Copy No. 1

U.S. Air Force Historical Study No. 105
(Formerly Army Air Forces Reference History No. 105)
(Short Title –AAFRH-5)

AIR PHASE OF THE NORTH AFRICAN INVASION

Prepared by
ASSISTANT CHIEF OF AIR STAFF
INTELLIGENCE
HISTORICAL DIVISION

RESTRICTED

REFERENCE HISTORY

CONFIDENTIAL

AIR PHASE OF THE NORTH AFRICAN INVASION

NOVEMBER 1942

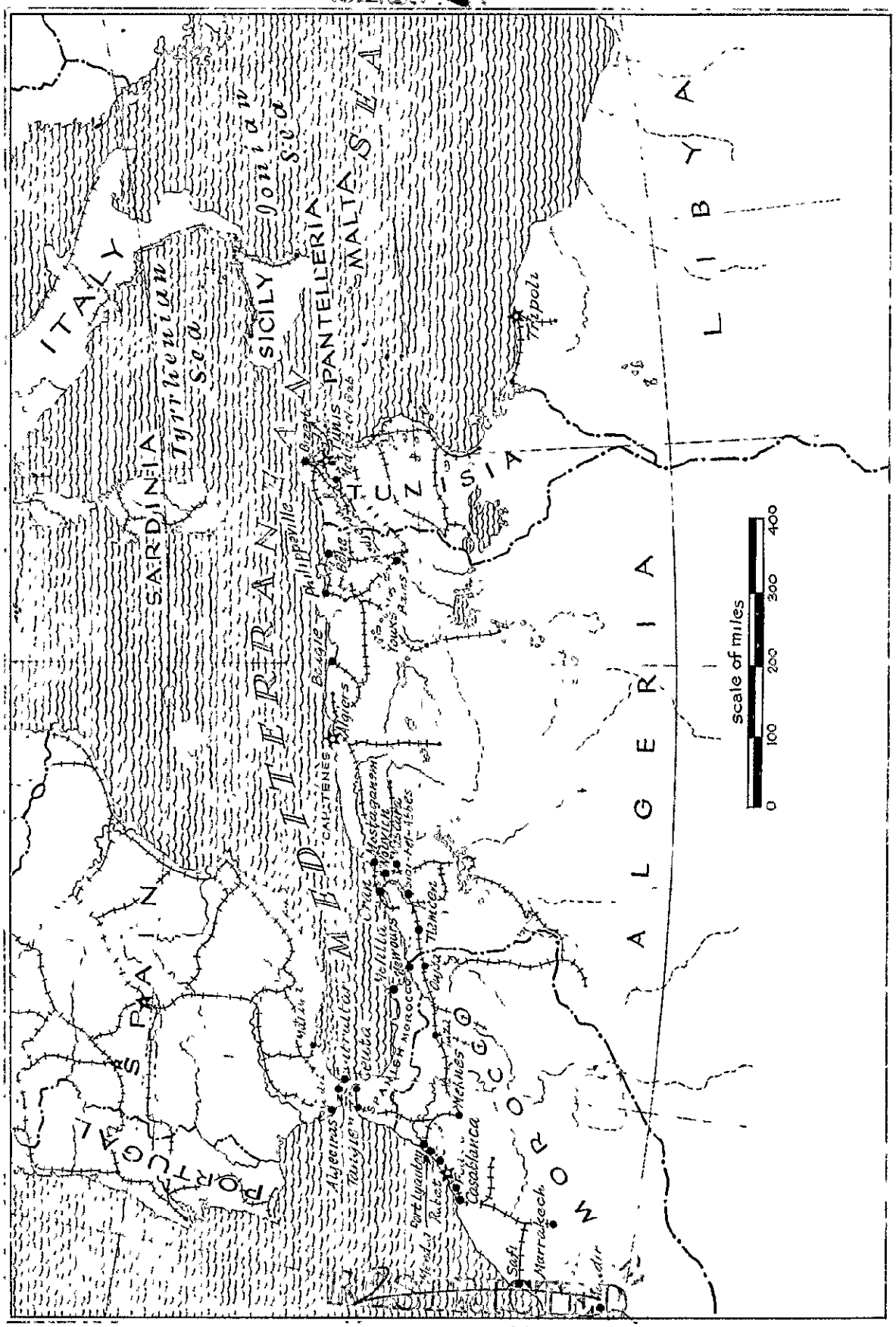
(Short Title: AAFRH-5)

Prepared by
Assistant Chief of Air Staff, Intelligence
Historical Division
November 1944

[redacted]

CONFIDENTIAL

SECURITY INFORMATION



THE TORCH AREA

C O N T E N T S

I	THE TORCH PLAN	1
	The Genesis of TORCH	1
	The Development of TORCH	7
II	THE TWELFTH AIR FORCE	14
	The Organization of the TORCH Air Force	14
	The TORCH Air Plan	19
	The Contribution of the Eighth Air Force	28
	Air Preparations for the Assault	36
	Progress of Combat Units	36
	The Paratroop Task Force	40
	The 31st and 52d Fighter Groups at Gibraltar	43
	The 33d Fighter Group	46
	The Air Movement to Africa	49
III	THE LANDINGS IN NORTH AFRICA	52
	Oran	52
	Casablanca	66
	First Days in North Africa	76
	GLOSSARY	88
	NOTES	89
	BIBLIOGRAPHY	100
	INDEX	106

ILLUSTRATIONS

The TORCH Area	frontispiece
	following
Area of the Center Task Force Landings . . .	52
Area of the Western Task Force Landings . .	67

RESTRICTED CONFIDENTIAL

[redacted]

Air Phase of the North African Invasion, November 1942

RESTRICTED CONFIDENTIAL

[redacted]

SECURITY INFORMATION

Chapter I

THE TORCH PLAN

The Genesis of TORCH

America's military interest in French North Africa, as, indeed, her appreciation of the menacing trend of the European War, goes back to the collapse of the Allied front in the summer of 1940. The victorious Germans adopted the ingenious plan of splitting hapless France into two parts, allowing the more southerly to be governed by the aged Marshal Petain. The degree of independence exercised by Petain was a mooted question; certainly, there was never any hindrance to the assumption of full control of France by the Germans, once they chose such a course.

North Africa, like those portions of the French Empire not declaring for de Gaulle, assumed a politico-military complexion similar to that of unoccupied France. The German-Italian Armistice Commission patrolled Algeria, Tunisia, and Morocco. Axis agents abounded in the area. By the terms of the Franco-German Armistice, the Vichy French were left with forces considerable enough to maintain their ascendancy against internal revolt and to discourage an Anglo-Saxon invader. Meanwhile, a German incursion, in one form or another, was a constant possibility.

The strategic implications of the situation were important. To the United States, at uneasy peace, Nazi occupation of Vichy

Africa would mean a threat to the Western Hemisphere from Dakar. For Great Britain it would mean the certain interdiction of the sea route through the Mediterranean, the opening of the sea route around Africa to attacks by U-boat and bomber, and a threat to the air route across Central Africa to the Middle East. Allied operations in French North Africa were, therefore, in the first instance defensive, with the purpose of blocking the extension of Axis forces.

By August 1941 the United States had developed the joint plan, JPB-BLACK, for an eventuality necessitating the seizure of Dakar. Following Pearl Harbor, the so-called "Arcadia Conference," 23 December-14 January, convened in Washington to refurbish and implement Anglo-American war plans. At this conference was presented GYMNAST, a plan which had been under study in the United States for some months, involving a landing at Casablanca. The British, for their part, had previously explored the feasibility of a landing on the Mediterranean coast of French Africa. It was natural that these plans were combined.[1]

Two versions of the coalesced plans were prepared, SUPER GYMNAST and MODIFIED GYMNAST. SUPER GYMNAST, later spoken of as simply GYMNAST, until March 1942 embodied the British-American conception of a "second front." As the ancestor of TORCH, its salient points deserve discussion.

The sine qua non of GYMNAST was an invitation by the French African authorities and their subsequent "wholehearted cooperation."

As to the possibility of obtaining a trustworthy invitation, a difference of opinion existed in Allied councils. American statesmen believed that, given the opportunity, the Vichy authorities would turn on the Germans. British civil and military and American military opinion took the view that the French would continue to aid the Axis until such time as the Axis was clearly "on the run."[2]

GYMNAST would forestall German-Italian occupation of French North Africa, possibly open the Mediterranean to a limited degree, and deny the raw materials of North Africa to the Axis. Its successful exploitation would seal off and neutralize Dakar, thus accomplishing the principal objective of JPB-BLACK. Offensively, its possibilities were also important in that it provided land and air bases for operations against the Axis in Libya, Italy, and, in the case of air, Germany itself.

Were the operation unsuccessful, the Germans would have occupied North Africa in force, the very thing the Allies planned to prevent. Subsequent Allied thrusts at the area would be much more difficult; neither was it considered possible for an American army, beaten in Morocco, upon its withdrawal to assault Dakar. Spanish and Vichy French opposition to the Allies would stiffen, the hopelessness of occupied Europe deepen. The Plans Branch of the Air Staff was critical of any plan dependent upon a French invitation because of the high probability that the Germans would be informed of the venture and seize the opportunity to prepare an initial

defeat for American arms. Its opinion was that the operation should involve "only a calculated risk and not a desperate gamble; the forces involved and their employment must be predicated upon such a premise."[3]

The proposed operation envisaged the employment of 80,000 British and 90,000 United States troops. Each of the Allies would contribute one armored and two infantry divisions. The RAF would furnish three fighter squadrons and two army cooperation squadrons. As the American air contingent, the Eighth Air Force was created, to consist of 2 pursuit groups, 2 bomber groups, and 1 observation group. Before 1942 was out, the Eighth actually furnished the core of the air striking force for the North African campaign.

Enemy reaction was foreseen from two directions: southward through Spain--the Allies did not expect that the Spanish government would offer effective resistance to a German invasion--and south and westward from Italy, Sicily, and Sardinia. It was anticipated that a German invasion of Spain could not be prepared in less than about six weeks, by which time the Allies would be in a position to block the advance by seizing Spanish Morocco.

German capabilities for an aerial offensive based on captured Spanish airdromes were estimated differently by the Allies. The British tended to minimize this danger and reasoned further that initial enemy reaction would be directed against Algeria rather than Morocco. They, therefore, assumed that reinforcements for

Algeria from U. S. squadrons would be possible, once an American lodgment had been gained in Morocco. The Americans, on the other hand, believed that the air contingent for Casablanca was already barely sufficient for the needs of the West Coast.[4]

Whatever the possibilities offered by GYMNAST, in early 1942 Great Britain and the United States were so committed in other theaters and so restricted by shipping that the operation could not in any case be mounted. On 3 March the Combined Staff Planners termed planning for GYMNAST an "academic study" and recommended that no forces be held in readiness for a North African venture. By mid-April the Allied chiefs had turned to another strategy of getting at the European Axis: invasion of the Continent with an air offensive by night and by day as the preliminary. BOLERO designated the project for the preparatory build-up in England of American forces, these forces to be employed as Russian fortunes dictated, either for a limited invasion in the fall of 1942, or a full dress attack in the spring of 1943. However, it happened that GYMNAST, like John Barleycorn, could not be permanently interred.[5]

Available information does not suffice to trace in detail the working of the influences that finally tipped the balance in favor of TORCH as against a continental invasion, nor to fix the day or hour when the decision to undertake TORCH was taken. In mid-June, Prime Minister Churchill visited Washington and the BOLERO plan was thoroughly reviewed in the light of forthcoming German offensives

on the Russian front. The upshot of the conversations was the conclusion that BOLERO offered sufficient flexibility to provide for either Russian collapse or continued resistance, since it reinforced Britain, the next threatened area, in the first case and prepared for a direct offensive against Europe in the second. Neither did it preclude the undertaking of GYMNAST or minor operations against the Continent. Although planning for GYMNAST was to continue, the operation presented several disadvantageous features: (1) the curtailment of reinforcements to the Middle East without immediate support to that theater; (2) the thinning of naval concentrations in all other theaters; (3) the impossibility of predicting French African reaction; (4) the slowing up of the BOLERO concentration. The heads of the two governments agreed with the above opinions of the Combined Chiefs of Staff, yet left the door ajar for the consideration of GYMNAST. Everything depended on the Russian front, with the North African venture gaining at the expense of a 1942 continental invasion in the event of unfavorable developments in the East.[6]

By 24 July, so far as the Combined Chiefs of Staff were concerned, matters stood as follows: the plan for an invasion in 1943 was to be pushed so long as there existed a reasonable chance of its successful execution before July; if, by 15 September 1942, Russian deterioration made this impracticable, GYMNAST should be launched before 1 December 1942. In view of the limiting date, preparations for the North African expedition were to be made immediately and its

commander appointed at once. British forces were to predominate in Algeria and Tunisia and American forces in Morocco. Heavy and medium bomber units arriving for the Eighth Air Force in England were earmarked for North Africa.[7]

To President Roosevelt is assigned much of the credit for the North African strategy. The decision was evidently taken shortly after 30 July, when the Combined Chiefs of Staff were not yet certain of the definite concurrence of Roosevelt and Churchill, but had agreed that the urgency of mounting TORCH before 1 December did not permit waiting for 15 September, when the outcome of the German summer campaign in Russia would be apparent. Meanwhile, the operation was taking form. The new code name had been acquired by 25 July. To lessen French resistance TORCH was to have an American complexion, headed by an American commander with American troops as the first wave of the assault. On 25 July the Combined Chiefs of Staff had approved alternate command setups for TORCH and ROUND-UP, as the project for a 1943 invasion had been designated. Planning for the landing in Morocco was to be done in Washington, while London was to prepare the Mediterranean assaults. The U. S. representatives stressed that the adoption of TORCH meant the abandonment of ROUND-UP, and so it fell out.[8]

The Development of TORCH

Certain of the unusual characteristics of TORCH were by this time apparent. A striking fact was the short period which remained

between the decision to undertake the operation and the latest possible D-day. Under this imperious and not-far-distant deadline, two separate groups of planners, relatively inexperienced and of mixed nationalities, were set to work. In the end they had to provide for five separate task forces, three of which involved combined operations. Still other difficulties were to beset the planning after the decision to go into Africa had been taken.

In a directive approved on 13 August, the Combined Chiefs of Staff instructed General Eisenhower to establish "firm and mutually supported lodgments" in the Oran-Algiers-Tunis area on the North Coast and in the Casablanca area on the West Coast. From these lodgments control was to be extended over French North Africa with ths primary object of driving against the rear of the Axis forces in the Western Desert. Preparations to invade Spanish Morocco were to be made to guard against hostile action by way of Spain. As soon as possible, General Eisenhower was to submit a plan in line with the directive.[9]

On 26 August General Eisenhower's plan, as developed by the planners at Norfolk House in London, was presented to the Combined Chiefs of Staff. This Norfolk Group Plan differed importantly from the operation envisaged by the CCS directive. The Moroccan landings were abandoned; simultaneous pre-dawn assaults were outlined at Oran, Algiers, and Bone. Of 13 divisions to be employed, seven were allotted to French Morocco, but in lieu of a frontal attack on Casablanca, i.e., from the Atlantic, the American contingent

striking at Oran was to cut across French Morocco and take Casablanca from the rear. Subsequently, it would prepare for a possible assault on Spanish Morocco. The plan indicated that studies were in progress for an additional thrust at Spanish Morocco from the sea, if action were required before the Oran forces could consolidate on the landward side.[10]

In the light of later developments, General Eisenhower's reasoning is interesting. He fully realized the danger of not immediately occupying Casablanca, which would have ensured Allied use of the Casablanca-Oran railroad and highway, when hostile reaction from Spain might cut communications through the Straits, knocking out the vital airdrome and naval base at Gibraltar. However, with the British, he was willing to accept the risk that Spain would remain neutral and defend her neutrality. He believed that a Moroccan landing would spread his forces too thinly. If maximum effort were not exerted to the east, the Axis could get into Tunisia and once there could be built up more rapidly than Allied forces.[11]

GYMNAST had originally depended on French cooperation and provided against Spanish hostility and the closing of the Straits by seizure of Casablanca. The British were at the time unwilling to rely on assurances of Vichy acquiescence. Now the situation was to be reversed. The Norfolk Group Plan took French resistance into account and chanced Spanish hostility. The U. S. Joint Chiefs of Staff took exception to the assumption of that risk.

If Allied forces were insufficient to carry out the original CCS directive, the U. S. Chiefs of Staff contended that landings east of Oran must be scrapped, not those on the West Coast. Mostaganem, about 50 miles beyond Oran, would be the scene of the easternmost assault. A directive embodying this conception was sent off for the concurrence of the British Chiefs of Staff.[12] On 27 August, the British telegraphic reply indicated their adherence to General Eisenhower's plan. The question was considered in the meeting of the Combined Chiefs of Staff on 28 August.

Admiral Cunningham presented the thesis set forth in the message from the British Chiefs of Staff. Objections to the Casablanca landing were based on the danger that it would thin out the Allied striking force and slow the advance eastward, allowing the Germans to establish themselves in Tunisia whence they would be difficult to dislodge. The surf on the Moroccan coast presented another hazard. The planners in London were willing to risk considerable to get into Tunis and Bizerte. If the Casablanca phase was to be carried through, additional U. S. forces must be made available. For himself, Admiral Cunningham thought that twin landings on the flanks of Spanish Morocco were more likely to cause the Spanish to open hostilities. It was contended that, despite an establishment of the German Air Force in Spain, supply ships could be gotten through the Straits of Gibraltar if the Allies held the southern shore. Although willing to pit an army of 150,000 Allied troops against an equal number of French and about 130,000 Spaniards, the Joint Chiefs of Staff would take no chances

on their starving, and insisted that the line of communication be secure.[13] The outline plan for TORCH was dated 26 September and not approved by the British until later, but a general conception of the operation must have been agreed upon by 1 September.[14] Many details, however, were still unsettled by 2 October.

To the necessary haste of mounting TORCH, therefore, were added a disagreement as to the fundamentals of the operation, continuing until only a little over three months before the latest possible D-day, and a high degree of uncertainty as to detail which continued on some points past the sailing date. Considering the uncertainties of the Spanish situation and the inherent hazards of TORCH, the estimate of Generals Eisenhower, Patton, and Clark that the operation's chances for over-all success were less than 50 per cent can be understood.[15]

A short summary of the TORCH plans is needed to complete the strategic background of the operation. The outline plan, dated 26 September, was identical in salient points with the original Combined Chiefs of Staff directive of 13 August to General Eisenhower. TORCH still faced east and west, towards Tunisia and Spanish Morocco. Preparation of striking forces to be used against the latter was the responsibility of American task forces—the Western Task Force, landing at Casablanca, and the Center Task Force, landing at Oran. In conformity with the decision that the initial assault must be an American function, the third task force striking on D-day was also predominantly American. Known

as the Eastern Assault Force, its mission was to secure Algiers. In its wake would come a much stronger British force, the First Army, which would operate immediately against Tunisia.[16]

Features of the Norfolk Group Plan were preserved by the organization of a Northern Task Force with the mission of attacking the Tangier-Ceuta area before D+60, should action be required before the consolidated Western and Center Task Forces could effectively move against Spanish Morocco. The organization of this force was begun by General Eisenhower in late October; on 4 November the Combined Chiefs of Staff approved the plans. Under the code name BACKBONE this project was active until about February 1943, the Northern Task Force being maintained intact in England, through November at least.[17]

In view of the likelihood that weather off the Moroccan coast might prevent the Western Task Force from effecting a landing in the Casablanca area, four alternate plans were drawn up in Washington. The Force might move to the protection of Gibraltar in a position of readiness; assault Nemours, east of Oran, and operate against Oujda, Taza Gap, and the rear of Casablanca; attack Algeciras, Malaga, and Cadiz; or proceed against Tangier and thence down the coast to Casablanca.[18] Because Gibraltar could not accommodate the entire Western Task Force, the first alternative was revised: ten transports with escorts would refuel at Gibraltar at a time and the convoy would lie off in the Atlantic until the weather cleared.

As the discussion has indicated, the TORCH plan was possessed of a certain ambivalence, caused by the uncertainty as to Spanish reaction or German reaction through Spain. American military leaders had insisted that precautions be taken against interruption of the line of communication and won their point. The push towards Tunis, perforce, had to be weakened. The Center and Western Task Forces, to be consolidated after junction, were to be held in readiness in the event of a breach of Spanish neutrality. Assigned to their support was the Western Air Command, or the Twelfth Air Force.

