

*Volume Two*

EUROPE: TORCH TO POINTBLANK

AUGUST 1942 TO DECEMBER 1943

# THE ARMY AIR FORCES

## In World War II

PREPARED UNDER THE EDITORSHIP OF

WESLEY FRANK CRAVEN

*Princeton University*

JAMES LEA CATE

*University of Chicago*



New Imprint by the  
Office of Air Force History  
Washington, D.C., 1983

at Algiers and passed to the operational control of the First Army. Two days later Colonel Raff and Maj. Martin E. Wanamaker, commanding the transports, were called to headquarters and assigned a mission against Youks-les-Bains airfield, out near the Tunisian border. Intelligence about the area was meager, the reaction of the local French problematical, and enemy patrols might even be in possession of the field. Nevertheless, on the morning of the 15th, twenty C-47's left Maison Blanche, flew with Spitfire escort along the coast to Djidjelli, thence with Hurricane escort south; the formation was at one point forced onto instruments but, at 0945, 350 paratroops were successfully dropped.<sup>88</sup> Next day the 64th carried out a similar mission against the Souk-el-Arba airfield, ninety miles up the Medjerda valley from Tunis, dropping 384 British paratroops. This operation had been attempted on the 15th but was frustrated by weather. None of these paratroop landings was opposed, nor were any of the transports lost to enemy action, although on the way to Souk-el-Arba the 64th had watched enemy planes bombing and strafing the Bône airfield.<sup>89</sup>

The Axis was making a determined effort to establish a bridgehead in Tunisia, pouring men and weapons in from Sicily. By 17 November the hostile establishment at Bizerte, where the Ju-52's were averaging fifty landings a day, was estimated at 4,000 men, with an additional 1,000 in Tunis itself. This force mustered some medium tanks and the German and Italian infantry was strong in antiaircraft and antitank guns. The enemy had put about 150 fighters and dive bombers into the Tunis and Bizerte airdromes, and with long-range bombers from Sicily and Sardinia he was operating with some effect against the exposed communications of the First Army.

After prolonged indecision, the bulk of the French forces in Tunisia came over to the Allies. Gen. Louis Jacques Barré, commanding the French army in the protectorate, had been negotiating with the German commander, Gen. Walter von Nehring, ever since the Germans set foot in the country. He now broke off. The French began to harass the Axis advance, fighting patrol actions at Oued Zarga and Mateur on the 16th. By the 17th the British had made contact with German elements at Djebel Abiod on the coast road. In the south Raff's paratroopers had secured the cooperation of the French garrison at Tebessa and began to clash with Italian patrols moving inland from Sfax and Gabès.

Barré had agreed that he would cover the British 78 Division's con-

northwest of Mateur. Welsh ordered further attacks on enemy airfields to destroy, if possible, the enemy front-line air superiority. Anderson meanwhile prepared to resume the offensive as soon as Combat Command B, U.S. 1st Armored Division, could come up.<sup>76</sup>

A small force of B-26's from the 319th Group arrived at Maison Blanche in time for these operations, after a series of mishaps which culminated when the group commander was shot down over Cherbourg in transit from the United Kingdom to Africa. On the 28th, upon finding Kairouan airdrome unoccupied, the 319th attacked Sfax harbor from 1,000 feet, several of the B-26's coming down for strafing runs. On the 30th, nine of its planes attacked the Gabès airdrome and called on one of XII Fighter Command's DB-7's from Youks to land and rescue the crew of a B-26 shot down in enemy territory by the light flak over the field.<sup>77</sup> The DB-7's were also hammering the enemy airdromes: Gabès on the 29th and El Aouina on 1 December; the P-38's escorted them on two attacks on Djedeida, besides performing their own sweeps and reconnaissance missions.<sup>78</sup> On the 30th the B-17's, already beginning to be hampered by Tafaraoui's mud, bombed Bizerte's north quay, a target radioed back by Eisenhower from the front, but the clouds prevented more than a third of the pay load from being dropped. On the 1st, however, the 97th Group made an effective strike on El Aouina, achieving bursts on the hangar line and the built-up area of the field.<sup>79</sup>

General Anderson's offensive with Combat Command B never came off. Nehring anticipated him on 1 December, striking in the direction of Tebourba from the north. Much-battered BLADE Force withdrew towards Tebourba and Combat Command B replaced it, in a defensive role. In the early hours of the 2d, Anderson sent a worried radio back to Eisenhower.<sup>80</sup> He stated that if he did not take either Tunis or Bizerte within the next few days a temporary withdrawal was mandatory. Three factors, said the general, were responsible: administration, the enemy's air action, and his rate of reinforcement. Normal administration had been intentionally disregarded in the race for Tunis, the army and air forces working with precarious communications and no reserve supplies, their line of communication additionally burdened by the movement of French troops and stores. Anderson confirmed that what Eisenhower had feared and warned against had come to pass: the German build-up in Tunisia exceeded that of the Allies.

The British commander believed, however, that enemy air action

had exercised the greatest effect in bogging his advance; and he recognized that for "geographical reasons" his supporting air units could not deal with the situation. What Anderson referred to as enemy air action was the persistent dive bombing of his forward troops. Strangely enough, the obsolescent Ju-87's, the Stukas which had suffered so much at the hands of the RAF, ME, could claim a great deal of the credit for the First Army's discomfiture. The geographical reason for his own air forces' disability was the lack of forward airdromes.

The GAF and its satellite IAF were excellently disposed to support the defense of Tunisia. Besides their Sicilian and Sardinian bases, they enjoyed on the mainland the use of the all-weather fields at Sidi Ahmed and El Aouina and of the coastal airfields to the south at Sfax, Sousse, and Gabès. Moreover, their ground arm had seized the Tunisian plains, of which large areas were usable, almost without preparation, as landing grounds. The Germans based their Stukas at El Aouina, barely a score of miles from the front at Djedeida, and, since the plane was light, at landing grounds and in open fields just beyond the range of Allied artillery. Army calls for support, made by voice radio in the clear, could be answered within five to ten minutes.

