progressed far enough to allow establishment of a railhead at Grizzano, 20 miles south of Bologna, by the time the offensive began. Even should the port of Genoa be captured very rapidly, immediate use of sea transportation was out of the question. It was expected that between 15 and 30 days would be required to sweep mines from the shipping lanes between Leghorn and Genoa, while engineers estimated that 6 weeks would be required to prepare the port for use once it had been taken. There were not sufficient landing craft available to allow any large-scale use of a beach supply point. Air resupply also was practically impossible. Sufficient transport planes were on hand, but dropping equipment was stocked in only limited quantities. The principal drawback, however, was the fact that if this type of resupply was to be undertaken combat aircraft would have to be cleared from most of the forward air fields to allow their use as bases for the transports, thus forcing the fighter-bombers to operate from fields so far in the rear that they would be almost unable to fly over the combat area. Truck transportation battalions were available in sufficient quantity to lift the expected tonnages. Army transportation was made up of 26 companies each equipped with 42 2<sup>1</sup>/<sub>2</sub>-ton trucks, and 5 companies equipped with 42 10-ton semitrailers, making a total of 1,092 2<sup>1</sup>/<sub>2</sub>-tonners and 210 10-tonners available to carry approximately 5,000 tons of supplies each day on an estimated transport run of 125 miles. In addition there were 15 pack mule companies ready to move supplies into mountainous areas where vehicles could not operate.

Stockage of ammunition in the II Corps area was as complete as it could be made with the limited amount of space available for dumps along Highway 65. A 5-day supply of ammunition was built up in the forward supply points there, and a last-minute slight increase was made in medium artillery ammunition. The only new dumps to be opened were to be established near Porretta for Class III and V supplies destined for IV Corps units operating on Highway 64; under the cover plan these dumps could not be established until D Day, but all preparations were made beforehand. Smaller dumps were to be opened behind the 6 South African Armoured Division on Highway 6620. It was planned to move Class I, III, and V dumps into the vicinity of Vergato as soon as this became tactically possible, while the dumps already existing on Highway 65 were expected to support the main body of II Corps all the way into Bologna. Ammunition was to be placed in the dumps on the basis of actual expenditure rather than by an attempt to move the big reserves which had been accumulated around Florence. Medical installations were to be moved up Highway 64, and plans were drawn for establishment of hospitals and depots in Bologna, after which the tactical situation would dictate the location of future medical sites.

Gasoline, which would prove a highly important necessity in the event of a pursuit operation, was available by pipeline as far north as Radicosa Pass on Highway 65, but on Highway 64 the line extended only to Pistoia. Trucks could readily supply II Corps units from the Radicosa pipehead. Tankage to hold a total of 68,000 gallons was to be set up at the Porretta supply point, filled by tank trucks running up from Pistoia; forward distribution from this point would again be by truck. It was not planned to rely on the construction of the Highway 65 pipeline farther north during Phase I of the offensive, and reconnaissance of the terrain indicated it was impractical to attempt to run this line west to reach Highway 64 near Vergato. Construction was therefore to be speeded along Highway 65 as rapidly as possible into the Bologna area, where distribution by cans and drums would be started. It was hoped that this line could be in operation by the beginning of Phase II.

The supply section formulated its plans on the premise that a 15-day stock of all types of supply must be built up in Bologna before operations could be adequately supported farther to the north, and on the assumption that considerable time would elapse between the capture of Bologna in Phase I and the development of the Po River positions and the crossing of the stream in Phase II. The Bologna dumps were to be used for direct issue to consuming units as well as for a base of operations. Once the city was reached Highway 9 was to be developed as the main supply route for IV Corps moving to the northwest, and Highway 12 for II Corps elements advancing north from Modena and Bologna toward Verona. Dump sites north and northeast of Bologna were tentatively chosen, and it was estimated that 16,000 tons of Class V supplies, 800 tons of Class I items, 6,000 tons of Class II and IV quartermaster articles, 2,000 tons of Class II and IV engineer equipment, and 5,500 tons of bridging materials would have to be moved into this area. When the advance had reached points well beyond Bologna, dumps and truckheads were to be developed at Piacenza and at the town of Mirandola, on Highway 12 10 miles south of the Po. Truckheads would be moved north of the river as soon as it became practicable.

While preparations for the offensive had been in the process of development, alternate plans were perfected to be put into effect by Fifth Army in event of a formal enemy surrender. Reserve rations to feed 400,000 prisoners for 30 days were held; it was expected, however, that the prisoners would be fed from their own stocks wherever possible and would administer their own supply needs so far as such supplies existed. Detailed administrative plans for occupation of northern Italy, imposition of military government, and handling of civilian supplies and refugees were published following many weeks of discussion. Somewhat similar plans were prepared for occupation of northwestern Italy by IV Corps if the Germans should evacuate that portion of the country without giving battle.