Chapter II

THE TWELFTH AIR FORCE

The Organization of the TORCH Air Force

The early history of the Twelfth Air Force parallels the unfolding of TORCH. According to an account written by an air officer engaged in the planning at Norfolk House, Brig. Gen. James H. Doolittle received the first intimation of impending events late in July. At the time, General Doolittle was preparing the Fourth Bomber Wing, to which he had been assigned after his return from the Tokyo raid, for service with the Eighth Air Force. He was interrupted in his work with the B-25's and B-26's by the decision of Generals Marshall and Arnold that he would command the American air contingent for TORCH. On 6 August he arrived in England to begin his considerable task.[1]

Basic features of the air force for TORCH were outlined in a cable from General Eisenhower on 13 August, concurred in by Generals Patton, Spaatz, and Doolittle. Operations in Africa would require the formation in England of an air force complete with necessary command and service echelons. In essence the plan was "to form the nucleus of the Torch Air Force from the Eighth Air Force--to be supplemented as necessary direct from the United States." Utilization of the Eighth's units would take advantage of their superior training and organization. Medium and light

bomb units ready for embarkation were to proceed to England for indoctrination, processing, and initiation into combat. In addition, the Eighth was expected to furnish key personnel for the fighter, bomber, and service commands. The initial force would comprise 2 heavy bomb groups, 2 P-38 and 2 Spitfire fighter groups, 3 medium bomb groups, 1 transport group, and 1 light bomb group.[2]

Requirements based on this plan reached the Plans Division of the Air Staff by 15 August. In addition to the units mentioned above, General Eisenhower called for headquarters and headquarters squadrons for an air force, a fighter command, a bomber command, and a service command; 3 signal companies (aviation); 3 signal company service groups; 3 signal construction battalions; 2 air depot groups; and 1 engineer section AFSC (Sp.). Comments from Plans on the availability of these units forecast the difficulties of setting up the Twelfth. Combat units, except the medium and light bomb groups, were already in Britain. All others had to be robbed from U. S. continental air forces if they were to arrive in England before 15 September, the deadline indicated by General Eisenhower. Activation and training in the United States were precluded. The three medium bomb groups were not as far advanced as the 13 August cable presumed. The 310th (B-25's) could make the deadline if planes were robbed from commitments to Cairo, Australia, and India. The 319th and 320th could be readied only if they were equipped with unmodified B-26's, while the A-20B's of the 47th Light Bombardment Group lacked the necessary bomb bay tanks.[3]

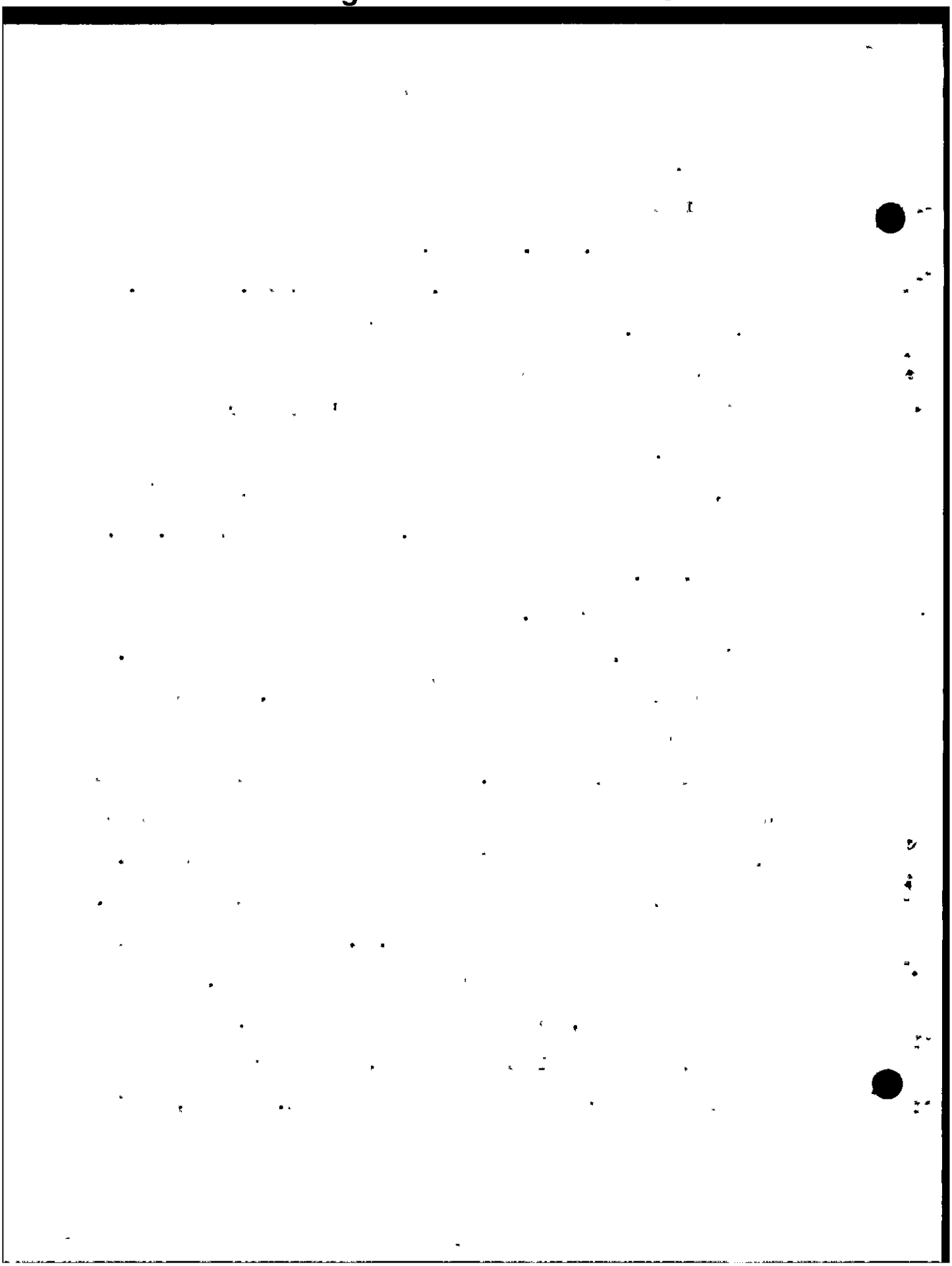
AC/AS, Plans further indicated that the necessary headquarters units could be provided by taking over those training for the Ninth Air Force, and that signal companies (aviation) could be obtained from the continental air forces, if the one operating in the Second Air Force could be turned aside from its commitment to the Fijis and New Caledonia. Of the two signal construction battalions in the United States, one was earmarked for the Fijis. The air depot groups and the signal company service groups, however, were available.

The sudden request for AAF units for TORCH meant the utilization of partially trained personnel and, because of TORCH's priority, the reversal of commitments to other theaters. The AAF, moreover, could offer no assurance that the 15 September deadline could be met and so informed General Eisenhower on 16 August.[4]

The nucleus of General Doolittle's staff, chosen by General Arnold, shortly followed their chief to England. Col. (now Maj. Gen.) Hoyt S. Vandenberg became chief of staff. Lt. Col. J. S. Allard, formerly vice-president of Curtiss-Wright, was appointed A-1 from a similar position in the Fourth Bomber Wing. Thirty-five-year-old Lt. Col. John Felton Turner became A-2. Col. (now Brig. Gen.) Lauris Norstad, also only 35 years old, was appointed A-3. Colonel Norstad had formerly been on General Arnold's Advisory Council. Col. Robert T. Zane, formerly with the First Air Force, was chosen A-4. Headquarters were set up in Allied Force Headquarters at Norfolk House in London and a period of intensive work began.[5]

When, on 23 September, General Doolittle assumed command of his air force, the command structure of the Twelfth in England had been completed. Col. Claude E. Duncan had assumed command of the Bomber Command on 2 September. By the 21st, Col. (now Brig. Gen.) Thomas W. Blackburn was selected for CO of the Fighter Command, the headquarters and headquarters squadron of which had originally been set up for General Brereton's air force in the Middle East. Headquarters and Headquarters Squadron, Twelfth Air Force, was constituted and activated on 20 ~~September~~ August; this unit had also been destined for the Ninth. By 22 September, Brig. Gen. (now Maj. Gen.) Delmar Dunton had been assigned from the Eighth Air Force to replace Col. Ray Dunn as head of the XII Air Force Service Command. General Dunton assumed command on 30 September.[6]

While the Twelfth was taking shape in England, a shift in the invasion plans necessitated the organization of another air command in the United States. It is probable that the requirements outlined by General Eisenhower in mid-August sprang from the Norfolk Group Plan, envisioning landings only on the Mediterranean coast. At any rate, after the Casablanca phase of the operation was added, as a result of the insistence of the U. S. Joint Chiefs of Staff, it was decided that air support for the western landing, as well as for that at Oran, would be furnished by the USAAF. As a consequence, around the first of September, the XII Ground Air Support Command was projected for the Western Task Force. In fact, as will



be brought out, this command amounted to a second U. S. air force.[7]

On 1 September, General Doolittle, once more in Washington, conferred with General Arnold. As a result of the meeting, it was decided that the Headquarters and Headquarters Squadron and staff of the III Ground Air Support Command be immediately assigned to the Twelfth Air Force and redesignated the XII Ground Air Support Command. Col. Rosenham Beam, commander of the III GASC, was taken over as CO of the new organization. Arrangements for a fighter and a bomber wing within the Command were also initiated. On 4 September, General Doolittle wired Colonel Vandenberg, in London, that he would stay in Washington until the XII GASC had gotten underway.[8]

With the decision to set up the XII GASC, the Twelfth Air Force more than doubled its paper strength. By 8 September, Washington was talking of 714 aircraft for Oran and 719 for Casablanca up to D+60, whereas General Eisenhower's original request called for less than 700 planes. As of 16 September, the contemplated GASC boasted 2 heavy bomb groups, 1 light bomb group, 3 medium bomb groups, 4 fighter groups, and 1 troop carrier group, besides other units.[9]

Colonel Beam, first commander of the GASC, gave way to Brig. Gen. (now Maj. Gen.) John K. Cannon on 22 September, but was retained as chief of staff. Col. Demas T. Craw, who was to die on D-day, became assistant chief of staff. Headquarters and Headquarters Squadron, XII Ground Air Support Command was activated at

Birmingham, Alabama, on 17 September; on 1 October the designation was changed to XII Air Support Command. Less than five weeks after activation, the unit was on the high seas. Personnel had been mainly drawn from the III GASC at Birmingham. In the last week in September, the organization arrived at Bolling Field, D. C., where the men were quartered in tents despite the raw weather. Meanwhile, over in the Munitions Building, in General Patton's headquarters in OPD, General Cannon was laying plans for cooperation with the Western Task Force.[10]

The TORCH Air Plan

The TORCH air plan envisaged two air forces—one American, one British—with separate tasks and areas of responsibility and operation. The RAF Eastern Air Command, under Air Marshal Sir William Welsh, was to have its headquarters at Algiers, the Twelfth at Oran.

The Eastern Air Command drew the definite assignment of supporting the Eastern Task Force and the Eastern Assault Force in the seizure of Algiers and the subsequent advance towards Tunis. Once Algiers had capitulated, RAF fighters were responsible for the protection of the port and the convoy routes east of Cap Tenes, one hundred miles west of Algiers. As the push into Tunisia developed, the harbors at Bougie, Philippeville, and Bone were also to be covered. The EAC would also arrange, through the Air

Ministry and with the commanders involved, for the cooperation of RAF units outside French North Africa, presumably, those in Malta and the Western Desert.

The Twelfth Air Force, or Western Air Command, was expected to support the assault on Oran and Casablanca, and furnish fighter defense for those areas and for the convoy route from Gibraltar to Cap Tenes. Aside from these tasks, its role, after the cessation of French resistance, largely depended on hostile reaction from Spanish territory. Should the Western and Center Task Forces move on Spanish Morocco, the Twelfth would support their operations. Should BACKBONE land near Tangier, the Twelfth was in support. Should the Germans begin penetration of Spain, the Twelfth's Fortresses, brought down from England, would strike the peninsula.[11]

The actual assaults were to be supported in the first instance by carrier-borne aviation under the orders of naval task force commanders. With the capture of airdromes, the Eastern Air Command, Twelfth Air Force, and XII Air Support Command were to relieve the naval aviation, as far as possible, and continue air support as directed by the respective task force commanders.

Although the establishment of two air forces in TORCH was necessitated by different systems of command, organization, and supply, and above all by the likelihood of widely separated operating and supply bases, cogent arguments for coordination were recognized. If the inherent flexibility of air power was to be

exploited, arrangements were necessary to reinforce one command from the other and to concentrate strength in any part of the theater. Moreover, the navies could not be expected to negotiate separately with each command respecting the protection of convoys.

Generally speaking, such coordination was exercised by AFHQ. The deployment of air units to achieve any particular strategic purpose after the initial phase of the operation would be determined by General Eisenhower. It was anticipated that it would be necessary to devise a system of centralized direction for air forces required for the protection of shipping. Permanent air liaison staff officers, both operational and administrative, were provided for each air headquarters. The TORCH plans concluded that "from the air point of view, the whole North African theater must be regarded as one."[12]

AFHQ hoped to deploy in North Africa an Allied air power capable of meeting enemy air reaction on a strength basis of two to one. For the assault maximum use of air power was urged, to create among the French the impression of force majeure in the face of which they could honorably lay down their arms. It is pertinent to note that, although the State Department continued the "political offensive," the TORCH operation, unlike GYMNAST, did not depend on either French invitation or acquiescence. This may be taken as earnest of the interim accretion of Allied strength.

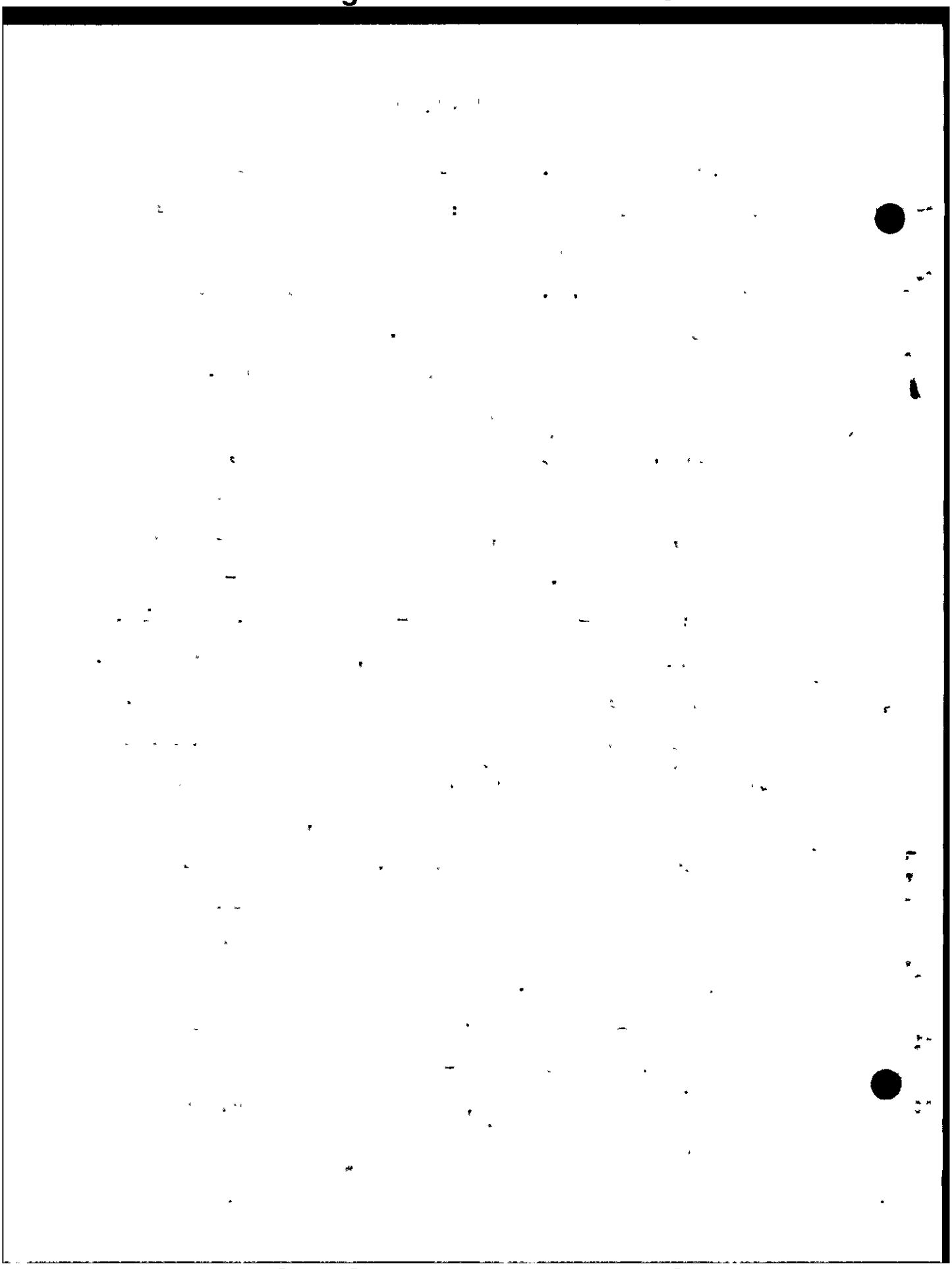
The degree of air superiority desiderated by the planners underlines their preoccupation with the safety of the Mediterranean

and Atlantic sea lanes. All ports and the water routes thereto were to have fighter protection; stress was laid upon sea reconnaissance and antisubmarine patrols; and provision made for seaward reconnaissance by U. S. naval aircraft from Port Lyautey, when the port and airbase had been secured.[13]

As contemplated by the air annex to the TORCH plan, the Twelfth Air Force was almost three times as large as the Eastern Air Command. Of the 454 aircraft assigned the latter, short-range fighters accounted for 234; light and medium bombers and reconnaissance, army cooperation, and night fighter aircraft for the bulk of the remainder. The Twelfth boasted 400 short-range fighters; 240 long-range fighters (P-38's); 70 heavy, 228 medium, and 72 light bombers; and 156 transports, besides other categories.

Several factors explain the disparity in assigned strength. The RAF found itself comparatively more straitened by commitments to other theaters than the USAAF. It was anticipated that in the initial lack of salvage and repair facilities, the EAC could more easily bring replacements from England, whereas the Twelfth would be reduced to drawing from its own first line strength. Finally, the relative inexperience of American flyers was expected to result in higher wastage.[14]

The build-up and reinforcement of Allied air strength in the theater was subject to well-defined limitations during the early stages of the operation, when losses were expected as high as one third of "initial equipment aircraft per squadron per



month." Suitable airdromes had first to be captured. Axis bombing attacks on Gibraltar constantly threatened the short-range fighters erected there for flight to the theater. All types of aircraft, including those capable of being flown in directly from England or other points, were limited as to deployment by the over-all logistical situation, i.e., shipping. Necessary maintenance personnel, gasoline, motor transport, etc. depended on what could be brought in by early convoys. The capacity of African ports and the competing requirements of ground forces were also considerations.[15]

In collaboration with ground and naval forces the Twelfth Air Force was assigned important tasks in the assault phases at both Oran and Casablanca. The original plans called for the dropping of parachutists by the 60th Troop Carrier Group at the two most important airdromes in the vicinity of Oran—Tafaraoui and La Senia—to destroy aircraft and hold Tafaraoui until relieved by troops landing to the east and west of the city. Tafaraoui in American hands, USAAF Spitfires of the 31st Group were to fly in from Gibraltar to furnish support against the French.[16]

Air Corps troops arriving on D-day and subsequent convoys were to prepare for the reception of additional units flying in from England and Gibraltar. Although any preconceived program for the dispatch of aircraft was recognized as susceptible of modification by weather and tactical considerations, tentative schedules for the movement of units were prepared. Up to D+6, besides the

31st, the 1st Fighter Group (P-38's) and two A-20 squadrons of the 68th Observation Group were scheduled for the Oran area. Later, the 52d Fighter Group (Spitfires) was added for deployment in this phase.