The Eastern Air Command and the Twelfth could have demonstrated the Ju-87's obsolescence, as the Allied air in the Middle East had done, had they been able to get at it in strength. But, in late November, they were operating from just three forward fields: Bône, 120 miles from the lines, and Youks and Souk-el-Arba, 150 and 70 miles back, respectively—the last two frequently muddled. Nor could additional fields be easily located and prepared, for the Allies possessed mostly the hill country of Tunisia. From Souk-el-Arba the Spits with their 90-mile "magic circle" radius could remain over the battle area for only five to ten minutes. On their appearance the GAF pulled out over the Gulf of Tunis or landed its Ju-87's at forward landing grounds and parked them under trees. When the sweep had disappeared over the western hills, the enemy bombers resumed their work.

The P-38's at Youks found the range more convenient, but there were not enough of them for the job. Over the Allied fighters, which had to escort paratroops and bombers and to cover the coastal shipping, the Me-109's and FW-190's were consistently enjoying numerical superiority. On sweeps over the battle area the Spits and P-38's frequently were hard put to defend themselves, let alone scatter the enemy bombers. Nor was the weight of the Allied bomber force

Faregh, south of which lay a large area unsuitable for maneuver. Montgomery decided to bypass this difficult area by a wide detour to the south and push his New Zealanders to the coast behind the Germans. The flanking movement would be coordinated with a two-division frontal attack.<sup>108</sup>

The British intended to move on 14 December and began preparations—large-scale raids and heavy air and artillery action. Lacking mobility (fuel) to counter the flank attack which he feared—he and Kesselring had told Goering in Rome on 30 November that the position could not be held—Rommel began to pull out on the night of the 12th, with the 90th Light as his rear guard. Nevertheless, on 15 December the 2 New Zealand, swinging into the coast from the desert, found the 90th and most of the enemy armor still to the east. Menaced by the 7 Armoured at its back, the rear guard broke into small detachments and won through; but it lost 20 tanks and some 500 prisoners.<sup>109</sup>

The American components of the Western Desert Air Force were especially active during these operations. The P-40's had joined with the RAF's light bombers in preliminary assaults on the enemy landing grounds around Marble Arch, which attacks had the effect of driving the enemy air force ninety miles behind the Agheila line.<sup>110</sup> Once the enemy broke to the west again, there were good targets along the coast road, although not to compare with those after Alamein. On the 15th heavy formations of USAAF B-25's and RAF Bostons and Baltimores hit motor vehicle concentrations on the coast road west of Marble Arch. Next day the 12th Group bombed again, in the Nufilia area, where on the 17th the New Zealanders had a sharp engagement with the Axis rear guard. At this point, contact with the enemy was lost, both in the air and on the ground, administration and the scarcity of landing grounds being responsible. Rommel went back to Buerat el Hsun.<sup>111</sup>

By mid-December, by checking the Allies in the Medjerda valley, the Axis forces in Tunisia had temporarily secured Rommel's rear. Moreover, the Tunisian ports were replacing bomb-battered Tripoli as Rommel's main dependence for supply: Middle East estimates showed he was already drawing less than half his daily maintenance requirements through the Libyan capital and the intake there would probably lessen as the larger ships abandoned the run. By 12 December the Axis had decided that Tripoli was too near the front for big ships. Tunis, Bizerte, Sousse, Sfax, and the railroad to Gabès took on new im-

portance on the Cairo maps.<sup>112</sup> In these circumstances the cooperation between the Middle East's air forces and those under Eisenhower in Northwest Africa, set under way and fostered by Tedder's visits to Algiers (he undertook another in mid-December), began to get concrete results. Cables began arriving at Twelfth Air Force from Brereton inquiring what airdromes in Northwest Africa were available for crippled B-24's and requesting that diversions be flown for IX Bomber's attacks on Tunis or Sfax.<sup>113</sup>

An earnest of this cooperation was the appearance in the Western Desert of the 93d Bombardment Group (H), attached to the Ninth Air Force by orders of 18 December.<sup>114</sup> The 93d had been borrowed by AFHQ from the Eighth Air Force, had run a pair of missions against Bizerte from Tafaraoui, and was lent by the Twelfth Air Force because its long-range B-24's could be better employed in the Middle East.<sup>115</sup> On 16 December, General Timberlake was on hand at Gambut to welcome the 93d and its commander, his brother, Col. Edward J. Timberlake. The 93d took over Gambut Main, and the advance base of the Delta groups had to be moved to LG 159, five miles west; the 12th Group, in turn displaced, transferred to LG 142, not far away.<sup>116</sup> As part of the transaction involving the 93d, nine ancient B-17's which Brereton had brought from India were sent to the Twelfth Air Force. Their limited range and different performance characteristics had made them unsuitable for combined operations with the B-24's. Their last mission in the Middle East had been against Portolago Bay in the Dodecanese on 27 November; on that occasion the crews had reported fires and explosions and hits on two merchant vessels.<sup>117</sup>

The Ninth Air Force's campaign against the Tunisian ports opened most auspiciously on 15 December when nine B-24D's of the 376th Group obliterated the roundhouse at Sfax.<sup>118</sup> Thereafter until Christmas bad weather played hob with operations. But when it cleared after the holiday, Tunis, Sousse (where three merchant vessels, the *Armando*, *Anna Maria*, and *Giuseppe Leva* fell victim to the B-24's), and Sfax were attacked and the 98th celebrated New Year's Day by dropping HE on Tunis harbor.<sup>119</sup> The Twelfth Air Force's bombers in January started a specialized effort against the coastal railroad, which, however, did not yield spectacular results.<sup>120</sup>

Meanwhile, an excursion of some proportions was being planned to the Cretan airfields from which issued the bombers attacking the Malta convoys and the harbors at Tobruk and Bengasi (from the advance