2. Engineer Plans. Engineer support of the 1945 spring campaign was to be normal throughout the early stages of the attack. Operations Instruction No. 7 directed that II Corps engineers would be responsible for construction of Class 40 bridges over the Reno River at Vergato and Praduro, while Army engineers would further develop the main supply routes and necessary laterals as directed by the Army engineer. Once in the valley, the principal engineer duties were expected to be development of river crossings, particularly over the Po, and detailed plans were drawn up by the Army engineering section covering this problem, based on the assumption that the line of the river would be defended and an assault crossing would have to be made. The first preparation began in March with the establishment of a river crossing training school at which troops were given instruction in assault crossings and various techniques of bridging were perfected.

Long study of photographs and maps of the Po resulted in the decision that the best possible crossing sites in the projected Army zone of attack were along a 20-mile stretch of the stream extending from Ostiglia on Highway 12 west to Borgoforte, where the highway connecting Mantua and Reggio reached the banks. Within this section of the river 12 likely sites for assault crossings were determined, 12 ferry sites capable of floating 26 ferries were charted, and 9 possible sites for construction of floating bridges were selected. While these sites did not always coincide, in the majority of cases one site was favorable for all three types of operations. Equipment was available in Fifth Army to make a two-division assault crossing, each division employing two combat teams abreast. The western half of the 20-mile zone, between San Benedetto Po and Borgoforte, was favored over the eastern section as best for the initial crossing due to the proximity of the marshy rice fields in the area around Ostiglia. A subsequent crossing at the latter site was necessary, however, in order to open up the Highway 12 route to Verona.

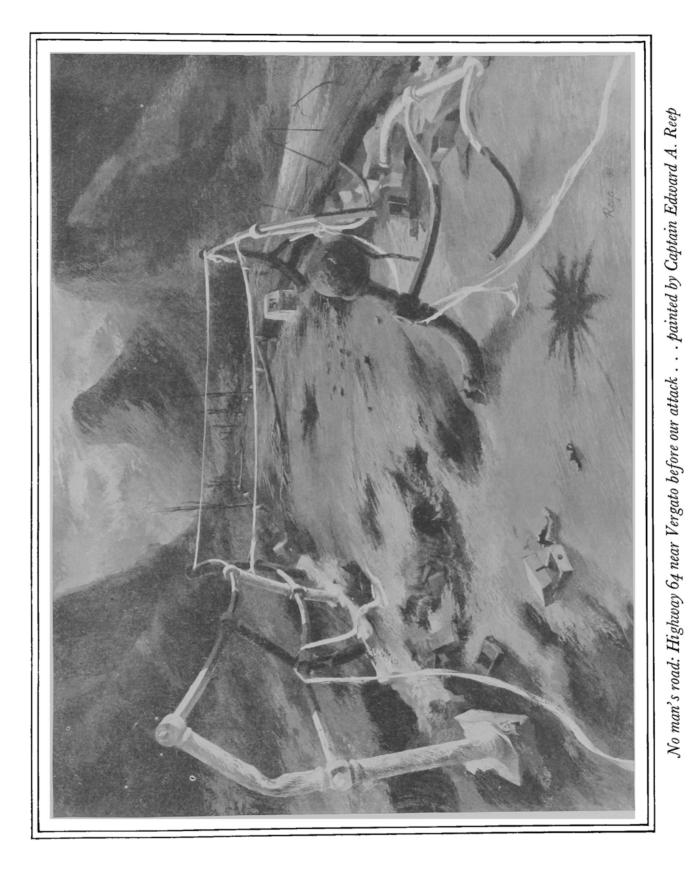
As special river crossing equipment the Army had on hand 103 storm boats with 98 50-horsepower motors; 741 assault boats, but only 214 22-horsepower motors for such boats; 16 infantry support rafts; 203 plywood treadways as decking for the rafts; 16 Quonset barges; 13 utility or tugboats; and 312 Dukw amphibious trucks. Each combat team - crossing with 2 battalions in the assault and 1 in reserve would require 24 storm boats with motors, 92 assault boats with 1 motor for every 2 boats, 4 infantry support rafts, 32 treadways, 3 Quonset barges, and 60 Dukws. Elaborate plans were completed for these assault crossings, using the small boats to ferry the infantry at high speed, following up with the Quonset barges and Dukws to send supporting artillery across, and eventually constructing, behind the protection of a bridgehead, a floating treadway or a floating Bailey bridge over which tanks and other heavy equipment could cross. Engineers were prepared to construct a total of four floating treadways, one floating Bailey, one reinforced heavy ponton bridge, and one semipermanent pile bridge, the last listed to be two-way Class 50 and one-way Class 90. A minimum of 1,500 feet of bridging was planned for use at each of the crossing sites, since the Po was at least 1/4 mile wide along almost the entire portion of the river under consideration.