The second phase, extending to D+47, contemplated the arrival of units at Oran in the following order: D+8, 319th Medium Bombardment Group (B-26's); D+10, 14th Fighter Group (P-38's); D+17, 15th Light Bombardment Squadron (A-20's); D+22, 320th Medium Bombardment Group (B-26's); and the 97th and 301st Heavy Bombardment Groups (B-17's) on D+30 and D+47, respectively.[17]

AFHQ indicated that U. S. fighter strength would be initially divided between Oran and Casablanca in a ratio of approximately three to two, probably in view of the fact that Oran was more likely to receive attention from the Axis air forces than was the West Coast. In accordance with this conception the 81st Group (P-39's) would be sent to Oran as soon as French resistance had been overcome in the Casablanca area. Heavy bombardment was concentrated near Oran so that it could be employed either towards Spanish Morocco or Tunisia. However, some of the plans also contemplated the use of B-17's from airdromes in the Casablanca area. The succession of tactical units in each area was, generally, fighter, light-medium bombardment, and heavy bombardment.[18]

On the West Coast, hinging on the seizure of the Port Lyautey airdrome, the P-40's of the 33d Fighter Group were to be catapulted from an auxiliary aircraft carrier to join in the action against the French. Air Corps troops of the XII Air Support Command would

land with the ground forces on D-day and participate in the assault of the three sub-task forces operating against Fedala, Mehdia-Port Lyautey, and Safi. As airdromes were captured, these Air Corps detachments reverted to the control of the XII Air Support Command, occupied the fields, and prepared them for operation. The following fields were within the scope of the landings: Port Lyautey, Rabat-Sale, Rabat, Casablanca-Cazes, and Mediouna.

The 7th Fighter Wing was charged with the establishment of an air warning service, besides making preparations for the reception of aircraft. Eight air support parties were detailed to the sub-task forces, to request support from the carriers and, later, from the XII Air Support Command. An advance echelon of the XII Air Force Service Command was formed to expedite the movement of supplies in the early stages of the landing. To maintain and enlarge the captured airdromes, aviation engineers were included in the D-day convoy.[19]

Of all the airdromes in the area, that at Port Lyautey with its hard-surfaced runways was most desirable. It constituted the main objective of sub-task force GOALPOST, landing at the mouth of the shallow Sebou River. To carry the gasoline, oil, and bombs up the Sebou to the airdrome, a vessel drawing less than 17 feet was necessary. After considerable difficulty in finding a ship of this description, the authorities at Newport News pressed into service the Contessa, an old 5,500-ton fruit boat.[20]

Next after the commitment of the carrier-borne 33d, the 81st Fighter Group (P-39's) was scheduled for the Casablanca area, followed by one squadron of the 47th Light Bombardment Group (A-20's) and two squadrons of the 68th Observation Group (P-39's) on D+4 and D+5. The 350th Fighter Group (P-39's) were to come down from England by D+7, the remaining three squadrons of the 47th on the next day. The B-25's of the 310th Group were expected by D+14 and the P-38's of the 82d by D+18, the latter relieving the 81st Group to be sent to Oran. The 17th Medium Bombardment Group (B-26's) to arrive by D+30, completed the scheduled movement. The provision of observation, troop carrier, and photographic units for both the Oran and Casablanca areas reinforces the impression that the Twelfth was in reality initially split into two air task forces. Such organizations were adaptable to landward convergence on Spanish Morocco as well as to the descent on the two African ports.[21]

The decision to mount TORCH meant the abandonment for no inconsiderable period of a major continental invasion and the fall from first priority in ETOUSA of the Eighth Air Force. On 24 July the Combined Chiefs of Staff had allocated heavy and medium bombers in the United Kingdom to TORCH and additionally pared down commitments to BOLERO by diversions to the Pacific. Nevertheless, it placed on record the conviction that Allied air strength should be built up in England to provide for "a constantly increasing intensity of air attack on Germany."[22]

Many arguments were advanced in an attempt to preserve the strength of the Eighth as against the Twelfth and the strength of

the two ETOUSA air forces against the pull of the Pacific. On 20 August Sir Charles Portal expressed the hope that the Eighth could maintain itself against pressure for diversions to other theaters so that its bombers could operate in force in concert with the RAF's night raids. Sir Charles questioned the wisdom of allotting two groups of heavy bombers to North Africa.[23]

At about the same time, General Spaatz, commanding the Eighth, was stressing the support that the air forces in England could give to TORCH by striking against the springs of German air power, unreachable from Africa. A concentration of air units in Britain, in addition, would provide easy reinforcement for TORCH, if the need arose. General Arnold struck somewhat the same note in protesting the diversion of the 33d Fighter Group from the Middle East to the Western Task Force. He pointed out that base, shipping, and unloading facilities limited the number of air units which could be initially operated from North Africa. Facilities in the United Kingdom, on the other hand, were in excess of the forces available and reserves could be moved to TORCH, once facilities there could support them.[24]

By the beginning of November, the concept of a "complementary use" of the Eighth and Twelfth was well developed. This "complementary use" favored Africa rather than England--General Spaatz reported General Eisenhower's declaration that, if need be, he would use the whole Eighth Air Force in Africa. General Spaatz envisioned heavy bomber striking power shifting from Iceland to

England to Iraq or back again if circumstances warranted. A miserable October in England had brightened the prospect of African airdromes. To exploit the TORCH bases, General Spaatz favored an over-all commander for the USAAF in the European theater. This plan was to be partly implemented shortly after the African landings were consummated.[25]

The Contribution of the Eighth Air Force

During the early preparations for TORCH in the United Kingdom, the Twelfth Air Force was known as "Junior Eighth Air Force," or simply, "Junior." Withal, in size and lustiness, Junior soon outstripped the elder organization, drawing freely on the Eighth's experience and personnel as well as on its best-trained units. "You can't have that; its for Junior" became a watchword in AAF circles in England. The contributions of the Eighth, indeed, wrought grievously on its own operations; after November it underwent a crisis in its history.[26]

The organization, training, and planning of the Twelfth Air Force was made the responsibility of the Eighth.[27] As partially trained and undermanned units of the Twelfth reached the United Kingdom, appropriate Eighth Air Force organizations took them in hand and proceeded to lick them into shape for the African venture.

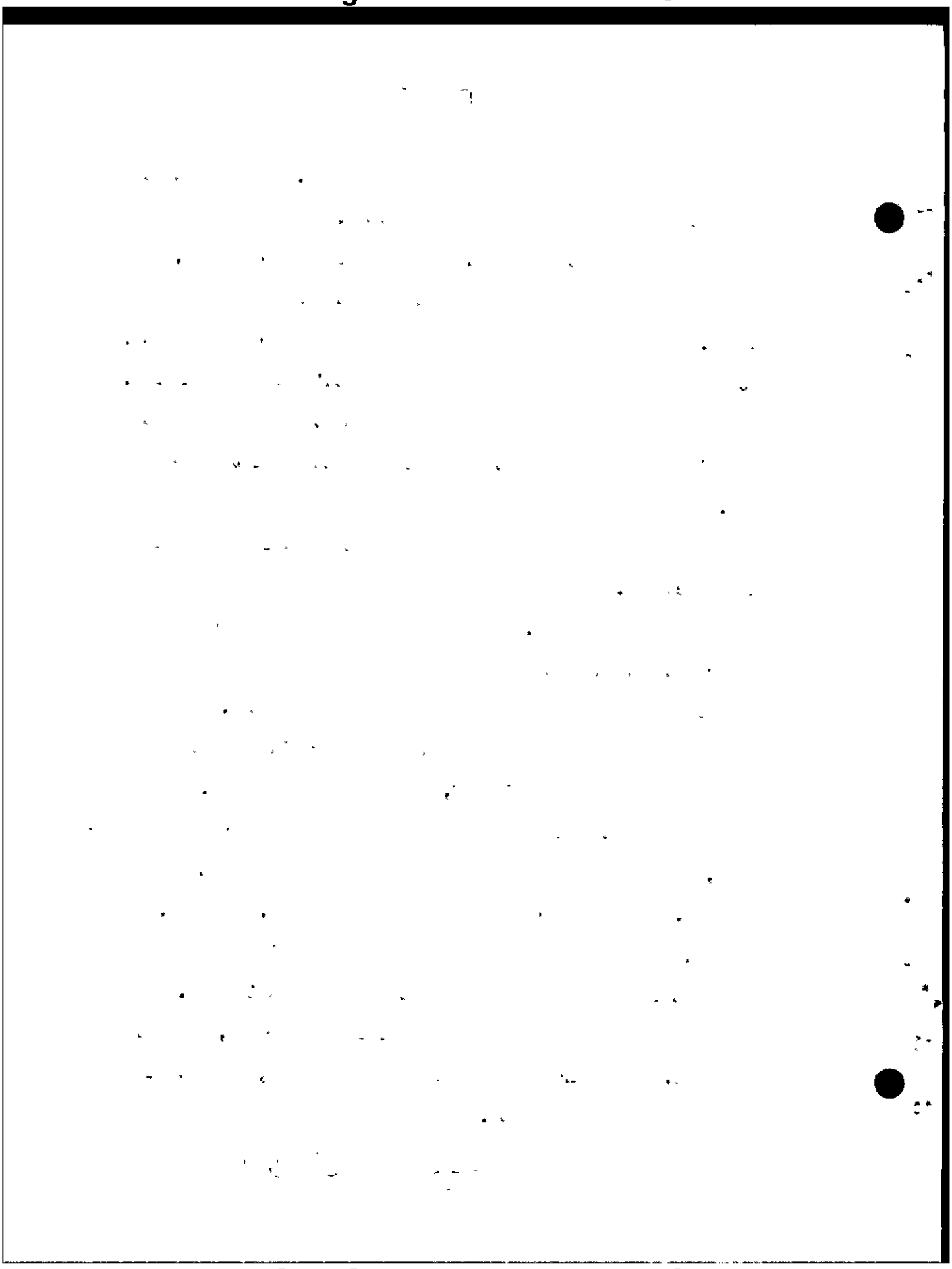
The A-1 section of the Eighth Air Force instructed its opposite number in personnel matters and worked on organizational charts and tentative tables of organization. A-2 assisted in

training for all phases of intelligence work, supplied information on the Luftwaffe and the Italian Air Force, and helped in the development of target information and other material. Much of its trained personnel was transferred to A-2, Twelfth Air Force. The A-3 section coordinated reception, assignment, and movement of all Twelfth Air Force units in the United Kingdom. It initiated the activation of the 350th Fighter Group and oversaw the procurement and delivery of P-39 and F-4 aircraft. Moreover, it coordinated operations in support of TORCH, i.e., the campaign against the French U-boat bases touched off by the raid of 21 October against Lorient. Headquarters and Headquarters Squadron, Twelfth Air Force and the XII Air Force Service Command owed their transportation and housing to A-4, Eighth Air Force, which also helped in organizing the Twelfth's service units and working out supply problems.[28]

In the matter of supply itself, the Eighth rendered important assistance. The Twelfth expected, in normal course, to get its supplies directly from the United States on an automatic basis. However, a meeting on 31 October, attended by Generals Eaker, Frank, Miller, Dunton, and Hansell, and Colonels Vandenberg and Curtis, assumed that emergency requests would be filled by calls on the Eighth. At that time, the following agreement was reached: the Twelfth would inform the Eighth of its expected requirements on an "automatic" basis, VIII Air Force Service Command to build

up its reserves in anticipation of emergencies. If the Twelfth was forced to abandon the automatic system, its requirements were to be communicated to the Eighth to be filled out of stock, replacements to be requisitioned by the Eighth from the United States. Actually, the latter arrangement had to be resorted to, with a resulting deterioration of the Eighth's supply situation. VIII Air Force Service Command estimated that 75 per cent of the Eighth's supplies were sent to Africa when the Twelfth moved down.[29]

The commands of the Eighth contributed equally with the staff sections. The VIII Fighter Command prepared accommodations for XII Fighter Command, filled shortages in its combat and service units, and secured six stations from the RAF for the further organization and training of two TORCH groups. VIII Bomber Command provided housing and other facilities for, and assisted in the organization of, the XII Bomber Command. It supervised the tactical training of all Twelfth Air Force organizations, conducted special courses for the training of intelligence officers, and trained over 200 gunners for Africa. Housing, messing, and the provision of airdromes and station complements for the tactical units of the Twelfth all fell to its lot. A sore blow was the loss of its two oldest heavy groups, the 97th and 301st. VIII Air Support Command administered, housed, and messed units of the Twelfth, aided in procuring supplies and



equipment, and conducted general and tactical training. VIII Air Force Service Command's main task was the equipment and modification of aircraft, a task which did not end with D-day. Much of its strength was also transferred to the Twelfth.[30]

As of the end of October, the Eighth Air Force had transferred 3,198 officers, 34 warrant officers, and 24,124 enlisted men to the Twelfth. The following table breaks down this personnel by sources:[31]

	Off.	EM	WO
Headquarters, Eighth Air Force	95	424	8
VIII Air Force Service Command	208	2,921	2
VIII Bomber Command	1,098	7,101	14
VIII Fighter Command	950	8,353	5
VIII Air Support Command	847	5,325	5
Total	3,198	24,124	34

In minor instances, friction, caused by the anomalous status of the Twelfth, arose between the two air forces. Not unnaturally, personnel of the Eighth were reluctant to strip their organization for the sake of an upstart, whose mission was largely unknown. In the beginning, it appears that the Twelfth had to request its needs from the Eighth.[32] The story of the organization of the 12th Weather Squadron illustrates this difficulty and, as well, the complexity of the TORCH operation. The forerunner of the 12th Weather Squadron was the Provisional Weather Squadron, Twelfth Air Force, activated on 14 September by order of General Spaatz. This unit was superseded when authority arrived from the War Department on 22 September to activate the 12th Weather Squadron

(Regional Control) consisting of 38 officers, 5 warrant officers, and 224 enlisted men, to be drawn from the 18th Weather Squadron.[33]

On 16 September Col. Von R. Shores arrived in London; on the next day Colonel Mustoe, weather officer of the Eighth, revealed the character of the TORCH operation and the plans he had made for a weather detachment and equipment for the Twelfth. On 19 September the initial weather plan was written by Colonel Shores and Lt. Col. Joseph A. Miller. Satisfactory liaison was promptly established with Squadron Leader P. J. Meade, chief meteorological officer of the Eastern Air Command, and Dr. N. K. Johnson, director of the Meteorological Office, Air Ministry.[34]

An effort was made to have weather information classified as priority and sent in the clear, at least for the assault phase, but G-2, AFHQ and the British disagreed to these requests. A request for a separate radio communications net for weather was also refused, despite the weathermen's conviction that Signal Corps communications had been proved unsatisfactory in the Carolina maneuvers in the fall of 1941. The final weather plan, coordinated with the British, was completed on 26 September and approved on 3 October by Col. Leo P. Dahl, regional control officer, who had arrived from the States on the previous day.[35]

At one point the Eighth Air Force refused to meet requests for additional personnel and orders for transfer to the 12th Weather Squadron issued by the Eighth often did not reach the men

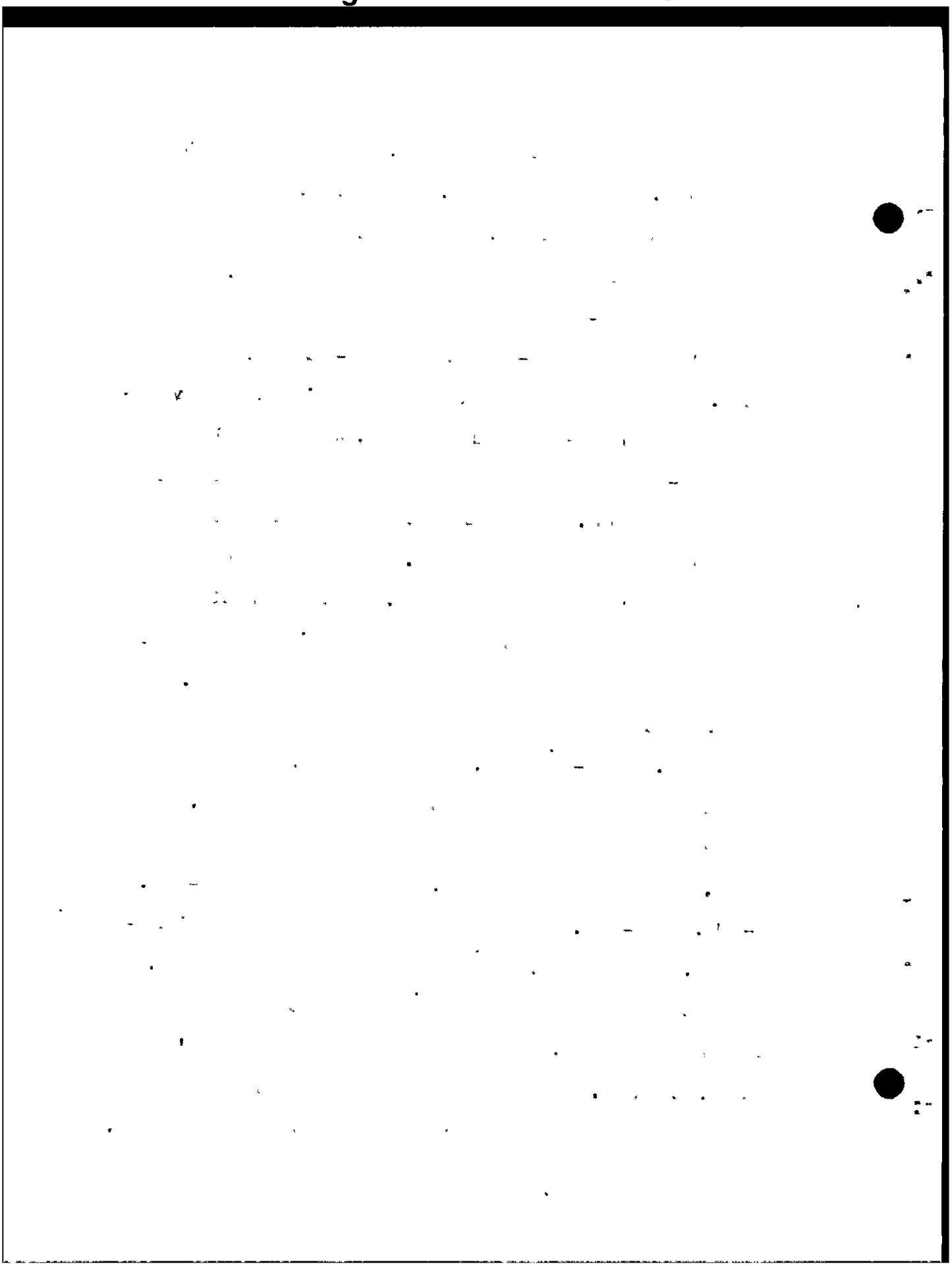
concerned. The weathermen, meanwhile, were scouring the United Kingdom for equipment; in this matter Eighth Air Force personnel were reported as non-cooperative. The initial increment of weather personnel, 49 enlisted men and 4 officers, was prepared for the D-day convoy at West Hampnett. Research was carried on for an air route guide to Africa and an officer sent to Gibraltar to prepare for the cooperation of weather facilities thereat. The Eighth Air Force had been made responsible for the weather briefing for flights from the United Kingdom; however, the 12th Weather Squadron briefed General Doolittle on the expected November weather for ferry operations to the theater and Generals Clark, Doolittle, and Craig before the command echelon of AFHQ took off for Gibraltar. General Doolittle and the American pilots in readiness at the Rock were briefed prior to the start of hostilities on 8 November.[36]

Former combat units of the Eighth figured prominently in the early days of the North African campaign because they, almost alone, were ready for commitment. For instance, three groups of medium bombers which, it was planned, would move to England for training before going on to TORCH were badly hampered by delays in the United States and by North Atlantic weather. As a consequence, General Doolittle was forced to bring down his heavies from England sooner than had been anticipated. In view of their importance to TORCH, it is meet to discuss the careers of some

of these Eighth Air Force units which, trained for operations over Europe, found their calling, for the time, over Tunisia.[37]

The 97th and 301st Heavy Bombardment Groups were the pioneers of daylight precision bombing in the European theater. On 17 August 1942, 12 B-17E's of the 97th had performed the VIII Bomber Command's first mission--against the Rouen-Sotteville marshalling yards. Operations followed during August against the Abbeville-Drucat and Courtrai-Wevelghem airdromes, the marshalling yards at Amiens-Longueau, the Le Trait shipyards, and the Potez airplane factory at Meaulte. On 5 September, the 301st joined the 97th in a second raid on the Rouen yards. The two groups had participated in numerous subsequent missions, including the big Lille raid in October and an attack on the submarine pens at Lorient.[38]

Four fighter groups were transferred from the Eighth. Of these, the careers of the 31st and 52d will be outlined in another connection. The P-38 groups, the 1st and 14th, had arrived in England during the summer as part of the BOLERO movement. The air echelon of the 1st Fighter Group flew over the northern air route, leaving Dow Field, Bangor, Maine, on 27 June in P-38's, B-17's, and C-47's. Initially stationed at Goxhill and Kirton-in-Lindsey, on 24 August the group moved to Ibsley in Hampshire. On the last day of August, its 27th Squadron, which had been left on patrol in Iceland, arrived at Colorne; during the 27th's Iceland tour, Lt. Elza Shahan had scored the first American aerial victory in the ETO by knocking down a Kurier on 14 August.