In respect of the Strait of Gibraltar, he had tended to weaken the American forces kept in readiness for action against Spanish Morocco in order to help on the initial drive for Tunis, relying on the England-based Northern Task Force for insurance against a hostile move.\* Moreover, after his repulse in December on the muddy Medjerda route to Tunis, he pulled additional American units eastward for use in the drier area of central Tunisia against Rommel's communications in the Sfax-Sousse-Gabès region.<sup>29</sup>

The date 5 January 1943 was important in the organizational history of the Allied Force. Not only was Spaatz' Allied Air Force created but at Oujda, in the northeastern corner of French Morocco, Lt. Gen. Mark Clark activated the American Fifth Army.<sup>30</sup> One of Clark's responsibilities at the time was to prepare for a possible BACKBONE II, combined action of his command and the Northern Task Force against Spanish Morocco.<sup>31</sup> The Twelfth Air Force, whose chief task in the beginning had been to cooperate with just such an operation, was initially committed to the extent of furnishing three fighter groups, if the necessity arose. To control these groups, on 6 January the Detachment, XII Air Support Command, was set up under Col. Rosenham Beam. It consisted initially of a headquarters, an air support communications squadron, a provisional air support signal battalion, and the 68th Observation Group.<sup>32</sup> On 1 March the Detachment, XII ASC, was relieved from attachment to the Fifth Army,<sup>33</sup> and long before that time the danger to the strait had appreciably diminished.

The changing complexion of the North African theater was reflected in another reorganization accomplished on 5 January. Doolittle's General Order No. 3 announced that the composite wings—Moroccan, Central Algerian, and Western Algerian—would be replaced by the 2d, 1st, and 3d Air Defense Wings, respectively, upon the arrival of these organizations from the United States. The three air defense wings were put under the jurisdiction of XII Fighter Command, which was giving up its sector forward of Tebessa.<sup>34</sup> Western Algeria and Morocco had taken something of the character of back areas. Later, the air defense of Algiers was reassigned to the RAF and the wing thus displaced was eventually attached to XII Air Support Command in central Tunisia.<sup>35</sup>

XII Air Support Command was designated as the air force contingent for Fredendall's II Corps, which Eisenhower was moving into the

\* See above, p. 50.

Substantial increments were arriving daily. By the 18th the estimated total had risen to 42,100. Not only did these enemy forces lack for little but an abundance of extra supplies was going down from Tunis and Bizerte by rail to Sfax and thence by rail, by road, and sea to Rommel in Tripolitania. In the north, Col. Gen. Jürgen von Arnim, the new enemy commander in Tunisia, was defending his lodgment along a line west of Mateur-Tebourba-Mohamadia with local attacks employing armor and infantry. With patrols and defensive positions west of Zaghouan and Kairouan, he protected the coastal corridor to the south. Defense of central and southern Tunisia was an affair of outposts and motorized cavalry at Djebel Krechem and Kebili and south of the Mareth Line at Medenine and Foum Tatahouine.<sup>45</sup>

At this point, Eisenhower was still in hopes of striking a decisive blow in the north to avoid settling down to the "logistical marathon." He had set 20 December as the date of another try for Tunis. But the weather, worsening after mid-December, frustrated his plans, and the possibility of a major offensive in the north passed over until March. He turned his attention to preparing operations in central Tunisia and to methods of limiting, in the interim, the Axis build-up. The air forces, whose part in these endeavors was expected to be considerable, meanwhile were working hard to remedy one of their greatest problems, the scarcity of airfields.<sup>46</sup>

It had been Anderson's opinion that the lack of airfields within convenient fighter radius of the front had been responsible for his check early in December. A report of the distribution of Allied aircraft at that time (the 5th) showed that all suitable fields, front and rear, were being used to capacity. Bône held 76 fighters; Youks, 37 (besides 9 DB-7's); and Souk-el-Arba, 45. Canrobert and Djidjelli, some distance back, together had a total of only 19 fighters and light bombers, but in the Algiers area Maison Blanche and Blida together counted 150 aircraft, and four fields around Oran had 180, mostly at Tafaraoui and La Senia. Even two weeks later, when a great improvement had been made, Doolittle estimated that of 600 planes at his disposal only about a third could be effectively employed at one time against the Axis.<sup>47</sup>

The pre-invasion plans had specified that the British were responsible for the development of airfields from Algiers eastward as their offensive moved on towards Tunis.<sup>48</sup> They brought in two airfield construction groups, Nos. 14 and 3, and detachments of the former were by 20 November working in the area of Souk-el-Arba. The British

respectful. For example, on 15 December two formations were sent out from Biskra for simultaneous attacks on Tunis and Bizerte. Six P-38's accompanied seven B-17's bound for Tunis; another six escorted the dozen heavies which could be mustered for Bizerte. All aircraft returned despite flak and enemy fighters, and according to an investigation of the port after its capture, with one 500-pounder the Tunis contingent sank the 10,000-ton Italian freighter *Arlesiana*. On the 18th, however, at Bizerte, four escorts and a bomber were shot down (another B-17 crash-landed at Le Kef) out of a formation of sixteen P-38's and thirty-six B-17's. Thirty-three of the bombers had attacked the target; the remaining three dropped on two naval vessels between Cap Zebib and the Cani Islands.<sup>73</sup>

Thereafter, until 26 December, foul weather plagued XII Bomber. On the 21st at Sfax and Gabès and on the 22d at Bizerte, Sousse, and Sfax, 10/10 cloud prevented an attack. On the 23d, seventeen B-17's of the 301st Group, escorted by eleven P-38's of the 1st, took off for Tunis and Bizerte. Five bombers returned early after encountering cumulus and icing at 25,000. The targets were completely shrouded, and four wandering B-17's turned up at distant airdromes, Tafaraoui, Nouvion, and Relizane.<sup>74</sup>