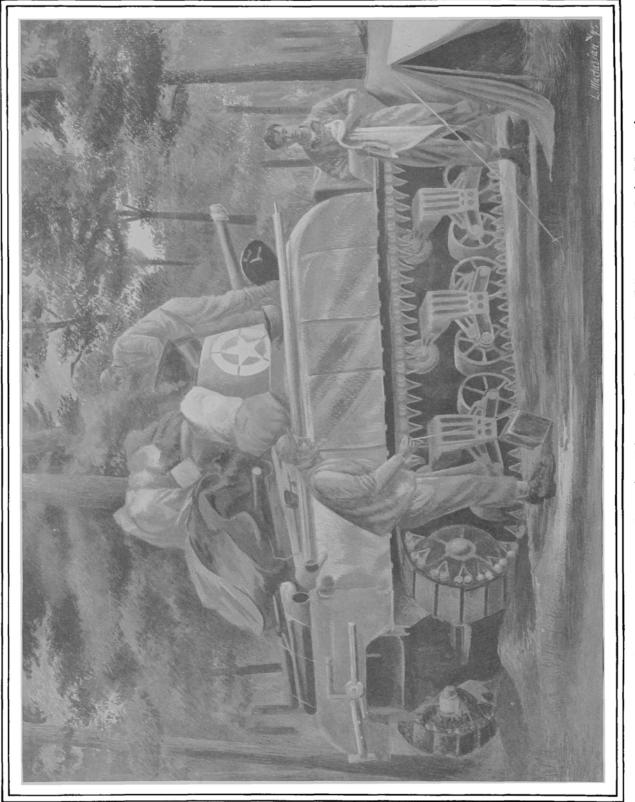
In addition to this river crossing equipment, other special means were provided for forcing a crossing. In great secrecy 200 LVT's (landing vehicle, tracked) or Alligators were assembled in the Arno Valley while 60 medium tanks, specially remodeled into amphibians, were also held in the Army rear area. For security reasons none of these special vehicles and practically none of the large stock of ordinary bridging equipment was brought into the forward areas where extensive camouflaging would have been necessary to prevent their presence from becoming known to the enemy and thus disclosing our intentions. Some of the equipment was as far away as Pisa, where the river crossing school had been held, but all was to be brought forward on call and assembled on wheels in an engineer bridge depot scheduled to be established in Bologna as soon as the area was cleared of enemy. When the need for it became apparent, the equipment was to be released to using units upon request to the Army The 30th Engineer Combat Group of II Corps had received the special engineer. training in handling and operation of the river assault equipment and was scheduled to have charge of the actual crossing, based on the probability that II Corps would make the main effort across the Po; if the effort were made by IV Corps, all or part of the engineer group would be released to support that corps.

#### D. REGROUPING OF TROOPS

While the various headquarters and supporting services were making their last preparations and ironing out details for Operation Craftsman, final regrouping of combat units for the attack began soon after the first of April. On 3 April when the cover plan went into effect, the 92d Division was detached from IV Corps and came under control of Army. Two days later major shifts were completed in II Corps when the 34th Division and the 91st Division exchanged sectors, the 34th Division moving into the right flank Idice Valley positions and the 91st Division taking up its attack zone astride Highway 65. The Legnano Group was detached from the latter division and came directly under Corps control; the 88th Division assumed command of a sector west of the 91st Division, but in keeping with the cover plan all troops actually on the line were from the 91st and 34th Divisions. The 6 South African Armoured Division, moving up from Army reserve, took over the left flank of II Corps, relieving the 1st Armored Division. The latter was put under command of IV Corps and assembled in the Prato area between Florence and Pistoia. On 9 April the 371st Infantry was attached to IV Corps, and on the following day the regiment assumed responsibility for part of the left sector of the Brazilians on Mount Belvedere, permitting the BEF to shift elements farther northeast to reduce the sector of the 10th Mountain Division. The same day the 1st Armored Division took command of the 81st Cavalry Reconnaissance Squadron and its sector on the right flank of IV Corps; by nightfall of 11 April the remainder of the division closed in forward assembly areas.

Restricted Section Eta Mon To- Elenision





A tank crew prepares for the spring drive . . . painted by Staff Sergeant Ludwig Mactarian