The 14th Group's air echelon ran into foul weather on the ferry route, but two squadrons had arrived at Atcham, in Shropshire, by the end of August, the third squadron, the 50th, having succeeded the 1st Group's 27th on Iceland duty. The Eighth Air Force attempted to get these groups into combat before it was necessary to release them for TORCH, but weather and inexperienced combat leaders prevented any contact with the enemy; therefore, on the eve of TORCH, except for tests against a captured FW-190, there was no indication of how the P-38's would stand up to the Luftwaffe.[39]

The Twelfth Air Force also acquired the first AAF combat unit to arrive in the United Kingdom, the 15th Light Bombardment Squadron (A-20's). Originally intended as a night fighter squadron using British Turbinlite equipment, the 15th was converted into a conventional light bomber unit. The personnel had arrived in England by 5 June, but the aircraft lagged behind. Airmen of the 15th and the 97th Heavy Bombardment Group celebrated Independence Day 1942 by raiding airdromes in Holland with RAF planes and in an RAF formation. This was the first mission participated in by Americans against German-occupied Europe. Operating under the VIII Bomber Command, the squadron later carried out additional attacks against French targets, including the docks at Le Havre and the Abbeville-Drucat airdrome.[40]

Air Preparations for the Assault

Progress of Combat Units. Besides the trained and equipped units furnished the Twelfth by the Eighth Air Force, i.e., units assigned to BOLERO which already had arrived in England, two other rough categories of combat units existed in the Twelfth--those units assigned to BOLERO, but diverted to TORCH before arrival in the theater, and those specifically activated for TORCH or assigned to it in the United States. Units in the latter categories lacked the experience of the Eighth Air Force units and through no fault of their own were not ready for action when the landings were sprung on a surprised Axis on 8 November.

In August when TORCH loomed on the horizon, three medium bombardment groups, the 310th, 319th, and 320th, were being trained in the United States for assignment to BOLERO; they were promptly allocated to the Twelfth.

The ground and flight echelons of the 319th (B-26's) had arrived in England by early October, but the echelon which was to fly the aircraft over the northern route was encountering considerable difficulty. Its planes were being prepared at Baer Field, Fort Wayne, Indiana, where, according to the group's historian, the personnel knew very little about the B-26 and only the exertions of the 319th's own engineers and line chiefs got the ships out. On 18 October the last B-26 left Baer Field.

Meanwhile, the wintry northern route had become almost impossible; planes became weatherbound in Iceland and Greenland and were finally ordered to proceed either towards Europe or back to the United States, as the elements permitted. Some Marauders and their crews were lost in the North Atlantic; the tardy arrival of others seriously restricted the group's striking power in the early weeks of the North African campaign.[41]

The 320th Group (B-26's) both shared and benefited from the misfortunes of the 319th. Its advance echelon arrived at Hethel, England, on 12 September where the ground echelon joined it by 4 October. The flight echelon waited for its planes at Baer Field and did not depart Fort Wayne until after D-day. However, after the experience of the 319th with the northern route, it was decided that the 320th would proceed by way of the southern route. The last of its B-26's left West Palm Beach on 5 January 1943.

The B-25's of the 310th Group succeeded in getting over the northern air route before its interdiction. The air echelon of the 310th disembarked from the Queen Mary at Gourock, Scotland, on 12 September and proceeded to Hardwick to await the arrival of its planes. The flight echelon picked up 54 new B-25C's at Westover Field, Massachusetts and flew them to the United Kingdom via Presque Isle, Goose Bay, Bluie West #1 and Reykjevik. From Prestwick and Stornoway the first planes arrived on 24 September at Hardwick, where the group began training. It was December

before all its planes were in England and the ground echelon was left in the United States.[42]

In August 1942 approximately 250 crated P-39's were in England awaiting shipment to Russia. The British Air Ministry's schedule called for some delay in their dispatch and plans were laid to use 200 of them to equip two USAAF fighter groups in England, the United States undertaking to send replacements via the Alaskan route. To utilize the Airacobras the air echelon of the 81st Fighter Group was sent to England and the 350th Fighter Group was activated by the VIII Fighter Command.[43]

The pilots of the 81st Group, who had trained on P-39's in the United States, embarked on the Queen Mary for England on 27 September; the headquarters detachment and ground echelon went on landing maneuvers in Chesapeake Bay in conjunction with the Western Task Force. On 20 September the War Department directed that the 350th Fighter Group be activated in England, planes and personnel to be furnished by the Eighth Air Force. On 1 October, the group was activated by order of the VIII Fighter Command with a ground and air echelon in England and a ground echelon at Baton Rouge, Louisiana, the parts, like those of the 81st, to be united in French Morocco. The 350th's pilots were secured from former Eagle Squadron personnel and from the 31st and 52d Fighter Groups.[44]

Three major factors, besides crowded take-off airdromes and poor communications, delayed the deployment of the P-39 groups in

Africa: modification of the aircraft, unfavorable weather on the overwater route to the theater, and pilot inexperience. The 176 crated Airacobras required VHF installations and belly tanks procured from the United States. The P-39 was unfamiliar to VIII Air Force Service Command mechanics; spare parts were non-existent; the aircraft, in some cases, had been damaged in packing. On 18 September, Air Section, AFHQ, informed that 151 of these planes would be shipped to Burtonwood for erection and modification at the rate of six a day, queried as to progress. On 30 September, VIII Air Force Service Command could report only 10 assembled at Burtonwood despite a 24-hour, 7-day week schedule.

As a consequence, by late October, the 14th Fighter Group (P-38's), originally destined for Oran by D+10, was diverted to Casablanca on the movement plans as a replacement for the 81st Group. Once the P-39's had been erected and tested, it was found that most of the best-trained pilots had already hopped off for TORCH--the 68th Observation Group's P-39 squadrons were delayed on this account. Moreover, the Airacobras required either still air or tail winds for the flight to Africa--head winds commonly prevailed in the area between Portugal and the Azores. Not until 27 December was the 81st Group ready to move down into Africa; the New Year passed before the first planes of the 350th took off.[45]

The Paratroop Task Force. One of the most audacious features of the TORCH plan was the use of paratroops against the airdromes at Oran. In charge of preparations was Col. William C. Bentley. Colonel Bentley had been air attache in Italy in 1941 and subsequently military and air attache at Tangier. In the latter capacity he had traveled extensively in North Africa. On 5 September after conferences with Lt. Col. Edson D. Raff, commanding the 2d Battalion, 503d Parachute Infantry and Col. Ray Dunn, then CO of the 51st Troop Carrier Wing, Colonel Bentley submitted recommendations for the organization of an air transport-paratroop team. On 12 September the Paratroop Task Force was formed. Assigned to Colonel Bentley as CO were the 2d Battalion, 503d Parachute Infantry and the 60th Troop Carrier Group. In line with Colonel Bentley's recommendation, a service detachment was to be assigned to the Force by G-1, AFHQ, to take over housekeeping duties.[46]

The 60th Troop Carrier Group was one of three subsequently assigned to the Twelfth Air Force as the 51st Troop Carrier Wing under Col. P. L. Williams. With the 64th Troop Carrier Group, it was destined for air transport in the Oran area, the 62d to go to Casablanca. The first ground echelon of the 60th had arrived at Gourock on 10 June. By the end of the month its C-47's began hauling personnel of the VIII Fighter Command to England over the northern air route. On 26 July Lt. Col. A. J. Russel

Malone, Group CO, assumed command of Chelveston airdrome, whence the 60th moved to Aldermaston on 7 August.[47]

Colonel Bentley was directed to coordinate the training of the elements of his force, to assist in the preparation of operational plans, and to transport the paratroops to the combat zone. After the paratroops were dropped, their control was to pass to the paratroop commander. Planes of the 60th flew almost daily from Aldermaston to Ramsbury for training with the paratroops, but Colonel Bentley, of necessity, spent his time in London in conferences at AFHQ.[48]

The early plans for the use of paratroops anticipated the employment of the Norfolk Group Plan, but since Oran figured in the final invasion, the preparations of the Paratroop Task Force were not interrupted. In the hangars at La Senia airdrome, about two miles south of the city, was the bulk of the French fighter strength in the area. Tafaraoui, about six miles south and east of Oran, possessed a paved runway and taxistrip. Paratroops were to drop at H-hour, D-day, on both airdromes, destroy or neutralize the French aircraft, and hold Tafaraoui until the arrival of troops from the beachhead. The paratroops dropped at La Senia, after completing their task, were to move to join the principal force in the defense of Tafaraoui.[49]

To guide the C-47's to Africa--to a landfall in the vicinity of Lourmel, about 30 miles west of Oran--it was planned to utilize

the British fleet which would be closing in on the city on D-day. HMS Alynbank, an antiaircraft ship, was to transmit M/F W/T homing signals as from an Italian marine radio beacon. The destroyer Antelope was to keep listening watch, commence transmitting if Alynbank's transmissions failed; the headquarters ship Largs and Alynbank were instructed to keep an additional receiving watch, as was Gibraltar, for messages from the leader of the transit aircraft. Alynbank was to begin her homing signals an hour before the estimated time of arrival of the C-47's at Tafaraoui. In addition, Alynbank was supplied with a visual air homing beacon to be used when RDF had detected the C-47's within 20 miles. At least one further aid to navigation was provided: a secret radio, BANTAM, evidently set up in the vicinity of Oran by an American operative.[50]

At one point in the TORCH preparations, a paratroop operation had also been projected for the Port Lyautey airdrome in Morocco. On 3 October, AFHQ indicated that additional paratroops had been ordered to England for this purpose, but warned General Patton that their employment depended upon early arrival and the availability of transport aircraft. Every effort was to be made to have the force readied by D-day. Less than a week later, however, the plan was abandoned because of the lack of training of the air transport groups, and the impossibility, in the short time before D-day, of conducting coordinated training of the pilots and paratroops. Evidently, the latter had, at that date, not yet left

the United States. General Patton, convinced of the importance of early seizure of the airdrome, requested that one-half battalion of either paratroops or airborne infantry already in England be assigned to the project. However, AFHQ refused to divert any airborne units from tasks already assigned.[51]

The 31st and 52d Fighter Groups at Gibraltar. Gibraltar played an important part in the invasion of North Africa. General Eisenhower arrived at the Rock on 5 November to direct the operation from the AFHQ command post in its tunnels; General Doolittle came in on the next day after a brush with four JU-88's in the Bay of Biscay; out of its airdrome came cover for the convoys and the initial striking force of land-based aircraft.

In the Combined Chiefs of Staff meeting on 24 July, Sir Charles Portal had remarked that the RAF might be able to assist the Casablanca landing from Gibraltar where the presence of British aircraft would raise less suspicion of "impending operations in the neighborhood." On 28 September Air Commodore A. P. M. Sanders, with Brig. Gen. Howard A. Craig air adviser to AFHQ, laid down the capabilities of Gibraltar. The Air Ministry had been advised that the maximum number of single-seater aircraft which could be erected, tested, and made available for flight to captured North African airdromes by D+2 was 220. Of these, not more than 175 could be dispatched on D-day, without seriously interfering with other RAF squadrons stationed at Gibraltar performing essential naval cooperation tasks. Ninety RAF Spitfires

and Hurricanes and 130 USAAF Spitfires were to be ready on D-day, with an additional 48 Allied planes ready to fly off by D+4.[52]

The decision to commit these planes on D-day lay with AFHQ, after consideration of situation reports and consultation with the two air commanders, General Doolittle and Air Marshal Welsh. Further reinforcements for the Eastern Air Command would be readied at Gibraltar after D+4. The 160 USAAF Spitfires to be staged through the Rock comprised the 31st and 52d Fighter Groups. Although, theoretically, some of these planes could have been used in the Casablanca area--a "Spitfire Detachment," probably a maintenance echelon, was listed for the Western Task Force on 2 October--the movement plans called for the 31st Fighter Group to go to Oran on D+2. There is some evidence that a previous assignment of the 52d to Casablanca was shifted when the 33d Fighter Group was allocated to the Western Task Force.[53]

The 31st and 52d had come to England as part of the BOLERO movement and, comparatively speaking, were among the veterans of the Twelfth Air Force, meaning that they had had some training and experience with the RAF. The 31st had trained on P-39's in the United States and it was originally planned that it would take its aircraft, equipped with belly-tanks, to England over the northern air route. After the group reached the northeastern concentration area at Grenier Field, New Hampshire, it was decided to send the air echelon to England by ship. The air

echelon arrived at Atcham on 25 June and began training with Spitfires. On 1 August the squadrons were farmed out to the following British airdromes for tactical experience: Biggin Hill, Kenley near London, and West Hampnett in Sussex. During the next three months, the 31st participated in numerous RAF operations, including the aerial battle over Dieppe in which the first enemy aircraft to be destroyed by USAAF aircraft out of Great Britain was brought down on 19 August by Lt. Samuel F. Junkin. Early in October, the group was transferred to the Twelfth Air Force.

The background of the 52d was similar. It abandoned its P-39's in the United States and was trained at Eglinton in North Ireland by the RAF, the Spits proving more to the pilots' liking than the less maneuverable P-39's. The group was further strengthened by the assignment of 22 Eagle Squadron pilots. After some operational experience under RAF tutelage, the 31st was also given over to the Twelfth.[54]

At Gibraltar, the Spitfires were assembled as they were unloaded regardless of their allotment to the British or the Twelfth Air Force. Intelligence and weather personnel arrived at the Rock to brief the pilots, 300 of whom were present on D-day. The pilots of the 52d had left Goxhill, Lincolnshire, for Gibraltar via Padgate on 23 October. Those of the 31st arrived at Gibraltar on 5 November.[55]

The 33d Fighter Group. Air support for the Western Task Force was initially the task of U. S. Navy carrier-borne aviation. However, early in September, a plan was put forth to bring Army pursuit to Morocco on a carrier and catapult them after the airdrome at Port Lyautey had been taken by sub-task force GOALPOST.

For this purpose, on 5 September, General Doolittle requested the 33d Fighter Group. This unit, however, was committed to the Middle East and the matter came up before the U. S. Joint Chiefs of Staff on the 8th, at which time General Arnold opposed the diversion on the grounds that the TORCH area could initially support only a limited number of air units. The Joint Chiefs of Staff decided to recommend to the Combined Chiefs of Staff that the 33d be diverted, but agreed that General Arnold should endeavor to obtain the "informal concurrence" of the British Chiefs of Staff.

Sir Charles Portal's reaction, as expressed on 10 September, was negative, agreeing with General Arnold's contention that danger existed of too many units piling up in Africa in the initial stages of the operation. It was decided that General Eisenhower's opinion would be sought, General Doolittle to explain the importance of the diversion upon his arrival in London. The British Chiefs of Staff remained in opposition. General Eisenhower and General Clark had earlier expressed misgivings about the transfer, but General Doolittle evidently was able to change the

Allied chieftain's mind. On 19 September, General Eisenhower agreed that the 33d should go to Casablanca. He stressed, however, that the fortunes of TORCH would be aided by air superiority in Egypt and hoped that P-40's could be sent quickly to the Middle East. In conformity with General Eisenhower's cable, the 33d was assigned to General Patton's force on 19 September.[56]

Activated in January 1941, the 33d had participated in the air defense of the U. S. East Coast upon the onset of the war. In May 1942, at the time of the Japanese attack on Midway, two of its squadrons had also conducted air defense operations on the West Coast under Col. (now Maj. Gen.) Elwood R. Quesada. The first complete organization to be formed under the "parent and satellite" plan, the 33d in its turn had been parent to the 324th, 325th, and 327th Fighter Groups. In the latter part of June 1942, Maj. (now Col.) William W. Momyer became group commander.[57]

Other hurdles intervened before the 33d finally sailed to Africa. The use of the group in the assault had been predicated on the availability of the auxiliary aircraft carrier Charger. In casting up their carrier contingent for TORCH, U. S. Navy authorities considered that the Ranger and the auxiliary carriers Santee, Sangamon, and Charger represented the minimum requirements for the success of their part of the operation. They protested the use of Charger for catapulting land-based planes. Although P-40E's had been successfully catapulted from ground installations

at the naval airfield at Philadelphia, naval experts doubted that the P-40F could stand the strain. They pointed out that some of their own specially constructed aircraft had "done nose dives into the drink for no apparent reason."

Moreover, the Navy contended that the P-40's could not add weight to the initial assault, unless employed in a sacrifice role, i.e., before an airdrome had been secured. In its view, either Navy planes should be used on Charger or the P-40 pilots should be given intensive training in catapulting at the naval airfield in Philadelphia.[58]

Subsequent shifts in carriers are not known in detail. The 33d Group was finally assigned to the Chenango; on 26 September General Doolittle was concerned over whether she would be ready on time. He indicated that some Spitfires could be made available for General Cannon, but preferred the P-40's to either the Spits or the P-39's of the 81st Fighter Group because the Spits could not be used for dive-bombing and the experience level of the 81st was not as high as that of the 33d.

Reportedly, Chenango could accommodate only 56 of the 77 P-40's ready for her. An effort was made by Generals Patton and Doolittle to obtain the auxiliary carrier Suwannee to take the balance. However, the final carrier force met the needs of both the Navy and the XII Air Support Command. Besides the Ranger, the Sangamon, Santee, and Suwannee carried naval aviation to the assault, Suwannee, on her shakedown cruise, having replaced

Charger. The records indicate that all 77 P-40's finally crossed the Atlantic aboard the Chenango, and in the second convoy to Casablanca sailed the British auxiliary carrier Archer with 35 more P-40's as replacements.[59]

The Air Movement to Africa. Other than the 33d, 52d, and 31st Fighter Groups, it was intended that the bulk of the initial Twelfth Air Force aircraft would fly to North Africa from Great Britain. Since RAF units were to make the same journey, a coordinated program became necessary. Over-all plans were outlined in late October.[60]

The movement was based on airfields in southwest England under the control of 44 Group, RAF, at Gloucester. Weather and communication services already existed in this area. The selected airdromes were to be protected by special arrangements made by Fighter Command, RAF. The air officer commanding, 44 Group, Air Marshal Kingston-McCloughry, was charged with dispatching British aircraft for the Eastern Air Command. Arrangements for the dispatch of Twelfth Air Force units were the responsibility of the Commanding General, VIII Fighter Command, Brig. Gen. Frank O'D. Hunter. General Hunter, with a staff, was to operate at 44 Group Headquarters in Gloucester.

The channels established for the dispatch of aircraft were as follows: requests originating with the Twelfth Air Force and the Eastern Air Command were to be signalled to command post, AFHQ at Gibraltar and thence to Rear Echelon, AFHQ, London. In case

of conflict between the requirements of the two air forces, the decision lay with General Eisenhower. Rear Echelon, AFHQ, informed 44 Group daily of dispatches for the following day and probable dispatches for the next four days. The squadrons concerned would be contacted by 44 Group and by VIII Fighter Command, in the case of American units. The command post at Gibraltar, the Rear Echelon, AFHQ, and Headquarters, Eighth Air Force were to be informed of dispatches actually effected. Arrivals in the theater would be reported back by the Twelfth and the Eastern Air Command.

Plans for the movement of Twelfth Air Force units were established in a letter from the VIII Fighter Command to Eighth Air Force on 17 October. Portreath, Predannock, Hurn, Chivenor, St. Eval, Davidstow, and Trebelzue were the staging fields; aircraft were to be concentrated at least four days in advance to avoid delay from weather in other parts of England. P-38's and P-39's were to stage through Chivenor, Portreath, and St. Eval; A-20's through Portreath and Predannock; B-26's through St. Eval and Chivenor; and B-25's through St. Eval, Chivenor, and Portreath. The C-47's of the Paratroop Task Force were scheduled to leave from Hurn, although actually they jumped off from Predannock and St. Eval.