By the end of December, XII Bomber Command organization began to take form, incorporating one feature novel in bomber commands: the escort fighters were attached. Between 14 and 18 December, two squadrons of the 1st Fighter Group (P-38's) moved to the bomber station at Biskra and came under the control of XII Bomber. Part of Doolittle's regime of composite commands, this innovation did away with the necessity of coordinating each mission with a fighter command headquarters, and the P-38's presence on the bomber airdrome simplified such problems as rendezvous. The step seems to have been well suited to the operating hazards in Africa, especially to the miserable communications which Doolittle rated on 30 November as the chief bugbear of efficient operations.<sup>75</sup> The system worked to the satisfaction of USAAF commanders, but, later, Coningham and other observers came to believe that continual employment of fighters as escort detracted from their efficiency in their primary role. The fighter pilots tended to regard themselves as stepchildren of the bomber command.<sup>76</sup>

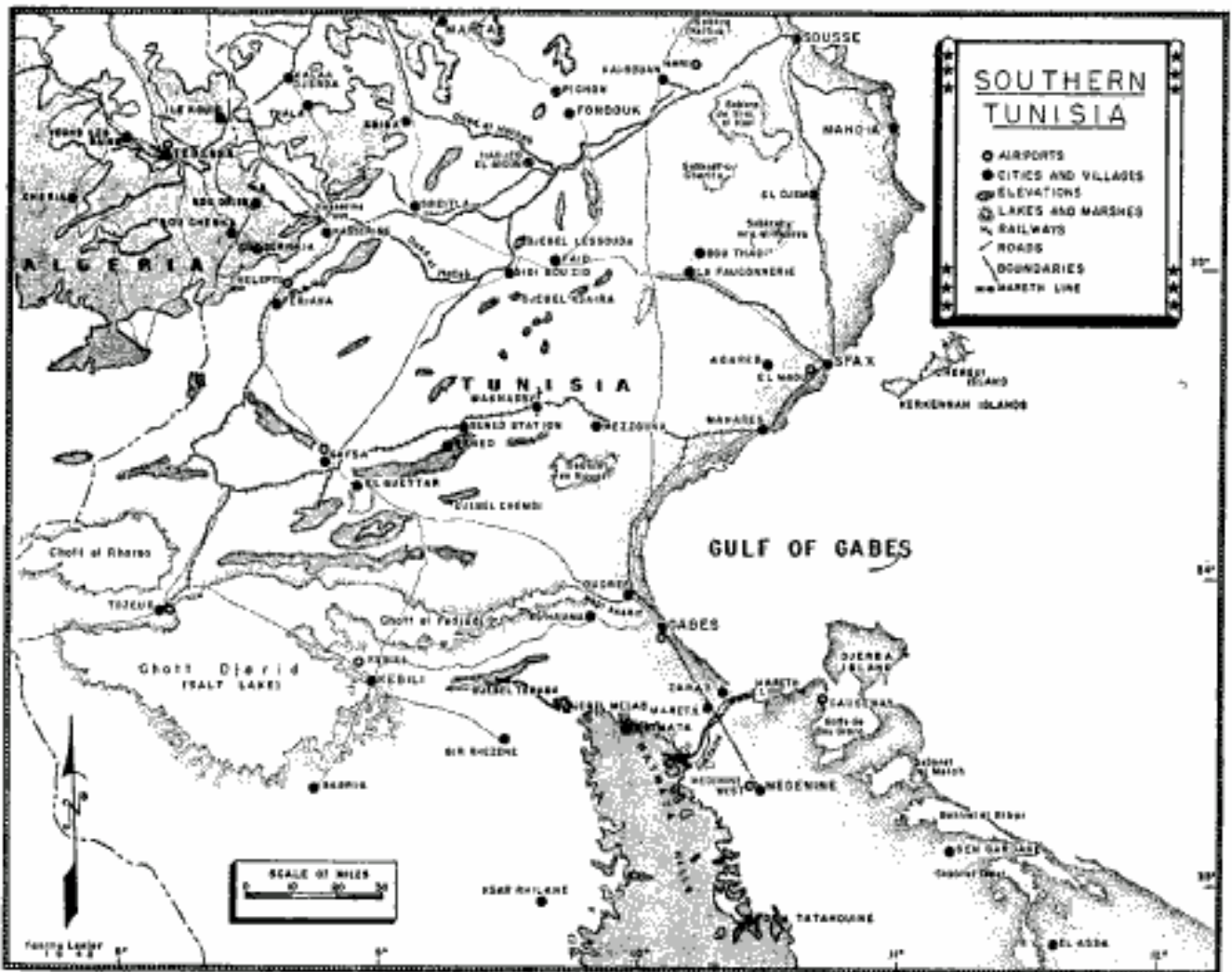
In the early days, the bomber command passed down directly to the units the operational instructions for the missions. As the available groups became more numerous, however, wings were interposed. For

this purpose the wing headquarters originally attached to XII ASC were utilized. On Christmas Day, Col. J. H. Atkinson, commanding the 97th Group, was promoted to brigadier general and later made commander of the 5th Bombardment Wing (Heavy), the organization gradually assembling at Biskra in mid-January. Moreover, shortly after New Year's, personnel of the 7th Fighter Wing headquarters in Morocco were alerted for a move eastward, and on 7 January, Ridenour replaced Col. John C. Crosthwaite as commanding officer. On 1 February the 7th began operating at Châteaudun-du-Rhumel, near Constantine, as a medium bombardment wing, an arrangement solemnized when it was redesignated 47th Bombardment Wing (Medium) on 25 February.<sup>77</sup>

After Christmas, the bad weather having worn itself out for the time being, the B-17's turned their attention chiefly to the east-coast ports of Sfax and Sousse, which were building up supplies against Rommel's arrival in southern Tunisia. Seven missions were run against them late in December, the results showing the high degree of accuracy the B-17's were achieving. P-40's of the 33d Group, by then operating out of Thelepte in central Tunisia, took the 301st to Sfax on 26 December; the bombs evidently wrought havoc in the harbor, one small and two large vessels being assessed as sunk. Next day the 301st attacked Sousse, claiming hits on four ships, one of which was reportedly blown to bits. Sfax absorbed further punishment on the 30th and 31st: the 97th started fires in the marshalling yards and on the west end of its north quay on the 30th, and next day the 301st claimed hits on two medium-sized ships in the harbor.<sup>78</sup>

On 4 January weather prevented all but one of a formation of B-17's from bombing La Goulette, but on the 5th and the 8th effective strikes were carried out. The 5th saw the 97th Group over Sfax, weather reconnaissance having disclosed solid overcast at Tunis and Bizerte. Eleven B-17's bombed and completely destroyed the Sfax power station, hit at least one vessel in the harbor, and left the entire dock area smoking. Bad weather did not protect Ferryville on the 8th. The 97th found holes in the overcast, bombed through them, and reported hits on oil storage tanks, docks, and ships. After Tunis had fallen in May it was learned that the ships included five French vessels sunk or damaged beyond repair: a submarine, a sailing vessel, a tug, an aircraft tender, and a patrol vessel.<sup>79</sup>

During their early operations in Africa the Twelfth's medium bomb-



moving westward towards the French positions at Fondouk. All the fighter command's efforts were directed against this excursion, but the Panzers proved both formidable and elusive, quick to turn effective fire on low-flying aircraft, burrowing into bushes, and camouflaging themselves when caught in the open.<sup>15</sup>

The increasing number of Germans in central Tunisia was a reliable indication that large enterprises were in store for the area. As part of the American preparations, XII Fighter Command was relieved and XII Air Support Command, which had at last got quit of Morocco, was substituted, Brig. Gen. Howard A. Craig taking command on 10 January.<sup>16</sup> What was afoot on the Allied side was Operation SATIN, a project in which II Corps was scheduled for a prominent role.

SATIN took its inception around Christmas from Eisenhower's reluctant conclusion that an assault on the drenched northern front was not a practicable operation of war and from his unwillingness to allow the opposition any rest. Clark's headquarters commenced the planning in December and II Corps staff assembled in Algiers on New Year's Day to begin preparations. At least three alternative plans were drawn, all requiring the SATIN Task Force, of which the U.S. 1st Armored Division was the core, to be concentrated forward of Tebessa. Sfax might be taken, followed by a swing northwards towards Sousse; or Gabès and Sfax captured in that order; or Kairouan could be taken as preliminary to an advance on Sousse. Basically, SATIN was a large-scale raid on Rommel's communications, for the bulk of his supplies were coming down to Sfax by rail from Tunis and Bizerte. It was not anticipated that the coastal towns would necessarily be held.<sup>17</sup>

The project had its risks. In the first instance, success depended on a coordinated attack by the Eighth Army on the Mareth Line, the old French works in which Rommel was expected to make his stand. Failing such a conjuncture, Rommel could easily detach enough strength to jeopardize SATIN's southern flank and its communications with Algeria. SATIN's other flank was similarly vulnerable to a known concentration of enemy armor around Kairouan. Reluctantly, Eisenhower accepted the fact that Anderson's British First Army would have to be simultaneously expended in local containing attacks in the north; he was trying to build up Anderson for decisive action in the spring. Once east of the Tebessa railheads, all SATIN supplies would have to proceed in trucks 160 miles to the sea. Trucks were scarce, but it was

hoped that by dint of Middle East convoys maintenance could be considerably eased.<sup>18</sup>

Another complication was the French sector. Early in December, Giraud had suggested to AFHQ that his units take over the defense of the Eastern Dorsal, a step which recommended itself on several counts. The scant Anglo-American forces needed help; political and morale problems might thereby be eased; and the mountains seemed a relatively good location for the ill-equipped French. But, by the time that SATIN was ready to take the field, the French sector had assumed crucial importance as the only link between II Corps and the First Army. Not only was the link weak but Barré and Juin refused to be subordinated to Anderson, who alone had the signal communications to control the entire front. Eisenhower had to take personal command, shuttling between Algiers and a command post at Constantine.<sup>19</sup>

If these factors had given Eisenhower pause about SATIN, what he learned on 15 January from Alexander at Casablanca about the Eighth Army's schedule caused him definitely to abandon the original conception. Rommel was nearing Tunisia at a fast clip, but the Eighth Army did not expect to reach Tripoli before late January or to be in a position to attack the Mareth Line before the middle of February. A coordinated attack on the SATIN D-day, 23 January, was impossible, and Rommel would have the elbow room to drive against SATIN's flank. On his return from the Anfa camp, Eisenhower informed Fredendall, whom he had appointed task force commander on 1 January after deciding that he needed Clark to head the Fifth Army, that there would be no excursions to the coast. He did not, however, propose to adopt a purely defensive attitude in central Tunisia and instructed II Corps to act as aggressively as possible against the Axis communications without committing its main forces. On 17 January he radioed the commanders in chief, Middle East, that they could cancel their arrangements for convoys to Sfax or Gabès.<sup>20</sup>

#### *Air-Ground Cooperation in Central Tunisia*

In the orders for air support which went forward on 1 January, Welsh was to provide assistance from 242 Group, insofar as it was not committed at the time to the First Army, but the main burden lay with XII Air Support Command. XII ASC became responsible not only for cooperation with II Corps but for meeting requests for aid from French elements south of an east-west line through Dechret bou Dabouss (on

the approximate latitude of Sousse), these requests to be passed through Fredendall. Moreover, XII ASC was empowered to arrange mutual assistance with 242 Group to the north.<sup>21</sup>

The doctrines of air support current in the U. S. Army in January 1943 stemmed from War Department Field Manual 31-35 of 9 April 1942, *Aviation in Support of Ground Forces*, and little resembled the doctrines employed in later European campaigns, for the reason that FM 31-35 was tried in Africa, found wanting, and superseded. The outstanding characteristic of the manual lay in its subordination of the air force to ground force needs and to the purely local situation. By its prescription, the air support commander functioned under the army commander, and aircraft might be specifically allocated to the support of subordinate ground units. Although conceding that attacks on the hostile air force might be necessary (when other air forces were inadequate or unavailable) and that local air superiority was to be desired, the manual recited that "the most important target at a particular time will usually be that target which constitutes the most serious threat to the operations of the supported ground force. The final decision as to priority of targets rests with the commander of the supported unit." With him also lay the decision as to whether a particular air support mission would be ordered. Both as to command and employment of air power (which were nearly inseparable) the American doctrines were at variance with those developed and so successfully tested in battle by the Eighth Army-RAF, ME partnership in the Western Desert.