Aircraft were to be dispatched only on order of the U. S. Controller at Gloucester. A subordinate U. S. controller was

assigned to each airdrome to work with the RAF at that station. The 51st Troop Carrier Wing, Twelfth Air Force was responsible for repair facilities for transports shuttling between Africa and England. Selected ground echelons of the Twelfth were to be concentrated and organized into transport loads at Ibsley, to depart from Hurn as requested. The VIII Air Force Service Command was to assigh maintenance and supply personnel at the various fields and erect a small supply depot at Trebelzue.

Messages regarding the movement of aircraft were coded VILLAIN and of six types. From Eastern Air Command and the Twelfth Air Force came "Forecast VILLAIN" messages, readying aircraft in England, "Request VILLAINs," and "Arrival VILLAINs." From Headquarters 44 Group, Gloucester, went "Warning VILLAINs," indicating aircraft ready to leave, "Delay VILLAINs," correcting the "Warnings," and finally "Departure VILLAINs." In response to "Routine" calls aircraft would be cleared in good weather; to "Urgent" calls, in questionable weather; to "Emergency" calls, in unfavorable weather. In the latter circumstances, loss was expected.

Chapter III

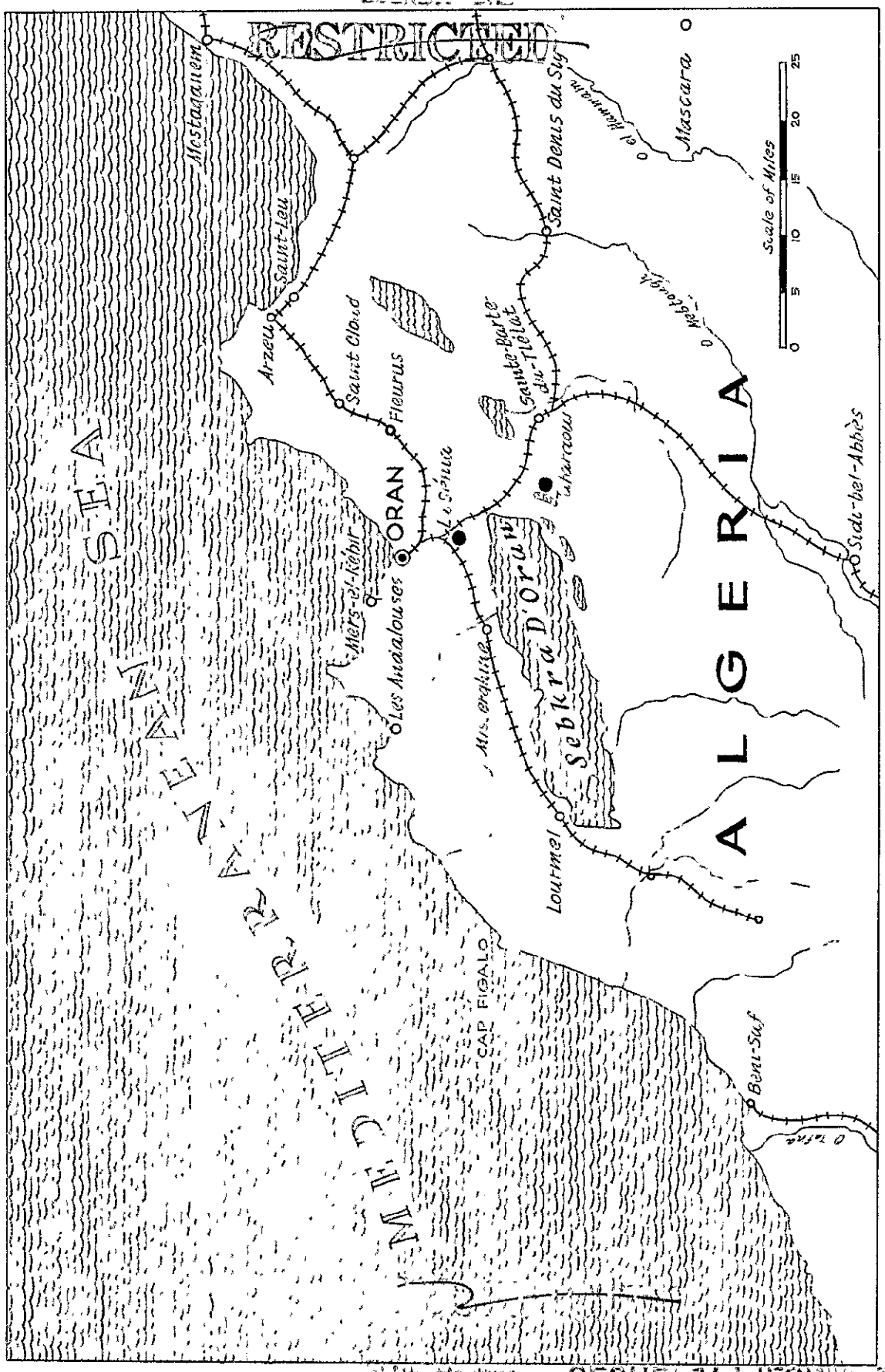
THE LANDINGS IN NORTH AFRICA

Oran

The Twelfth Air Force's role in the initial operations against the three French African ports was, in the aggregate, a minor one. Air support for the Eastern Assault Force which took Algiers on D-day was in the charge of the Royal Navy's Fleet Air Arm and the Royal Air Force. In the more stiffly-contested operations at Oran and Casablanca, carrier-borne aviation, in the nature of the case, furnished a major part of the air offensive. As between Casablanca and Oran, USAAF participation in the latter action was more significant.

About 250 miles east of Gibraltar, where the Mediterranean is still narrow, lies Oran, a town of about 200,000. Its port is excellent and together with that of Mers-el-Kebir, three miles westward across the bay, was of prime importance in the occupation of North Africa. Besides Tafaraoui and La Senia, several landing grounds were in the vicinity: Oggaz, Saint Denis du Sig, Fleurus, and Lourmel.

The defense of Oran was facilitated by the general steepness of the adjacent coast and by the chain of salt marshes in the hinterland which reduced the area over which an invader could



AREA OF THE CENTER TASK FORCE LANDINGS

come at the city. Numerous batteries manned by naval personnel—certain to resist because of their antipathy toward the British—protected the seaward approaches. Of the 50,000 troops permitted Algeria by the Franco-German Armistice, an estimated 10,000 were in the area of the planned American landings. With reinforcements from Mostaganem and Mascara to the east and from Tlemcen and Sidi-bel-Abbes, headquarters of the Foreign Legion, to the south and westward, it was calculated that this force could be built up to nearly 18,000 on the first day and to over 21,000 on the second. The arms and morale of the troops, however, made prolonged resistance unlikely.[1]

French air strength, the majority based at La Senia, was estimated at about 55 fighters and 40 bombers. The fighters, Dewoitine 520's, were inferior to comparable Allied aircraft. The bombers comprised Douglas's, Glenn Martin 167's, and Potez 63's, none first class. At Oran were also a number of naval torpedo bombers, while possible Axis effort from Sardinia was placed at 10 bombers daily.

Exact composition of French naval units at Oran was evidently unknown prior to the arrival of the assault forces. The escort vessel Surprise and the destroyers Typhon, Epervier, Tramontane, and Tornade were put out of action on 8 and 9 November and three submarines were among the vessels damaged by the French before the city capitulated.[2]

Against the French establishment at Oran was pitted the Center Task Force--British naval elements and American ground and air force troops. In command of British fleet units, the Center Naval Task Force, was Commodore Thomas Troubridge, Royal Navy. Maj. Gen. Lloyd R. Fredendall, U. S. Army, was entrusted with the Center Task Force proper. Under his command were II Corps troops: 1st Infantry Division, 1st Ranger Battalion, and Combat Command B of the 1st Armored Division.

Commodore Troubridge disposed of the headquarters ship Largs; the battleship Rodney; the carrier Furious; the auxiliary carriers Biter and Dasher; the AA ships Delhi and Alynbank; the light cruisers Aurora and Jamaica; and two ex-U. S. Coast Guard cutters Walney and Hartland which were detailed for operation RESERVIST. In addition, there were various destroyers, corvettes, minesweepers, trawlers, and other craft. On Furious were 24 Seafires and 9 Albacores; on Biter, 15 Hurricanes; and on Dasher, 9 Hurricanes.[3]

The Center Task Force was directed to assault and capture Oran and its airdromes and prepare, in conjunction with the Western Task Force, land and air striking forces to secure Spanish Morocco, if this proved necessary. It was responsible for the establishment and maintenance of communications with the Western and Eastern Task Forces. Rapidity of action was considered essential for it was expected that if Oran held out for some time French resistance would stiffen and Axis airborne troops might

intervene. The Commanding General of the Center Task Force, once command had passed from the senior British naval officer, had control of all ground, air, and service units assigned to the Center Task Force. The command channel was from CG, CTF to CG, 1st Infantry Division, CG, Combat Command B, 1st Armored Division, and CG, Oran Air Force, Col. Lauris Norstad, A-3 of the Twelfth Air Force, went to Oran on the headquarters ship, in charge of all Twelfth Air Force operations until the arrival of General Doolittle.[4]

The Allied plans contemplated a convergence on Oran from beaches east and west of the city, the advance from the beachheads supported by units of the British fleet. HMS Walney and Hartland, formerly Sebago and Pontchartrain, manned by the Royal Navy and carrying special United States and British personnel, were to enter Oran harbor flying the American flag above the Union Jack. Their object was threefold: to capture the batteries at Fort Lamoune and Cap Blanc, capture and hold the wharves, board and hold the merchantmen in the harbor to prevent their sabotage.[5]

Landings were to take place in three main areas, to the east and west of the steep shores of Oran Bay. Westernmost was X beach, consisting of two bays--Mersat Bou Zedjar and Moul el Bahar. Still west of Oran lay Y beach, at Les Andalouses. Z beach was at the town of Arzeu, 25 miles east of Oran. The 1st Infantry Division, less detachments, with service and antiaircraft

troops had been organized into three regimental combat teams. Two of these RCT's were to land in Arzeu Bay and the third at Les Andalouses to capture Oran by a double envelopment from the Northeast and West. One mobile column of Combat Command B, 1st Armored Division, would come in at Arzeu after a beachhead was established. The second column was destined for the Mersat Bou Zedjar area. Tafaraoui and La Senia constituted the primary objectives of the armor; upon their capture Combat Command B was to assault Oran from the south.[6]

La Senia likewise attracted the tender ministrations of British carrier-based planes. Naval operation orders of 14 October specified that at first light on D-day a dozen Seafires, the carrier version of the Spitfire, would attack any aircraft airborne and dispersed at the airdrome, while simultaneously 9 Albacores, escorted by 12 Hurricanes, were to dive-bomb its hangars. Until relieved by the Twelfth Air Force, the Fleet Air Arm was also responsible for the protection of the convoys and the assault forces, the support of the American army, and for tactical reconnaissance as required.[7]

The Twelfth Air Force began its participation in TORCH with the take-off from Land's End of the paratroop-laden C-47's of the 60th Troop Carrier Group. Although the mission was to be a failure, its participants toiled mightily to retrieve the situation. The earlier plans contemplated that at H-hour the 2d Battalion, 503d Parachute Infantry, would be dropped to destroy

or neutralize French aircraft at both La Senia and Tafaraoui, hold the latter until beachhead troops arrived, and cut communications to the south and west of Oran. One hundred and forty paratroops were to be employed at La Senia, who after damaging planes and communications would move to aid the principal force in securing Tafaraoui. The CO, Parachute Infantry Battalion, would command the defense of Tafaraoui until the advent of armored units.[8]

However, on 22 October General Clark had undertaken his famous, and what one correspondent called "Oppenheimish," mission, landing from a submarine near Oran to confer with Robert Murphy and pro-Allied Frenchmen. Assurances were given that American troop-carriers could land unopposed at Oran and that French forces in the Bone area would offer no resistance. As these assurances offered the attractive opportunity of a rapid movement towards Tunisia, Allied Force Headquarters prepared to exploit the situation. The loaded transports were to land at La Senia and be ready for a flight to Bone airdrome and a subsequent jump in Tunisia.[9]

On 3 November the Paratroop Task Force was ordered to proceed to St. Eval and Predannock, the take-off airdromes. Only 4 out of 39 C-47's were ready for the trip and as the weather was bad none were dispatched. Most of the transports lingered at Burtonwood and Langford Lodge, undergoing necessary modifications. The secrecy of the mission did not permit assigning high priorities to the readying of the aircraft. As a result the

last seven did not arrive at the departure points until D-1, 7 November. Briefing for the mission was therefore rather sketchy.

The 60th was on the alert and standing by for take-off when at 1625 instructions were received to carry out "peace" plan rather than "war" plan. The planes were, therefore, to land at La Senia after daylight, instead of dropping the parachutists at H-hour--0100, 8 November. Thereupon, signal was flashed to Gibraltar giving the new estimated time of arrival over the radio ship and the Paratroop Force prepared for assembly over Portreath at 2200 for the long 1,250-mile journey to Algeria.[10]

The 39 C-47's were divided into four flights, A, B, C, and D, transporting, respectively, D, Headquarters, E, and F Companies of the 503d Parachute Infantry, altogether, 39 officers and 492 men. Flight A with 9 C-47's and flight B with 10 took off from St. Eval; flights C and D, each with 10 aircraft, departed from Predannock. Leading the four flights were Colonel Bentley, Lt. Col. T. J. Schofield, CO of the 60th, Maj. J. A. Tobler, and Maj. F. H. Sherwood, respectively. While RAF Spitfires and Beaufighters patrolled overhead, the force assembled one mile west of Portreath in clear but misty weather, the flights intermingling to some extent, and set course initially for the Scilly Islands. Shortly, bad weather and the burning out of formation lights caused the flights to disintegrate, some aircraft proceeding individually. Widely separated, the 60th crossed Spain

at about 10,000 feet, passing close to Madrid. Near the southern coast, Spanish antiaircraft guns opened on some of the planes. Colonel Bentley in the lead ship had begun to transmit homing signals, in accordance with the plan to home on each squadron commander's plane, but many of his pilots could not receive them.[11]

Over the Mediterranean solid cloud conditions were encountered. The C-47's attempted to home on the ship off Cap Figalo and on the secret radio. However, the operator of the latter had not been informed of the change to peace plan and ceased transmission when no planes had arrived at the earlier ETA prescribed by war plan. The homing ship transmitted on 460 kilocycles instead of the planned 440; some of the pilots could not make sense out of its signals. The rest of the story is largely that of individual planes as the formation by the time it arrived over Africa was hopelessly scrambled.

At daylight Sunday, 8 November, Colonel Bentley, accompanied by a group of his transports, was circling a lighthouse north of Melilla in Spanish Morocco. To ascertain his position, he landed and interrogated some Arabs. On arriving in the vicinity of Oran, the flight encountered 12 C-47's just south of Lourmel on the dry bed of the Sebkra d' Oran, the largest of the salt lakes ringing the port. These ships radioed that they had been attacked by French aircraft and none had reached La Senia where antiaircraft had gone into operation at their approach. Four others had been forced down on the Sebkra by Dewoitine fighters

which afterwards strafed them. The paratroopers, under fire, had taken up defensive positions on the lake bed and Colonel Raff requested that those in Bentley's group be jumped to join his force.

After dropping his passengers, Colonel Bentley proceeded on a reconnaissance of La Senia. Forceddown by motor trouble, he was taken prisoner by the French and on his way to Misserghine negotiated the surrender of a planeful of paratroopers who, with the aircrew, were dug in on another part of the Sebkra under command of Maj. C. J. Galligan. This party was surrounded by French who were endeavoring to confine the Americans in their defensive position without molesting them. With about 400 British and Americans, including the survivors of the Walney and Hartland, these members of the Paratroop Task Force were courteously incarcerated in Oran, spending the next day, Monday, watching from the prison walls the progress of the battle on the heights above Mers-el-Kebir.

Back on the Sebkra, Colonel Raff received a radio to take his paratroops overland to La Senia. An attempt to taxi the C-47's in the direction of the airdrome was foiled by mud. The paratroops had been sent off on foot and personnel of the 60th had prepared to defend their aircraft when a message directed Colonel Raff to proceed to Tafaraoui which by this time was in American hands. All C-47's took off; five were detailed to pick up the paratroops on the way to La Senia. With troops on board,

three of these planes were attacked and shot down by Dewoitines.

Some time passed before all the planes of the 60th were accounted for, unfamiliar British navigating equipment having added to the confusion of the pilots. Twenty-five planes landed on the Sebkra and subsequently proceeded to Tafaraoui. Three landed in Spanish Morocco and were interned; two others landed in Spanish Morocco, refueled and flew to Casablanca where they worked for the Western Task Force. Four had been shot down and strafed on their arrival over the Sebkra; one landed 20 miles northeast of Tafaraoui; another pilot dropped in at Gibraltar without enough gas to taxi off the runway. Three other planes were scattered over the Sebkra. In the opinion of many of the pilots, the results would have been worse if war plan, entailing a jump or landing at night, had been carried out.

While the Paratroop Task Force had been winging its way down to Africa, the Center Task Force, which had left England on 25 October, had been standing in to Oran, ignorant of the welcome forthcoming from the French. The defenders had been alerted the previous morning by reports from aerial reconnaissance, but the alert was abandoned as the convoy passed Oran, in the belief that its destination was Algiers or Italy. In the moonless night, the Allied armada slipped back and took positions. H-hour was set for 0100.

The assault went generally according to plan. At Arzeu harbor two companies of Rangers landed at 0055 hours and by 0745

resistance had been sufficiently diminished that 1st Infantry Division troops were able to occupy the town in force. Saint-Cloud, on the road to Oran, blocked further progress by the doughboys. The third RCT of the 1st Division came in unopposed at Les Andalouses. French artillery, however, denied them Djebel Mourdjadjo, commanding Oran and Mers-el-Kebir. The western column of Combat Command B, after considerable difficulty in finding the beach, landed at Mersat Bou Zedjar and Moul el Bahar; by mid-morning a reconnaissance company took Lourmel. In the afternoon, the advance was held at Misserghine, west of La Senia. In the early morning darkness, the gallant foray of Walney and Hartland into Oran harbor had ended in disaster, victim of the expectation that the French would offer only token resistance. Offshore, the British fleet beat back sorties by French destroyers while Rodney duelled intermittently with stubborn coastal batteries.[12]

The second column of Combat Command B passed through the 1st Division beachhead at Arzeu, assembled at the village of Saint-Leu to the south, and dashed for Sainte-Barbe-du-Tlelat and Tafaraoui. Towards noon of D-day, it secured the airdrome after a short, sharp fight. The way was now open for aerial reinforcement of the Center Task Force, heretofore relying on the Fleet Air Arm. The advanced command post of the Twelfth Air Force ordered two squadrons of the 31st Group in from Gibraltar. At 1540 hours 24 Spitfires, the 308th and 309th Squadrons, left

Gibraltar under Lt. Col. J. R. Hawkins and arrived at Tafaraoui at 1700 hours. Four planes, believed to be Hurricanes, were doing lazy eights overhead. The 308th had landed and the 309th was coming in when the supposed Hurricanes, actually Dewoitines, attacked. One Spitfire pilot was shot down and killed. Three of the Spits which had not yet landed flew against the Dewoitines, bringing down three of the four. The French fighters were plainly no match for the Spitfire.V.[13]

When the two squadrons of the 31st Group. arrived on the scene in the afternoon of D-day, the French air strength was largely crippled. This was the work of the Fleet Air Arm. At La Senia, Albacores had delivered an effective attack on the hangars, coming in gallantly without the planned Hurricane escort. Dewoitines lay in wait and eight of the Albacores did not return to the carrier.[14]

On the morning of 9 November, after the African night had rungto the American challenge, "Heigh-ho Silver"--reply, "Awa-a-y"--the French air force made a farewell gesture when a single bomber dropped a lone bomb on Tafaraoui, damaging one of the C-47's which had flown in from the Sebkra the previous day. The 31st Group had a flight in the air but darkness prevented the Spitfires from intercepting the low-flying Frenchmen. Ground observers could see both the fighters and their intended prey, yet in the absence of radio equipment could not direct the Spits. Before noon, the French planes at La Senia had left for Morocco. Two

echelons of the ground personnel of the 31st rolled into Tafaraoui by motor convoy as the field was being shelled by the everlasting French 75's; these troops arrived from Arzeu where they had disembarked the previous day. They managed to keep the Spitfires in the air thereafter, by dint of improvisation and use of French ammunition and gasoline supplies.[15]