Nor had the scrutiny of the combined staff that planned TORCH made any great impression on the received doctrine. The spirit of FM 31-35 was echoed by AFHQ's Operation Memorandum 17 of 13 October 1942,<sup>22</sup> which theoretically prescribed the air support arrangements for the Allied Force. Although not a great improvement, this document did stress that air support was an important means of preventing the arrival of hostile reserves and reinforcements; and it contained the monitory statement that support aircraft should not be "frittered away" on unimportant targets but "reserved for concentration in overwhelming attack upon important objectives."

In appointing Craig to head XII ASC, the higher command had hit on one of the few officers in the Allied Force who was at all familiar with Western Desert practice. Craig had accompanied Tedder on his return to the Middle East on 17 December. In Cairo he had visited the com-

bined war room, and when it turned out that his plane needed an engine change before he could return, he utilized the interval, at Tedder's suggestion, for a trip to the army-air headquarters near Marble Arch in Tripolitania. Coningham met him at the airfield and flew him in a captured Storch to the RAF command post, where he had dinner with Montgomery and absorbed a good deal of the current thinking on army-air operations.<sup>23</sup>

On 9 January, Craig's air establishment consisted of two understrength squadrons of the 33d Fighter Group and the entire 47th Bombardment Group; the P-38's of the 14th Group were then in process of being withdrawn. The airdrome situation had been somewhat improved. Besides Youks, inclined to mud, there were Thelepte, forward landing grounds at Gafsa and Sbeitla, and construction under way or contemplated at Tebessa, Le Kouif, and Kalaa Djerda. In addition, if SATIN had broken through to the coast, according to the original intention, XII ASC could have counted on airfields at Gabès and **Sfax** and numerous good landing-strip sites in the coastal plain.

Craig could not overlook the deficiencies of his command. He called attention to the low serviceability of the 33d Group and the "ineffectiveness" of the 47th, which, considered poorly trained in all respects, he recommended be withdrawn. He sought clarification of the status of the Lafayette Escadrille, scheduled shortly to arrive in his area, as the impression prevailed at Tebessa that the French army would control this unit. On 11 January, after a conference at corps headquarters at Constantine, Craig came to the conclusion that he had not enough air power to perform his mission; considering the ambitious nature of the current SATIN design, he was entirely right. Doolittle radioed back that reinforcements were indeed contemplated, and he concurred in XII ASC's plan to conserve its operational strength for the forthcoming test.<sup>24</sup>

Perhaps reflecting this conservation policy, XII ASC was relatively inactive, except for normal reconnaissance and repelling constant raids on its fields, in the period from 8 to 18 January. II Corps was still in preparation, and the Germans and Italians made no immediate move. Craig began receiving the promised reinforcements: the 91st and 92d Squadrons of the 81st (P-39's) and the Lafayette Escadrille (P-40's). He landed the P-39's on a level stretch of road and parked them in bushes to conceal them from the active GAF. The chief operation of note took place on the 10th. The enterprising Maj. Philip Cochran,

that the German squadrons operating against it had been strengthened by the remains of the Desert Luftwaffe and IAF, which had come in from Libya. The Eighth Army had captured Tripoli on 23 January. By the end of the month its patrols were over the Tunisian border. XII Bomber Command had struck at Rommel's air at the Medenine landing grounds on 24 January; and early in February, by request of Allied Air Support Command, it attempted by counter-air force action to relieve the pressure on XII ASC.<sup>42</sup>

The mediums proceeded to give the coastal airdromes the frag-cluster treatment. Ten parked aircraft were assessed as destroyed at Gabès on 31 January and three more at Sfax on 2 February. Two P-38's and a B-25 were lost on these strikes. On 3 February, ten more parked aircraft had to be written off at Gabès; the enemy fighters, coming up for a 40-minute battle, caused the crashes of one B-26 and three P-38's but reportedly lost three themselves. The afternoon of 4 February was a busy time at the fields around Gabès. The B-17's—97th and 301st Groups—the B-25's of the 310th, and the B-26's of the 17th all obliged with a visit, but only the heavies bombed, the others being prevented by bad weather.<sup>43</sup> Four days later, another strike at Gabès brought the opposition up in force. Fourteen P-38's of the 82d Group escorted in fifteen B-26's and eighteen B-25's. The B-25's took a severe mauling from interceptors which began attacking before the target was reached and persevered as far back as the Algerian border. The B-25 gunners reportedly shot down four Me-109's, but four bombers were also shot down and two crash-landed at base. The escort meanwhile was performing earnestly, claiming eight enemy fighters for one P-38, and the B-26's were having an argument of their own with twenty to thirty fighters which attacked just after the bomb run and likewise tried conclusions all the way to the Algerian border. The B-26's claimed six of them.<sup>44</sup>