The aircraft based at Tafaraoui rendered important support to the embattled Americans around Oran, who were encountering unexpectedly stubborn resistance. A few minutes after dawn on 9 November, three Spits on reconnaissance patrol southward towards Sidi-bel-Abbes observed a large force with many trucks moving northward against Tafaraoui. A continuing series of attacks, enduring four to five hours, was maintained against the column, which turned out to be the famous Foreign Legion advancing to the aid of its comrades at Oran. The light French tanks were pitiful opposition for the Spits' 20-mm. cannon. At least five were destroyed, together with numerous trucks, before the discouraged column turned southward, after which it was not further molested. In this connection, the Spitfires' attack probably prevented French recapture of Tafaraoui, which was uncovered by Combat Command B's assault on La Senia. The troublesome 75's, which had intermittently shelled Tafaraoui from a hill two and a half miles away, were silenced by two flights of the 31st Group which effectively strafed the position, shortly afterward captured by light tanks.[16]

Seventeen missions, totalling 45 sorties, were flown against various French targets on 9 November and close liaison maintained with Combat Command B. At 1605 hours, General Doolittle and his staff flew in from Gibraltar in a B-17, escorted by a dozen Spits of the 52d Fighter Group.[17]

On 9 November, out to the northeast of Tafaraoui, the 1st Division began to bypass the French hedgehog at Saint-Cloud, but its 18th Combat Team was still pinned against the mountains west of Mers-el-Kebir. Combat Command B made more progress. Its western arm bypassed Misserghine by routing its armor through the soft ground at the edge of the Sebkra and cracked the defenses of La Senia. Once junction had been made between the two armored wings, the fate of Oran was decided, failing a resort to the barricades in the city itself.[18]

French resistance ceased around Oran at 1416 hours on 10 November while armistice negotiations got underway. The Spitfires from Tafaraoui continued to escort convoys, execute tactical reconnaissance, and support the ground forces, but their activities were not as successful as on the 9th. Enemy aircraft were nowhere to be seen. French ground forces paid more attention to dispersal and concealment. Fewer profitable targets were to be found. The performance of the airmen during the brief operation had been generally good. Maj. Gen. Terry Allen tendered the 31st a letter of commendation on behalf of the 1st Division. In two instances, friendly tanks were strafed by Spitfires. The

tanks were unharmed, but two aircraft were shot down. This resulted in a course in mutual identification for Spitfire pilots and troops of the armored division.[19]

Aircraft losses during the three-day battle had been moderate. Besides the Spitfire which fell to the Dewoitines over Tafaraoui on D-day, four fighters were lost to ground fire--two to friendly guns. Two other Spitfires sustained accidents in taxiing and six planes of the 52d Group ran out of gas en route to Oran. On 10 November only about 20 of the C-47's of the 60th were operational after the dispersal of the Paratroop Task Force and the landings in the Sebkra. Algeria was now secure and the door open to aerial reinforcement for the campaign developing to the East.[20]

Casablanca

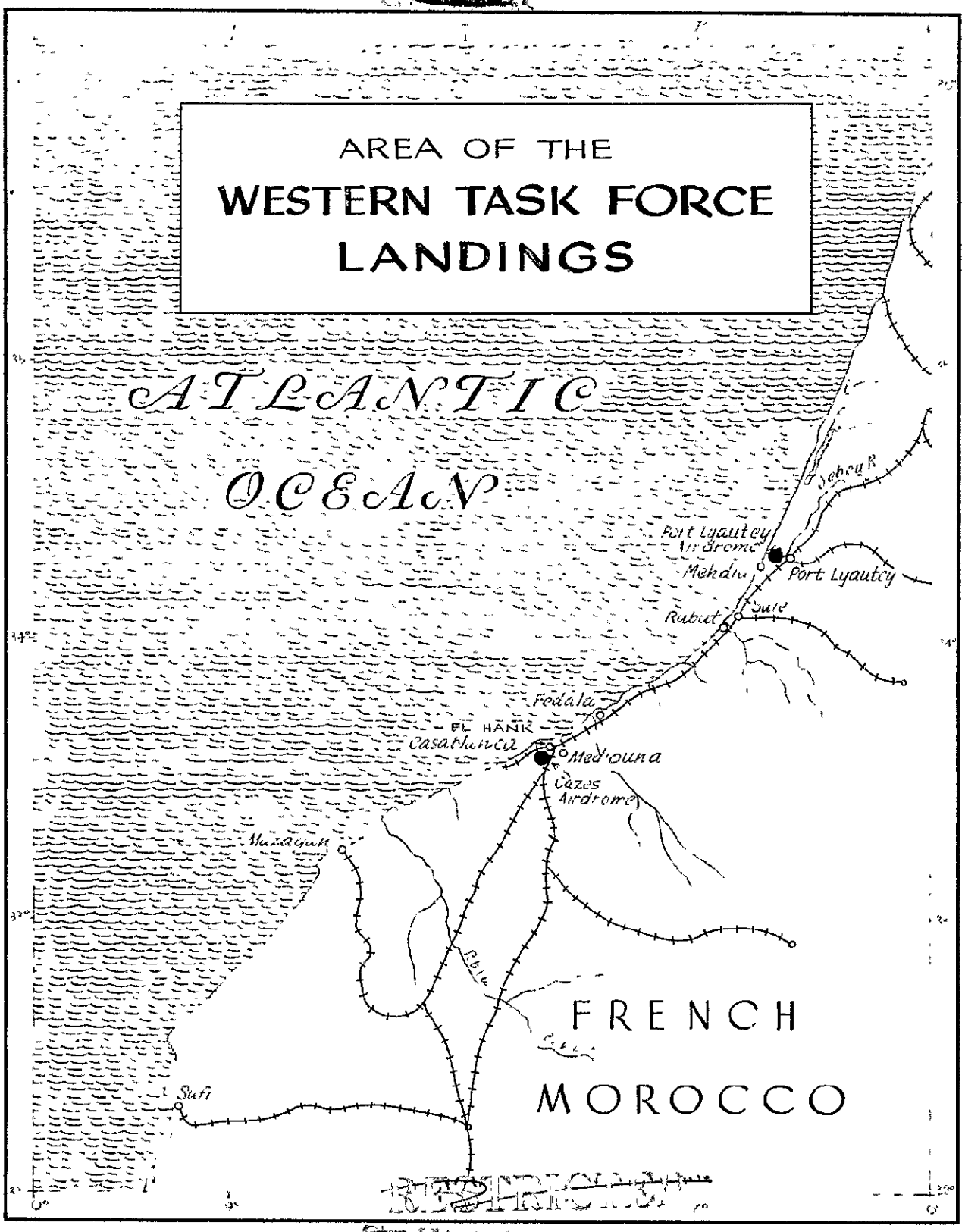
Casablanca is situated on a coast peculiarly inhospitable to seaborne invasion. Its modern port, the chief objective of the Western Task Force, is artificial, formed by two jetties. The surrounding littoral features shallow rivers, long shelving beaches, rocky outcrops, and "considerable tidal rise and fall." Even in good weather high surf and swell commonly occur. These conditions were held in some quarters to prohibit a landing—and certain to worsen with the approach of winter. The "meteorological factor" of the expedition was therefore of the

highest importance. Moroccan weather could be predicted only by observations taken over the entire Atlantic.

To this inhospitable coast, the French had added numerous defenses. Safi, Fedala, and Mehdia were the planned landing points of the Western Task Force. At Safi, 125 miles to the south of Casablanca, were two Navy coast defense batteries and an army battery of three 155-mm. guns. Mehdia, at the mouth of the Sebou, boasted the Batterie Ponsot, two 138.6-mm. guns, and the Batterie des Passes, two 75-mm. guns. Twelve miles north of Casablanca, Fedala, normally a pleasure resort, was fortified with four 138.6-mm., two 100-mm., and six 75-mm. guns. Casablanca itself was protected by powerful batteries at El Hank and AA batteries in the harbor area. Moreover, the incomplete battleship Jean Bart, moored at the Mole du Commerce, contributed four 15-inch guns to the city's defense. Mobile army artillery, 75's and 65's, was to prove effective against the Americans.[21]

French land forces in Morocco, according to the Armistice stipulations, amounted to 55,000 troops. However, German thoroughness had not succeeded in disarming Morocco as it had Algeria and Tunisia. Gen. Auguste Nogues, Governor of Morocco and an associate of Marshal Lyautey, found ways of circumventing the Armistice Commission. Weapons were cached; remote garrisons maintained at full strength; on the eve of German inspections Arab troops disappeared under the burnous.[22]

CONFIDENTIAL



CONFIDENTIAL

The aerial strength of the French in the Casablanca area was not serious, amounting to about 130 planes according to pre-landing estimates. At Casablanca were 26 fighters—Curtiss 75A's and Dewoitine 520's—and 15 Douglas DB-7's. At Rabat, 60 miles north, were based an additional 24 Curtisses and Dewoitines and 15 Liore et Olivier-45 (L.E.O.-45) bombers. Meknes, 70 miles inland from Port Lyautey, boasted 13 L.E.O.-45's; Marrakech, a like number of L.E.O.'s and, in addition, 13 Potez 63-11 reconnaissance planes. Far down the coast at Agadir were 13 DB-7's.[23]

In Casablanca harbor on D-day lay the light cruiser Primaguet, the flotilla leaders Milan, Albatros, Le Malin, 7 destroyers, 11 submarines, and 3 sloops, under Vice-Adm. Frix Michelier. Whatever hopes held for the good will of the French land forces did not apply here. "Well-trained, well-equipped, thoroughly disciplined . . . leadership . . . energetic and able" aptly characterized the French Navy in Morocco.[24]

The amphibious force which sailed against Morocco constituted Task Force HOW, with Rear Adm. Henry K. Hewitt, USN, in command. Admiral Hewitt's navy contingent was formidable by 1942 standards. It included the battleships Massachusetts, New York, and Texas; the cruisers Wichita, Tuscaloosa, Cleveland, Augusta (the flagship), Philadelphia, Brooklyn, and Savannah, besides destroyers, oilers, and minelayers. The Ranger carried 54 F4F-4's—Grumman "Wildcats"—and 18 SBD's—"Dauntless" dive-bombers. Sangamon had 9 TBF's--

Grumman "Avengers"--9 SBD's, and 12 F4F-4's. On Santee were 9 TBF's, 9 SBD's, and 12 F4F-4's; on Suwannee, 9 TBF's and 30 F4F-4's. These carriers made up the air group under Rear Adm. Ernest D. McWhorter. With the convoy sailed the Chenango loaded with the P-40F's of the 33d Fighter Group.[25]

Thirty-seven thousand ground and air force troops, under Maj. Gen. George S. Patton, accompanied the Navy, the 3d and 9th Infantry Divisions and the 2d Armored Division to bear the brunt of the attack. The men were fresh from three weeks of landing practice at Solomons Island in Chesapeake Bay.[26]

On 23 October Task Force HOW began to put to sea out of Hampton Roads. The covering group, intended to contain French naval forces at Casablanca and Dakar, where the battleship Richelieu was reported, had previously been sent to Casco Bay and departed thence on 24 October to join the main body in mid-Atlantic. The carriers joined on 28 October from Bermuda. The armada zigzagged across the Atlantic, feinting at Dakar and avoiding sea searches from the Canaries and the Azores. The Contessa, loaded with gas and Air Corps munitions and a crew scraped from the Norfolk jails, sailed independently from Hampton Roads on 26 October. After 6 November, as the African coast was neared, the naval units began to round up fishing boats and coastal steamers.[27]

By the night of 6-7 November, dispatches indicated that wind and swell would decrease--the 8th of November was reportedly

the calmest day on the Moroccan coast in 68 years—and the task force prepared for battle. On the evening of the 7th the three attack groups proceeded to positions off Mehdia, Fedala, and Safi and the covering group stood off Casablanca.[28]

As defined by the TORCH outline plan the Western Task Force's mission included the occupation of the port and airdromes at Casablanca, the establishment and maintenance of communications with Oran, and the build-up of land and air striking forces for possible use against Spanish Morocco. The scheme of maneuver was as follows: three surprise landings supported after daylight by naval gunfire, elimination of the enemy air force by surprise dawn attacks and the securing by the end of D-day of at least one airdrome for land-based planes.

Sub-task force BRUSHWOOD would deliver the main weight of the assault at Fedala and press southward towards Casablanca under Maj. Gen. Jonathan W. Anderson. Almost 20,000 men were involved in this landing, disposing of 77 light tanks. The men were drawn from the 3d Infantry Division and the 2d Armored Division. Under Maj. Gen. E. N. Harmon, sub-task force BLACKSTONE was to go in at Safi, capture and secure the port and unload the tanks brought over on the sea-train Lakehurst. BLACKSTONE was then to secure crossings over the Rbia River and operate against Casablanca from the south, preventing the garrison there from being reinforced from Marrakech. Troops included the 47th Infantry, 9th Division,

reinforced, and two Armored Battalion Landing Teams from the 2d Armored Division.

The northern attack was directed against Mehdia and the airdrome at Port Lyautey by sub-task force GOALPOST, commanded by Brig. Gen. Lucian K. Truscott, and mainly composed of the Sixtieth Infantry, 9th Division, reinforced, and light armor of the 2d Armored Division. The schedule called for the Port Lyautey airdrome in American hands by the end of D-day.[29]

According to one account, General Nogues was forewarned of the invasion by American sympathizers who attempted to convince him that resistance was futile. He was therefore able to deploy his forces and make some preparations against the landing. He may have hoped for aid from the Germans via Spanish Morocco or from the Spanish garrisons themselves. American forces approaching the shore, meanwhile, waited for definite hostile action before "playing ball," the code signal for full attack. H-hour was set for 0400, three hours later than at Oran.[30]

The Western Task Force succeeded in effecting a landing on a coast where expert military opinion believed no landing possible because of the unfavorable surf and beaches. Ashore, its operations were more protracted than expected. By 1300 hours on 8 November, the greater part of the French fleet which had sortied from Casablanca had been annihilated by the Covering Group of the naval task force. The French coast artillery,

however, was a harder nut to crack and some of it was still able to fire after the French had surrendered, despite the expenditure of a good deal of the ammunition of the American fleet.[31]

Algiers capitulated on D-day itself; Oran gave in on D+2; Casablanca held out until D+3. General Patton's position on the evening of 10 November was described as "unpleasant, if not precarious." Many of the American officers were extremely pessimistic. The Jean Bart and the coastal batteries still roared defiance; it seemed that Casablanca and other Moroccan cities would have to be stormed and garrisoned. However, the operation, like the singed cat, was better than it looked. The fall of Oran sealed Casablanca's fate, since the French could not resist without further supplies the attack certain to come from Oran.[32]

The landing at Safi went smoothly with the aid of some extremely accurate gunnery from the destroyers Mervine and Bernadou, the cruiser Philadelphia, and the battleship New York. By 1500 hours the Lakehurst was in the harbor unloading tanks, and the end of D-day saw Safi firmly in the hands of the Americans. On 9 November detachments of French coming down from Marrakech were dispersed by strafing from Santee planes and by 15 tanks from the Lakehurst. On 11 November the 47th Infantry having been left at Safi, the armored column was poised for an attack at Mazagan when the Armistice intervened.

The main assault at Fedala occasioned considerable confusion; many units landed at the wrong beaches; one group of four boats

strayed into Casablanca harbor where they were unluckily discovered by a French destroyer. The French, however, offered, except for their artillery fire, only slight resistance, evidently fighting a delaying action while fortifying the approaches to Casablanca. A coordinated attack had been planned on the city itself on the morning of 11 November, which was barely forestalled by the order to cease firing. On the nights of 11-12 and 12-13 November, a series of torpedo attacks, whether by Axis submarines or French submersibles out of Casablanca is unknown, sank four American transports off Fedala.[33]

Mehdia brought the most severe fighting of the entire operation. The consequent delay in capturing the Port Lyautey airdrome prevented the anticipated use of the 33d Group.

Landings were planned on both sides of the mouth of the Sebou while the destroyer Dallas, guided by a Fighting Frenchman, formerly a pilot on the river, was to proceed up the river to Port Lyautey. The landings to the north of the estuary were unopposed, but the main assault, immediately south of the river, encountered stiff resistance. French batteries straddled the destroyer Roe and drove the transports out of range. At least 10 French fighters began strafing in the beach area, necessitating a call for fighters from the carriers. The Dallas could not run the Sebou in the face of the fire from the walled Kasba at Mehdia where Foreign Legion units effectively blocked the advance towards Port Lyautey. A small American detachment which had penetrated

the Kasba on D-day was captured by a vigorous French counterattack on the next morning.

On the night of 9-10 November, the net across the Sebou was cut under fire by a Navy crew in a small boat. The Dallas thereupon scraped her way up the shallow winding river and by 0800 landed a Ranger detachment at the airfield which the French were contesting with a company of American infantry. The Army, meanwhile, took back the Kasba in an action reminiscent of Beau Geste, the French withdrawing to the south and east.[34]

Air support for the Western Task Force was wholly by naval aircraft, which performed creditably throughout the action. They patrolled over the Covering Group and the three Attack Groups of the fleet; made important attacks against the lighter French naval units sortieing out of Casablanca and continually bombed the coastal batteries. High praise was voiced for their quick response to requests for cooperation with ground forces. They effectively bombed enemy aircraft at Rabat-Sale and Marrakech airdromes and en route to the latter strafed reinforcements bound west for Casablanca. According to an Army observer, one incident marred the record. Relying on reports that the Jean Bart had been left "in flames" by naval dive bombers on the previous day, the Augusta moved in on 10 November to deal with two destroyers harassing the American advance from Fedala, whereupon she narrowly escaped hits by 15-inch shells from the Jean Bart, which was still able to fire at the time of the Armistice.[35]

The headquarters of the XII Air Support Command was first established on the beach and subsequently at the Miramar Hotel at Fedala. When the Port Lyautey field had been at last secured, the P-40's of the 33d Group under Colonel Momyer were ordered to proceed thereto. Despite the early misgivings, the catapulting itself was successful, planes being eventually launched at as little as two or three minute intervals. However, Navy shells and dive-bombers had badly damaged the main runway at Port Lyautey and the rest of the field was soft. Catapulting, begun on 10 November, had to be discontinued. The unloading of the P-40's was completed on the two succeeding days, some of the fighters apparently going into Cazes airdrome at Casablanca.

Of the 77 P-40's launched from the Chenango, one crashed into the sea, another was never heard from, and 17 were damaged in landing. The 33d Group took no part in the remainder of the action against the French, terminated on 11 November by armistice negotiations. Shortly afterward, Maj. Philip Cochran arrived off Morocco in the British auxiliary carrier Archer, in charge of the "advance attrition" of the 33d Group--35 P-40's. These planes were catapulted and landed at Port Lyautey, four cracking up in landing due, primarily, to pilot inexperience.

During the hostilities, although it did not furnish air support against the French, the XII Air Support Command performed a variety of tasks. Many of its units participated in the assault at the side of ground force troops. For instance, the

squadrons of the 33d Fighter Group furnished assault troops which went over the side into landing barges and assisted in the ultimate capture of Mehdia and Port Lyautey. Personnel of the 21st Engineer Aviation Regiment landed at both Mehdia and Fedala. On the beach south of the Sebou, aviation engineers served as assault infantry, ministered to the wounded, and captured and guarded prisoners. Units of the XII Air Force Service Command, operating under the direction of XII Air Support Command, besides serving as assault troops, were charged with moving supplies to such airfields as were captured. The last shot in defense of Cazes airdrome had scarcely died away when a truck convoy manned by men of the 41st Service Group arrived on the scene from Fedala with 16,500 gallons of gasoline.[36]

The XII Air Support Command took no part in the armistice negotiations, but was able to arrive at working agreements with French air authorities. On the day after the Armistice, General Cannon journeyed to Rabat from Fedala and interviewed Gen. Auguste Lahoulle, French air commander in Morocco. General Cannon stipulated that the Americans must control all flights as a matter of military necessity, no planes to leave the ground without permission. After some protestation, the French agreed. Good relations were forthwith established.[37]

First Days in North Africa

Looking back after French resistance had ceased, General Doolittle felt that, on the whole, the Twelfth Air Force had made

an auspicious beginning. Although carrier-borne aviation had broken the back of the French air at Oran and Casablanca, the commanding general was solaced by the performance of the 31st Group. At Casablanca, the 33d had not been able to get off the Chenango until late in the fighting, but through no fault of its own. Once ashore, the P-40's relieved Admiral McMorter's carriers which sailed westward on 13 November. Only the paratroop mission had come off badly.[38]

The Gibraltar airdrome had been a source of worry, but by 19 November the congestion had been relieved and other AAF units were coming in directly from England, despite the lengthy trip and winter weather. The air echelon of the 1st Fighter Group (P-38's) completed the flight with the loss of only two pilots—one interned in Portugal. Arriving at Tafaraoui on the 13th, 14th, and 15th of November, the air echelon was reunited with its ground crews which had landed at Arzeu. On the 20th, the Group moved to Nouvion airdrome near Oran to begin escort missions with the B-17's.