After Combat Command A's repulse at Faid, uneasy quiet reigned for a time along II Corps' front and the French sector to the north. German tanks and M/T began appearing on the Gabès-Gafsa road and around Maknassy. With Rommel snug for the time in the Mareth Line, it was accepted that the Axis was about to make a last effort to disrupt the Allied timetable, the locale of the stroke anywhere from Pont-du-Fahs to Gafsa.<sup>45</sup> Meanwhile, the Allied Air Support Command was developing in consonance with the command arrangements agreed on at Casablanca. On 7 February, Kuter wired Spaatz that he was exercising oper-

the space of three quarters of an hour. Results were good: bursts covered the field and hangars, destroyed an estimated twenty-five aircraft, and left large black-smoke fires. Five Me-109's were claimed to have been shot down and two of the IAF's Re-2001's damaged. All of the Twelfth's aircraft came safely back, apparently suffering little worse than having their radios jammed in the target area. That evening the Axis mustered only a weak assault on the convoy, and covering Beaufighters dispersed the threat.<sup>63</sup>

Save for attacks on Sousse and on Kairouan airdrome, the B-17's were inactive during the following week, but 15 February saw them over Palermo, kingpin of the supply route from Sicily. A large ship was left burning and the docks and dry dock were holed; no significant opposition occurred. Again, on the 17th, XII Bomber Command struck at the Sardinian airdromes, briefing the B-17's for Elmas and the mediums for Villacidro. The heavies' bombing was hampered by weather; they dropped long-fuzed, delayed-action 500-pounders, as well as frags. The mediums divided their frags between Villacidro's barracks and the parked aircraft at Decimomannu. Altogether one FW-190 and three Mc-200's were reported shot down, and the only loss to bombers or escort occurred when two B-26's collided over the target.<sup>64</sup>

### *Kasserine*

In mid-February 1943 the Axis held in Tunisia the most favorable position it could expect for the duration of the campaign. The Eighth Army was walled off by the Mareth fortifications, was hampered by bad weather, and was under the necessity of building up supplies through Tripoli. In the breathing spell before Montgomery could mount his attack, there was scope for an Axis smash at the ill-equipped French on the Eastern Dorsal or the largely untried American II Corps, which had assembled forward of Tebessa in January. In preparation, Rommel began to detach armor from his Afrika Korps: the 21st Panzer Division, partially re-equipped at Sfax, had put in an appearance at Faid Pass on 30 January; two weeks later additional armor was moving northward through the Gabès gap. On 14 February the enemy launched an attack which, fully exploited, might have cut through the Dorsals, taken Le Kef, and, rolling northward to the Mediterranean, isolated the Allied forces facing Tunis and Bizerte. At the very least, the move would safeguard the Axis flank during the Eighth Army's in-

On the 19th, while the rains held NASAF at its bases, TBF's bombers, dropping through breaks in the overcast, commenced a series of raids on the landing grounds at Gabès and Tebaga. NATAF designating the objectives, the agreed NASAF effort then came into play on a schedule arranged to minimize any lull while WDAF refueled and rearmed. NASAF mediums attacked Gabès and Tebaga on the 20th; and next day 76 B-17's joined to bring the total sorties against these fields to 281 over a three-day period. The first stage of the enemy air's withdrawal was the evacuation of Mezzouna and Gabès. Tebaga did not long remain tenable. A-20's and B-25's from TBF cooperated with NASAF's mediums to this end on 24 and 25 March—twenty-eight aircraft demolished by the bombardment were left on the field. The GAF retired to Sfax and La Fauconnerie.<sup>36</sup>

Sfax, harboring night bombers, lay beyond XII ASC's fighter range and so, except for TBF's night attacks, its field fell to WDAF for attention when the ground situation permitted. NASAF having retired from the counter-air campaign, TBF began on 30 March the systematic reduction of the La Fauconnerie group, which was heavily reinforced with AA from the abandoned southern fields. To mark the RAF's 25th birthday NAAF had planned visits in force to airfields from Sfax to Sicily, but bad weather interfered: except for strikes at La Fauconnerie and El Djem the American effort was canceled. The tempo of the attack on the La Fauconnerie group nevertheless mounted day by day, 242 Group's Hurribombers joining in, until on 6 April seven A-20 and B-25 missions were laid on. The La Fauconnerie fighters, with all they could do to defend themselves, were no longer a threat. On 7 April, forty-eight hours before the ground situation demanded, they pulled out. By the 10th the Axis Tunisian air force lay wholly within the bridgehead Enfidaville–Medjez-el-Bab–Pont-du-Fahs.<sup>37</sup>

XII ASC evened an old score by finally routing the Stuka. Escorted Ju-87 and Ju-88 attacks on II Corps' spearheads had intensified as the troops advanced, and these attacks reached a peak on 1 April with eighty-seven aircraft active in the El Guettar area. However, XII ASC began using Gafsa as an advanced landing ground, and seldom did the enemy get away without loss. In the late afternoon of the 3d, elements of the U.S. 52d Group caught a score of Junkers, escorted by fourteen fighters, just after bombing II Corps. Fourteen Stukas were destroyed for the loss of one Spit. Not long afterward, to the regret of

By nightfall the New Zealanders, followed by 1 Armoured Division, had broken into the Axis positions, and the armor passed straight through in a moonlight operation. Next day the enemy fought desperately in a confused mêlée, but the Mareth position had been turned. Evacuation began on the night of the 27th and, sandstorms intervening, proceeded virtually unbombed on the 28th. On the 29th, however, the P-40's contributed to 418 strafing and bombing sorties on the coast-road traffic as far north as Mahares. Attacks were also made on landing grounds at Zitouna, Oudref, and Sfax. The Ninth Air Force sustained in these operations the loss of three P-40's and a B-25. By 29 March the British were in Gabès.<sup>46</sup> In retrospect, the low-level air attack on the switch line had contributed mightily to the uncovering of the Mareth defenses. According to the Eighth Army's chief of staff, De Guingand, higher RAF quarters tended to play it down out of apprehension of constant army demands for this type of mission;<sup>47</sup> at any rate, the Air Ministry was interested enough to request a report on the principles and methods employed.<sup>48</sup>

Badly weakened by his recent hammering, the enemy now lay in the Gabès gap, where the sea and the Chott el Fedjedj were only fifteen miles apart. Across the interval stretched the Wadi Akarit, not so wide as the Wadi Zigzaou but dominated by steep-sided hills on its northern bank. The first five days of April were spent by the Eighth Army in preparing to force this last gateway to the coastal plain. WDAF, although hampered by three days of bad weather, turned the time to account by laying on light bomber missions against Sfax/El Maou, a nest of Me-109's and Mc-202's and a staging field for Sicily-based Me-210's and Ju-88's. On the morning of 6 April the Eighth Army attacked and a day of bitter fighting followed. WDAF threw in heavy, light, and fighter-bomber missions against counterattacking forces, in which missions Ninth Air Force elements bore full share. Exhausted by Montgomery's pressure, the enemy pulled out the next night.<sup>49</sup>

The forcing of the Wadi Akarit unhinged the whole southern front. On the 7th, II Corps and Eighth Army had joined patrols east of Maknassy. Everywhere the enemy was in flight and nowhere was he out of range of the Allied air forces. On 7 April all available XII ASC and WDAF aircraft attacked the backtracking columns with devastating effect and slight enemy air interference. XII ASC and TBF concentrated on the Chemsî Pass, southeast of El Guettar, with A-20's, B-25's, and P-40's all bombing.<sup>50</sup>

patrols pushed out into the flat country beyond; but Takrouna Hill, so steep that the defenders had resorted to rope ladders to scale it, occupied the New Zealanders two days. Montgomery withstood a number of counterattacks, regrouped for a thrust along the coast, and then decided that the game was not worth the candle.<sup>100</sup> The Eighth Army had moved without the customary preparation by WDAF, save for reconnaissance and a few fighter-bomber sorties. The enemy positions were well hidden; no vehicle concentrations appeared; besides, low clouds overhung the area. A number of fighter-bomber strikes, however, were laid on the stubborn Italians on Djebel Garci. Altogether (this was the time of the Palm Sunday massacre), the contemporary operations against air and sea traffic paid off better.<sup>101</sup>

The Ninth Air Force units operating with WDAF were by now all on the maritime plain. The 57th, which had been running patrols over minesweepers around Zarzis and over convoys between Djerba and Sfax, moved into El Djem North and later, on 21 April, into Hani Main, six miles east of Kairouan. Except for a rear echelon, the 12th Group was by 17 April at El Maou, outside Sfax, near neighbor to a newly arrived U.S. medium group, the 340th, which was to begin independent operations two days later with a raid against the Korba landing ground on Cap Bon. The 79th jumped to Hani West on the 18th; previously it had been flying escort from La Fauconnerie for minesweepers moving into Sfax and Sousse.<sup>102</sup>

Alexander issued his order on 16 April, and three days later Anderson, who had the operation immediately in charge, laid down First Army Instruction 37 for VULCAN. For the main blow, 5 Corps would strike along the axis Medjez-Tunis: first objective, the high ground at Peters Corner and Longstop (Djebel Ahmera); second, the high ground near Massicault and El Bathan. The 9 Corps was to move against the highlands west of the Sebket el Kourzia, with the idea of destroying the enemy armored reserve and of getting behind the defenders opposite 5 Corps. Bradley's main attack was to be delivered just north of 5 Corps along the Béja-Oued Tine-Chouigui axis; this meant an excursion into the dominating hills, for the narrow Oued Tine valley offered facilities for mousetrapping the American armor. The reopening of the Robaa-Pont-du-Fahs road constituted XIX Corps' chief objective. D-day was set for 22 April; 9 Corps would be attacking in the morning, 5 Corps after dark, II Corps the succeeding night, and XIX Corps when ordered by Anderson.<sup>103</sup>

were limited to a fighter-bomber attack of 7 June on the landing grounds at Korba North and a night raid of 10/11 June by fifty planes on Sousse. These and other efforts, however, had little effect on NAAF operations. It was estimated that Axis losses during the first ten days of June totaled nearly sixty planes, a figure four times that for Allied losses over Pantelleria from 18 May to 10 June.<sup>30</sup>

On five occasions between 31 May and 5 June, the Allied air assault was supplemented by naval bombardment of Pantelleria's harbor and surrounding gun positions. The attacking forces, all of which were British, in no instance exceeded a complement of one cruiser and two destroyers. On the 8th, however, units of the Royal Navy launched a full-scale attack. Five light cruisers, eight destroyers, and three torpedo boats participated in a bombardment of Porto di Pantelleria's mole and dock and near-by batteries. The enemy's reply to the six attacks from the sea was weak and inaccurate; observers concluded that the severe air attacks of the previous week had left most of the batteries useless.<sup>31</sup>

According to plan, the island twice was offered a chance to surrender prior to D-day. On the 8th (D minus 3), immediately after the naval bombardment, three pilots of the 33d Fighter Group dropped messages demanding immediate cessation of hostilities and unconditional surrender of all military personnel. Immediately after the drop, bombers showered the island with thousands of leaflets which pointed out the futility of further resistance and the advantage in sparing the island the ordeal of continued bombings. When, after a six-hour respite, prescribed signals of surrender had not been displayed, the air assault was renewed. A second call, made on the 10th (D minus 1), likewise met with no response.<sup>32</sup>

After the failure of this second call, final preparations for the ground assault were completed and on the night of 10/11 June the British 1 Infantry Division embarked at Sousse and Sfax in three convoys, two fast and one slow.\* The fast convoys, protected by fighters of NAAF and by surface craft, were met off Pantelleria about daybreak of the 11th by a British naval squadron from Malta. Eight miles from the harbor entrance to Porto di Pantelleria the ships lowered their assault craft preparatory to moving ashore.<sup>33</sup>

During the night of 10/11 June and up to 1000 hours on the 11th, the Allied air forces smashed at gun positions in an all-out assault. Forma-

\* The troops sailing from Sousse were to be employed in a ship-to-shore assault; those from Sfax, for the first time in the Mediterranean, in a shore-to-shore assault.