The other P-38 Group, the 14th, also was an early arrival. The ground echelon disembarked at Oran on the evening of 12 November under orders to proceed on foot to La Senia; en route the men discovered a garage housing numbers of large French busses. Good will and gesticulation brought permission to spend a comfortable night on the long leather seats. Both squadrons of the 14th made the trip from England without the loss of a P-38. The air

echelon of the 48th arrived at Tafaraoui on 15 November and departed on the 18th, escorting its ground echelon in C-47's to Maison Blanche airfield at Algiers. The air echelon of the 49th turned up at Maison Blanche the same day, after a two-day stopover at Tafaraoui. The 14th Group began operations at Youks les Bains, out near the Tunisian border, on 22 November; for a time at Youks the most sophisticated facilities were the Roman baths, constructed, the group historian estimated, "some few years before."[39]

On 10 November, the first Fortresses, the flight echelon of the 340th Squadron of the 97th Group, took off from Polebrook for Gibraltar. Three days later, they arrived at Maison Blanche and personnel began laborious preparations for the first raid. On the 16th, six B-17's dumped British bombs on Sidi Ahmed airdrome at Bizerte from only 6,500 feet; resultant flak holes were repaired with tin cans and adhesive tape. The nineteenth saw the 340th attacking El Aouina airdrome at Tunis and the 341st's air echelon arriving at Maison Blanche. Axis bombing of the poorly-protected airdrome terminated the 97th's stay in Algiers. The heavies moved back to Tafaraoui on 22 November, probably at the instance of General Spaatz, who, on an inspection tour of the theater, reported to General Eisenhower the congestion and exposure of Maison Blanche.[40]

For the most part, the Twelfth busied itself in setting up housekeeping. XII Air Force Service Command personnel had succeeded in establishing truck convoy service from Arzeu to

Tafaraoui even before Oran capitulated and were bringing in supplies despite French artillery and small arms fire. After the Armistice, Air Corps troops pouring ashore from Arzeu and Mers-el-Kebir converged on La Senia and Tafaraoui. They slept in hay stacks and abandoned buildings, under shelter halves and the open sky. The weather, which had been excellent during the fighting, shortly turned bad. B, C, and K rations were the rule.

In long shifts the men worked to unload the convoys. French vehicles underwent salvage and repair and were used to haul equipment from the docks. Under the French, La Senia and Tafaraoui had facilities for 300 officers and 3,000 men. On 18 November, about 1,000 American officers and 14,000 enlisted men were quartered there. Gassing of aircraft had to be accomplished by hand from five-gallon cans and personnel turned from the day-long job to soggy blankets. Tafaraoui mud quickly became proverbial. The French had thoughtfully "plugged" the water system and blown up the sewer system at the fields, necessitating repairs by American engineers, water rationing, and interim resort to homely facilities.[41]

In the Casablanca area was a similar concentration of Air Corps personnel and dispersion, as airdromes and facilities became available, a matter of first priority. The 33d Group established its headquarters on the Cazes airdrome at Casablanca and sent its 58th Squadron up to Port Lyautey. Major Cochran took his replacement pilots to Rabat to begin training. Meanwhile, unloading

went on at Safi, Fedala, Port Lyautey, and, after 14 November, to a limited extent at Casablanca; warehouses were secured and dumps established.[42]

Besides the logistical difficulties inevitably arising from combined operations by even the best organized forces, the Twelfth experienced a few which were peculiar to TORCH. In the Western Task Force, tonnage had already been allocated to the ground forces before the requirements of the air forces were submitted—and, as a consequence, Air Corps supplies had to be fitted into what space remained. A bad mistake of the planning phase was the failure to assign an Air Service detachment to General Cannon until about three weeks before the convoys sailed. Finally, a detachment of XII Air Force Service Command was activated on 4 October, after Brig. Gen. L. P. Whitten, Director of Base Services, had pointed out its importance to General Patton. It was then necessary to secure part of the grades and ratings authorized for the XII Air Force Service Command in England. Under Col. (now Brig. Gen.) Harold A. Bartron, the detachment was too late to participate to any great extent in the planning, but rendered valuable assistance in getting the convoys ready for movement.[43]

Generally speaking, the Twelfth brought into Africa plenty of gas, oil, bombs, and ammunition. In point of fact, the operational rate employed to compute these requirements proved

to be too high. The prime difficulty was experienced in moving supplies to the airdromes because of scanty motor transportation which—failing to supplement inadequate rail and sea facilities—slowed operations from the moment supplies hit the North Africa quays. Reconditioned French vehicles only partially filled the gap. Many units, in addition, could not locate their equipment and complained of the custom of segregating personnel and equipment on the convoys.

The Twelfth suffered initially in vehicles, in that the Air Corps system of allocating transportation did not provide as many as corresponding ground units disposed of. When many service units could not be taken, because of the necessity of orienting the first convoys with a view to an immediate battle with the French, an additional deficiency occurred. Finally, the entire Western Task Force lost heavily in transportation because of a command decision by General Clark.

Early in September, SOS planners in Washington suspected that the Western Task Force was already literally too large for its ships; meanwhile, requisitions continued to come in. The Navy refused to increase the convoy limit of 45 vessels, although General Patton proved willing to accept the added risk. On 28 September, three solutions to the problem were presented to General Clark, then in Washington. Equipment or maintenance requirements could be reduced; African port capacity expanded and the convoys increased to 66 ships each; or the Western Task

Force reduced in numbers. General Clark ordered vehicular equipment, although already issued to the troops, to be cut to a minimum on the ground that U. S. forces were called on to secure ports in an area where Axis concentrations were not anticipated, whereas the British were to undertake a dash for Tunisia. After the landings, the historian of the 14th Fighter Group reported from Youks that British units had transportation adequate to move every man and piece of equipment in one trip, in contrast to the unhappy situation in which his organization found itself.[44]

Although the airdromes scattered over North Africa served French needs, and, in some cases, were not without elaborate facilities, they were not equal to the strain suddenly thrown upon them by the Eastern Air Command and the Twelfth. With heavy rains setting in shortly after the Allies got a foothold in Africa, even such major bases as Gazes and La Senia became at times unusable. At Gazes, it took four tanks to pull out a B-17 so that General Doolittle could take off and General Spaatz reported that he had seen a P-40 go through the sod crust on 20 November. But the hangars at Gazes contained quantities of fairly new American machine tools and what General Spaatz described as a French air force version of a small Middletown Air Depot. Moreover, skilled and friendly French mechanics were at hand.

Besides Port Lyautey, Rabat, Mediouna, Meknes, Marrakech, and Rabat-Sale promised well as Moroccan bases. Port Lyautey

had been rechristened Craw Field in honor of the assistant chief of staff of the XII Air Support Command who had been killed while attempting to penetrate the French lines to arrange an armistice.[45]

Tafaraoui and Maison Blanche were for a time the mainstays of the Twelfth. Aircraft came in rapidly. By 19 November the 14th Group, two squadrons of the 97th, and one of the 27th Light Bombardment Group (A-20's) were serving with the British at Maison Blanche. On call at Oran on the 21st were 50 Spits of the 31st and 52d Groups and 50 P-38's.[46]

Before he had been two weeks in Africa, General Doolittle recognized that the conventional air force organization was not suitable for operations in TORCH, not merely because of the vastness of the area involved, but because of the diversity of tasks the Twelfth was called upon to perform. These labors are well outlined in his own words:[47]

> Additional units will be moved to the eastward until we have the principal part of our striking force set up in eastern Algeria and Tunisia. We must prepare and maintain adequate bases in the Casablanca and Oran areas in case the Hun decides to invade through Spain in which case we will establish a holding force here and to the eastward and operate from the western bases. . . . Initially we can stage, consolidate, and perfect our teamwork while extending to the eastward. We must be prepared to combat periodic nuisance raids which may become frequent if the concentration warrants. We must keep the Straits of Gibraltar open and provide fighter cover and later submarine protection for convoys along the west and north coasts of Africa.

General Doolittle planned to break up the TORCH area into four districts, with headquarters at Casablanca, Oran, Algiers, and a point to be determined south of Bone. Each of these areas would contain a small air force—a composite command. General Cannon's XII Air Support Command, with bombardment and pursuit, was temporarily left at Casablanca. XII Fighter Command, also with bombardment and pursuit, would function at Oran. XII Bomber Command was to be established in the Bone area. Twelfth Air Force headquarters would control the Algiers district. General Doolittle believed that his commands were well enough staffed to operate flexibly as composite organizations under direct control of headquarters. His conception had the support of Generals Eisenhower, Clark, and Spaatz.[48]

While General Doolittle pondered the internal organization of the Twelfth, General Spaatz arrived from England with over-all plans for the coordination of the ETOUSA air forces. At Gibraltar General Spaatz conferred with Generals Eisenhower and Doolittle and it was agreed to postpone discussion until after the Eighth Air Force commander had visited the theater. On General Spaatz's return to the Rock, the 21st of November was devoted to conferences with General Eisenhower and his staff.

By the end of October, General Spaatz had accepted the possibility that a large part of the Eighth Air Force might remove to North Africa, where, it was hoped, better weather

would prevail for winter operations. The Eighth was reexamining its T/O's from the point of view of mobility and temporary operations by limited personnel. To shift units back and forth from England to Africa, as circumstances dictated, General Spaatz saw the necessity for an over-all air commander.[49]

The raison d'etre of the plan was the fact that the TORCH air base area would link the Eighth and Twelfth Air Forces, already intertwined by considerations of supply and replacements, and place them in a position of mutual support with Allied air forces in the Middle East. The CG, USAAF in ETO, operating with a small staff at the command post of the theater commander, would advise AFHQ in all matters in which the AAF were concerned, prepare air plans involving the AAF, and coordinate strategic plans and operations with the RAF.[50]

General Eisenhower at first preferred to wait until Tunisia had been taken, but a letter from General Arnold, arriving during the conference, decided him to begin action at once. On 23 November General Spaatz returned to England to make his arrangements. A meeting at Eighth Air Force headquarters at Widewing, attended by Generals Eaker, Kuter, and Hansell and others of General Spaatz's staff, laid plans for an air command post at AFHQ. General Eaker was to take over as acting commander of the Eighth until the reorganization, planned for 1 December, was formalized.[51]

The union of the ETOUSA air forces was never accomplished, although some features of the plan were carried through. General Eaker replaced General Spaatz as Commanding General of the Eighth on 1 December, after the latter had proceeded to AFHQ where he functioned as air adviser to General Eisenhower. Eventually General Spaatz was to succeed General Doolittle as commander of the Twelfth. The abandonment of the plan was almost certainly caused by the failure of the Allies to eject the Axis from Tunisia in the winter of 1942-43. North African weather proved to be no better than English weather. It became necessary to forge an air organization for a determined campaign against Rommel and Von Arnim. In this, the Ninth, together with the Eastern Air Command and the RAF in the Western Desert, finally joined the Twelfth. The Eighth, after some vicissitudes, went its own way in England.[52]

By mid-November the early capture of Tunisia, upon which so many plans depended, seemed a matter of days or weeks. Allied forces were moving rapidly. As the crow flies, it is about six hundred miles from Oran to Tunis, four hundred from Algiers. By land, by air, and by sea, slim British and American forces stabbed across the Algerian border. On 18 November British paratroops were supporting the French at Medjez-el-Bab. Medjez-el-Bab, the Ford of the Gate, on the Medjerda, is 37 miles from Tunis. In 10 days, the Allies had come the distance from

Algiers. Six months were to elapse before the last 30-odd were conquered. On 19 November General Doolittle knew nothing of this; although his operations to that date had been "primitive," he wrote of the Twelfth: "We have our problems but no troubles--and the goose hangs high."[53]

GLOSSARY

ABC	Papers of the United States and British Staff Conversations
A/CM	Air Chief Marshal
AFABI	AC/AS, Intelligence
AFAEP	AC/AS, Plans
AFCAS	Chief of the Air Staff
AFCP	Allied Force Command Post
AFHQ	Allied Force Headquarters
AFIHI	Historical Division, AC/AS, Intelligence
AFSC	Air Force Service Command
AGWAR	Office of the Adjutant General, War Department
AOC	Air Officer Commanding
A/S	Antisubmarine
AWPD	War Plans Division, AAF
C/AS	Chief of Air Staff
CCS	Combined Chiefs of Staff
CG	Commanding General
CPS	Papers of the Combined Staff Planners
CTF	Center Task Force
EAC	RAF Eastern Air Command
ETA	estimated time of arrival
ETO	European Theater of Operations
ETOUSA	European Theater of Operations, U. S. Army
GASC	Ground Air Support Command
J/CCS	Combined and Joint Staff Division, AC/AS, Plans
JCS	U. S. Joint Chiefs of Staff
JPS	Papers of the Joint Staff Planners
M/F W/T	medium frequency, wireless telegraphy
MTO	Mediterranean Theater of Operations
OPD	Operations Division, War Department General Staff
RCT	Regimental Combat Team
RDF	radio direction finder
SOS	Services of Supply
T/O	Table of Organization
USAAF	U. S. Army Air Forces
USFOR	U. S. Forces [in European Theater]
USSAFE	U. S. Strategic Air Forces in Europe
VHF	very high frequency

N O T E S

Chapter I

1. Joint Plan for the Occupation of Dakar, 10 Aug. 1941, in WP-III-F12, Off. Services Br., AFAEP; ABC, 4/2, Project GYMNAST, 28 Dec. 1941.

2. JPS, 3, 1 Feb. 1942; CPS, 2/3, 21 Feb. 1942.

3. Memo for Gen. Arnold by AFAEP, 1 Jan. 1942, Joint American-British Occupation of French North Africa, in WP-III-J1, Off. Services Br., AFAEP.

4. R&R, AWPD to WPD for C/AS, 8th Air Force, 11 Mar. 1942, in Air AG 320.2, Eighth Air Force; CPS, 2, 22 Jan.; CPS, 2/1, 1 Feb.; CPS, 2/2, 10 Feb.; CPS, 2/2 A, 20 Feb.; CPS, 2/3, 21 Feb.; CPS, 2/5, 25 Mar.; CCS, 5/2, 3 Mar. 1942.

5. CPS, 26/2/D, Directive, Preparation of War Plan Bolero, 28 Apr. 1942.

6. CCS, 83, Offensive Operations in 1942 and 1943, 21 June; CCS 83/1, 24 June 1942.

7. CCS, 94, Operations in 1942/43, 24 July 1942.

8. Ibid.; CCS, 33d and 34th Meetings, 25 and 30 July 1942; Sumner Welles, The Time for Decision, 163.

9. Directive for Commander in Chief, Allied Expeditionary Force, approved by CCS, 36th Meeting, 13 Aug. 1942.

10. Norfolk Group Plan, 21 Aug. 1942, in CCS Meeting, 26 Aug. 1942.

11. Ltr., Lt. Gen. Dwight D. Eisenhower to CCS, 23 Aug. 1942, in ibid.

12. Directive proposed by U. S. Chiefs of Staff, 25 Aug., in CCS Meeting, 27 Aug. 1942.

13. CCS, 38th Meeting, 28 Aug. 1942.

14. See chap. II, 17-18.

15. CCS, 42d Meeting, 2 Oct.; JCS, 32d Meeting, 8 Sep. 1942.

16. Torch Outline Plan, CCS, 103/3, 26 Sep. 1942.

17. CCS, 103/15, 4 Nov. 1942; "Historical Summary of VIII Air Support Command . . ." Book I, in AFIHI files; AFHQ to CTF, cablegram #1055, 2 Dec. 1942, in theater messages, in AFIHI files.

18. AGWAR to USFOR, cablegram #R1757, 10 Oct. 1942, and AFHQ to AGWAR, cablegrams #3763, 3911 on 18, 21 Oct., in ibid.; CCS, 42d Meeting, 2 Oct. 1942.

Chapter II

1. "Torch in the Sky," dated London, 21 Oct. 1942, in 12th AF materials, AFIHI files.

2. CM-IN-4811 (8-14-42), London to AGWAR, #1127.

3. Memo for CG, AAF by Col. O. A. Anderson, Air Force Units Required by Gen. Eisenhower for a Special Operation, 15 Aug. 1942, in Off. Services Br., AFAEP.

4. AGWAR to Hq. ETOUSA, cablegram #3394, 16 Aug. 1942, in theater messages, AFIHI files.

5. "Torch in the Sky."

6. CM-OUT-6928 (9-20-42), WDOPD to USFOR, London, #R997, 19 Sep. 1942; CM-IN-9186 (9-21-42), London to AGWAR, #2515, 21 Sep. 1942; CM-IN-9842 (9-23-42), London to AGWAR, #2576, 22 Sep. 1942; memo for CG, 12th AF, by Col. Reuben Kyle, Status of Air Force Units, 22 Aug. 1942, in Off. Services Br., AFAEP. A detailed account of the pre-invasion history of XII AFSC is available in Hq. Army Air Force Service Command, MTO, "History of the Original XII Air Force Service Command . . .," in AFIHI files.

7. Ltr., Lt. Gen. H. H. Arnold to Air Marshal D. C. S. Evill, British Joint Staff Mission, 12 Sep. 1942, in 370.5, 33d Pursuit Group, J/CCS Div., AFAEP.

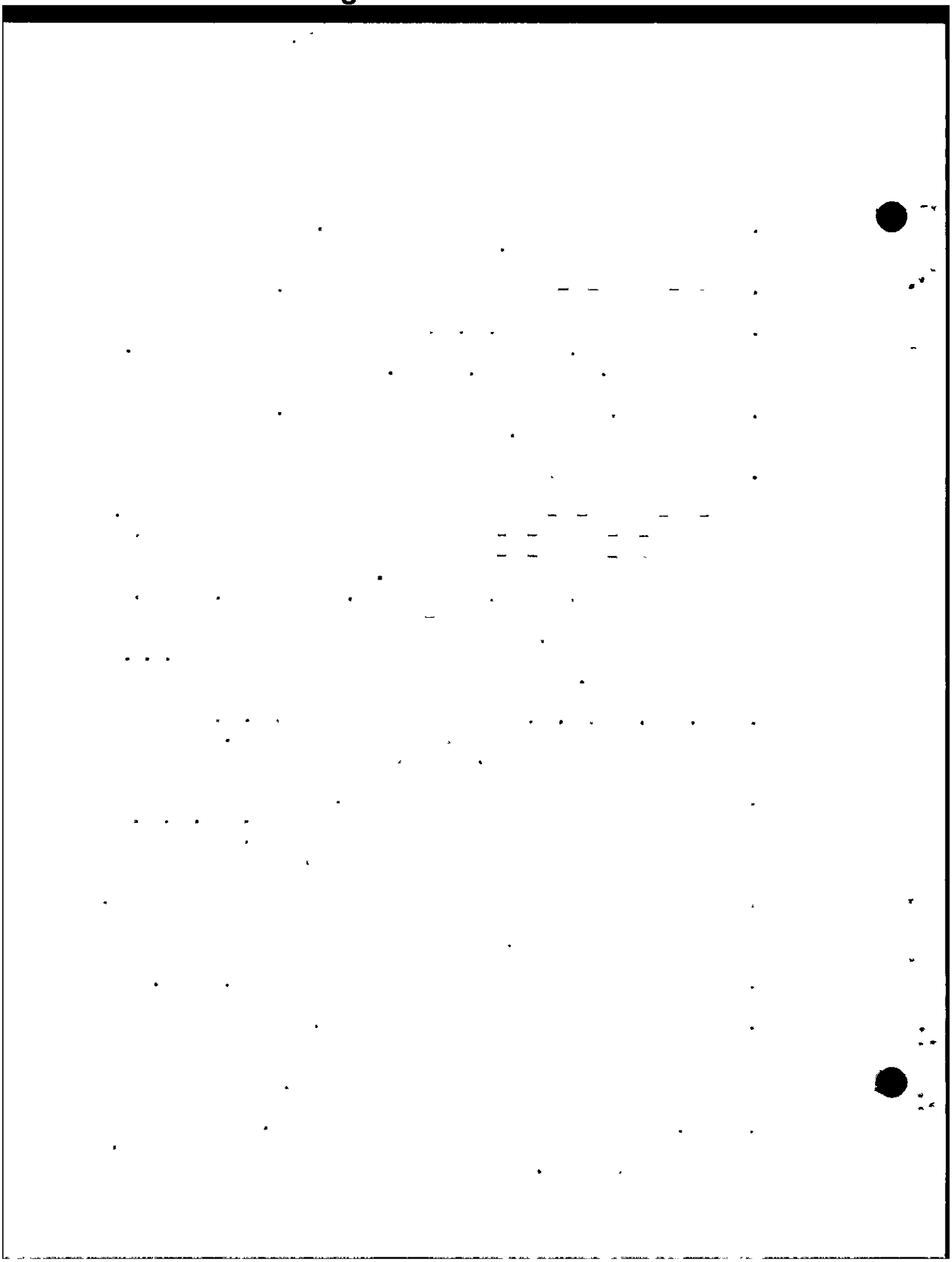
8. AGWAR to USFOR, cablegram #R316, 4 Sep. 1942, in theater messages, AFIHI files; memo for CG, AAF by Brig. Gen. J. H. Doolittle, 3d Ground Air Support Command, 2 Sep. 1942, in XII Air Support Command file, AFIHI files.

9. R&R, CG, GASC to CG, AAF, Task Force A, 16 Sep. 1942, in ibid.; AGWAR to USFOR, cablegram #R526, 8 Sep. 1942, in theater messages, AFIHI files.

10. History of the XII Air Support Command (to 31 Dec. 1942).

11. London to AGWAR, cablegram #4138, 27 Oct. 1942, in theater messages, AFIHI files; Outline Air Plan, 20 Sep. 1942, Annex 1 to Torch Outline Plan, CCS, 103/3; Annex 1d to Torch Outline Plan, Air Estimate of the Situation.

12. Ibid.; AFHQ, Operation Memorandum #30, 24 Oct. 1942, Organization of North African Theater, in files of North African Sec., Theater Gp., WDOPD.



13. For provision of Navy A/S squadrons, see AFHQ to OPD, cablegram #3153, 5 Oct. 1942 and COMINCH to AFHQ, cablegram unnumbered, 9 Oct. 1942, in theater messages, AFIHI files; Air Estimate of the Situation.

14. Ibid.; Annex 1a to Torch Outline Plan, Air Force Requirements.

15. Air Estimate of the Situation.

16. Annex 5 to Torch Outline Plan, Center Task Force Outline Plan, 12 Oct. 1942; Annex 1c to Torch Outline Plan, Dates of Arrival, Airdrome Areas, and Missions.

17. Ibid.

18. Ibid.; ltr., AFHQ to Air Commodore A. P. M. Sanders, 10 Sep. 1942, in files of North African Sec., Theater Gp., WDOPD.

19. Ltr., Col. H. A. Bartron, Hq. Det. XII Air Force Service Command, Munitions Bldg. /Wash., D.C./ to Capt. Charles F. Dexter, 8 Oct. 1942, in XII Air Support Command file, AFIHI files; Hq. XII Air Support Command, at sea, Field Order #1, 23 Oct. 1942, in files of North African Sec., Theater Gp., WDOPD.

20. Ibid.; U. S. Office of Naval Intelligence, The Landings in North Africa, November 1942, 14-15.

21. Dates of Arrival, Airdrome Areas, and Missions.

22. CCS, 94, Operations in 1942/43.

23. Memo for Lt. Gen. H. H. Arnold by A/CM Sir Charles Portal, 20 Aug. 1942, in Air AG 311.2, Misc. Communication by Wire.

24. Memo for CG, ETOUSA by Maj. Gen. Carl Spaatz, Modification of Basic Policy for the Build-up of U. S. Forces in U. K., 22 Aug. 1942, in Off. Services Br., AFAEP; JCS, 32d Meeting, 8 Sep. 1942.

25. Ltr., Maj. Gen. Carl Spaatz to Lt. Gen. H. H. Arnold, 31 Oct. 1942, in AAG 312.1-A, Operations Letters; CM-IN-00790 (2-11-42), London to AGWAR, #R4411, 2 Nov. 1942.

26. "Torch in the Sky"; Target: Germany, 44-46.

27. AGWAR to USFOR, cablegram #R689, 12 Sep. 1942, in theater messages, AFIHI files.

28. Memo for Lt. Gen. H. H. Arnold by Col. B. E. Gates, AC/AS, Management Control, Eighth Air Force Assistance to Twelfth Air Force, n.d., in Air AG 320.2, Twelfth Air Force.

29. Historical Sec., USSAFE,"Operation Torch: The Dispatch of Aircraft from the United Kingdom by the Eighth Air Force," 14 Sep. 1944, in AFIHI files.

30. Eighth Air Force Assistance to Twelfth Air Force.

31. Ibid. These figures probably include personnel actually destined for the Twelfth, but temporarily assigned to the Eighth.

32. AGWAR to USFOR, cablegram #R689, 12 Sep. 1942, in theater messages, AFIHI files.

33. History of the 12th Weather Squadron.

34. Ltr., Col. Von R. Shores, Weather Officer, Twelfth Air Force, to Director of Weather, Washington, Activities of the 12th Weather Region (Special), 2 Jan. 1943, in 12th Weather Squadron file, AFIHI files.

35. Ibid.

36. Ibid.

37. Ltr., Brig. Gen. J. H. Doolittle to Lt. Gen. H. H. Arnold, 19 Nov. 1942, in AAG 312.1-A, Operations Letters.

38. VIII Bomber Command, "The First 1,100 Bombers Dispatched by Eighth Bomber Command," /"The First 1,100 Bombers"/ in AFIHI files.

39. Histories of 1st and 14th Fighter Groups; CM-IN-9347 (8-24-42), London to AGWAR, #308E, 24 Aug. 1942; CM-IN-8386 (9-18-42), London to AGWAR, #2383, 18 Sep. 1942; ltr., Spaatz to Arnold, 31 Oct.

40. London to AGWAR, cablegram #1277, 25 Apr. 1942; CM-IN-1370 (6-5-42), London to AGWAR, #1896, 5 June 1942; CM-IN-1694 (7-5-42), London to AGWAR, #117, 5 July 1942; O.N.I. Weekly, 8 July 1942, 17; "The First 1,100 Bombers."

41. Histories of 319th Group; WAR, Washington to Hq. ETOUSA, cablegram #F1, 21 Aug. 1942, in theater messages, AFIHI files.

42. AFHQ to AGWAR, cablegram #3356, 9 Oct. 1942, in ibid.; histories of 310th and 320th Groups.

43. Ltr., Arnold to Evill, 12 Sep. 1942; CG, 8th AF to CG, AAF, cablegram #A252E, 24 Aug. 1942, in theater messages, AFIHI files.

44. AGWAR to USFOR, cablegram #R975, 20 Sep. 1942, in ibid.; histories of 81st and 350th Fighter Groups.

45. Ibid.; "Operation Torch: The Dispatch of Aircraft from the United Kingdom by the Eighth Air Force;" R&R, AFCAS to AC/AS, OC&R, P-39s for TORCH, 27 Sep. 1942, in Air AG 370.5, England; AGWAR to USFOR, cablegram #R826, 16 Sep. 1942, in theater messages, AFIHI files.

46. Col. William C. Bentley, "Report of Paratroop Force," 5 Nov. 1942 and "Report of Observations, North African Theater," 23 Feb. 1943, in K-14599, Reception Br., Collection Div., AFABI.

47. Dates of Arrival, Airdrome Areas, and Missions; ltr., Doolittle to Arnold, 19 Nov. 1942; History of 60th Troop Carrier Group (1942).

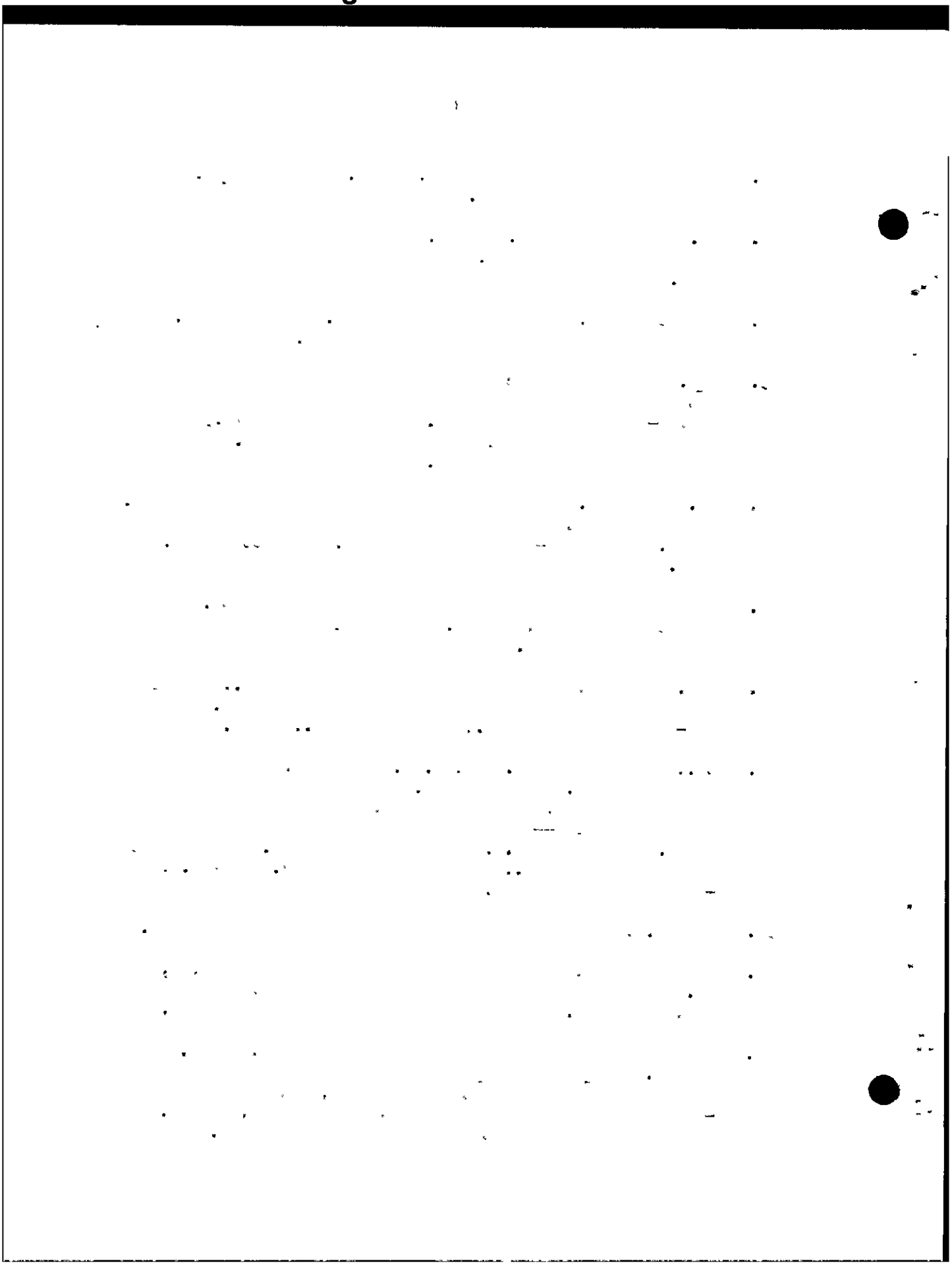
48. Ibid.; Bentley, "Report of Paratroop Force;" ltr., AFHQ to Bentley, Formation of Paratroop Task Force, 11 Sep. 1942, in K-14599, Reception Br., Collection Div., AFABI.

49. Ltr., Bentley to Brig. Gen. J. H. Doolittle, Operation "Torch," 26 Aug. 1942, in ibid.; Office of Naval Commander, Center Task Force, Naval Party 637, Naval Orders for Operation "Torch"—Center Task Force, Operation Order #8, 14 Oct. 1942 /Torch/N.C. 8/, in Operations Br., AGO, Secret and Confidential Sec., Analysis Files Subsec., 202-81.1, G-2 Plans and Personnel.

50. Torch/N.C. 11; History of 60th Troop Carrier Group (1942).

51. AGWAR to USFOR, cablegrams #R1568, R1725, R1921 on 6, 9, 14 Oct. 1942, and AFHQ to AGWAR, cablegrams #3084, 3312, 3676 on 3, 8, 16 Oct. 1942, in theater messages, AFIHI files.

52. Commandeth Gibraltar to AFHQ, cablegram #55GIB, 5 Nov. 1942, in ibid.; Target: Germany, 45; CCS, 94, Operations in 1942/43, 24 July 1942; memo for AOC, EAC, and CO, 12th AF by AFHQ, G-3 Section (Air), Fighter Support ex Gibraltar, 28 Sep. 1942, in XII Air Support Command file, AFIHI files.



53. Ibid.; Dates of Arrival, Airdrome Areas, and Missions; AGWAR to USFOR, cablegram #R526, 8 Sep. 1942, and AGWAR to CO, AF, cablegram #R1443, 2 Oct. 1942, in theater messages, AFIHI files.

54. History of 31st Fighter Group and history of 52d Fighter Group (1942).

55. Ibid.; interview with Lt. Col. Palmer Dixon, 10 June 1943; Commandeth Gibraltar to AFHQ, cablegram #GIB44, 4 Nov. 1942, in theater messages, AFIHI files.

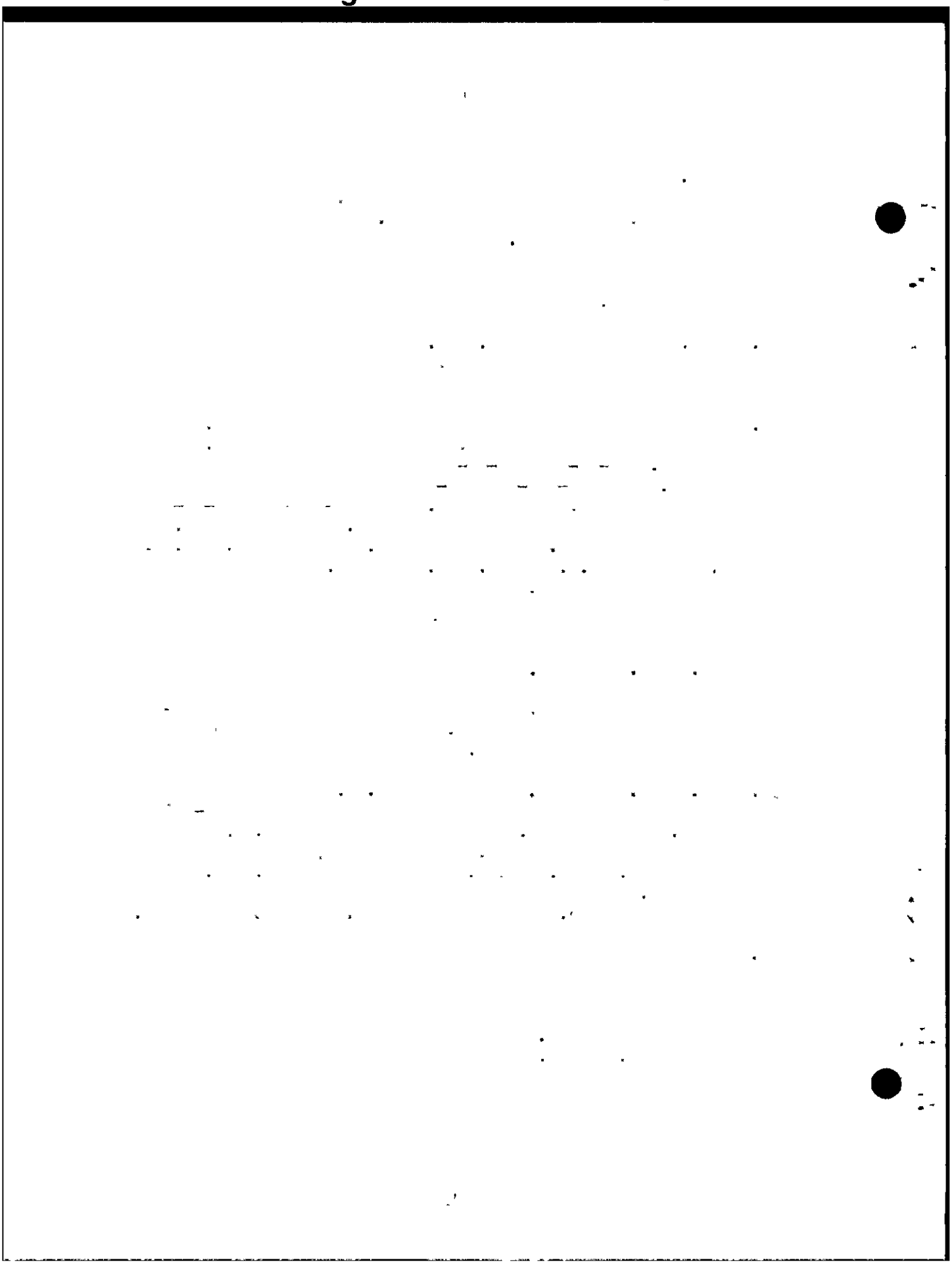
56. AGWAR to USFOR, cablegrams #R526, R757 on 8, 14 Sep. 1942, and Eisenhower to Marshall, cablegram #2149, 13 Sep. 1942, in ibid.; CM-IN-8195 (9-19-42), London to AGWAR, #2396, 19 Sep. 1942; CM-OUT-6569 (9-19-42), OPD to CG, Eastern Defense Command, #487, 19 Sep. 1942; CM-OUT-6211 (9-18-42), Marshall to Eisenhower, #R918, 18 Sep. 1942; J/COS Div., AC/AS, Plans, 370.5, 33d Pursuit Gp.; memo for Lt. Gen. H. H. Arnold by G.E.S. /Maj. Gen. George E. Stratemeyer/, 5 Sep. 1942, in Air AG 452.1, Bolero.

57. Histories of 33d Fighter Group.

58. Ltr., Col. George L. King, Ground-Air Liaison Officer, Headquarters Amphibious Force, Naval Operating Base, Norfolk, to CG, Task Force A, Acquisition of CV 30 Charger for G-ASC Use, TF "A" "Torch," 10 Sep. 1942, in XII Air Support Command file, AFIHI files.

59. Ltr., Col. George L. King to Adm. H. K. Hewitt, CO, Amphibious Force, Atlantic Fleet, Norfolk, Additional ACV for P-40's, 7 Oct. 1942, in ibid.; interviews with Capt. J. J. Clark, USN, 27 Nov. 1942 and Lt. Col. Philip C. Cochran, 3 June 1943; ltrs., Brig. Gen. J. H. Doolittle to Maj. Gen. George E. Stratemeyer, 26 Sep. 1942 and Stratemeyer to Doolittle, 8 Oct. 1942, in Air AG 320.2, Twelfth Air Force.

60. The discussion of the plans for the dispatch of Twelfth Air Force aircraft is based on material contained in "Operation Torch: The Dispatch of Aircraft from the United Kingdom by the Eighth Air Force;" and AFHQ, Air Instruction #1 (Torch), 23 Oct. 1942, in files of North African Sec., Theater Gp., WDOPD.



1. David Rame, Road to Tunis, 43-45; U. S. Office of Naval Intelligence, The Landings in North Africa, November 1942 /The Landings in North Africa/, 62-63.

2. Ibid., 63, 68-70; Office of Naval Commander, Center Task Force, Naval Party 637, Naval Orders for Operation "Torch"—Center Task Force, Operation Order #8, 14 Oct. 1942 / Torch/ N.C. 8/ in Operations Br., AGO, Secret and Confidential Sec., Analysis Files Subsec., 202-81.1, G-2 Plans and Personnel.

3. Ibid.; The Landings in North Africa, 63-64, 70.

4. Outline of Operation Plan, Oran Task Force, Torch, 11 Sep. 1942, in Operations Br., AGO, Secret and Confidential Sec., Analysis Files Subsec., 202-81.1, G-2 Plans and Personnel; Torch Outline Plan, CCS, 103/3, 26 Sep. 1942; ltr., Brig. Gen. J. H. Doolittle to Lt. Gen. H. H. Arnold, 19 Nov. 1942, in AAG 312.1-A, Operations Letters.

5. The Landings in North Africa, 67-68.

6. Rame, Road to Tunis, 46; Center Task Force Outline Plan, 12 Oct. 1942, Annex 5 to Torch Outline Plan, CCS, 103/3.

7. Torch/N.C. 8.

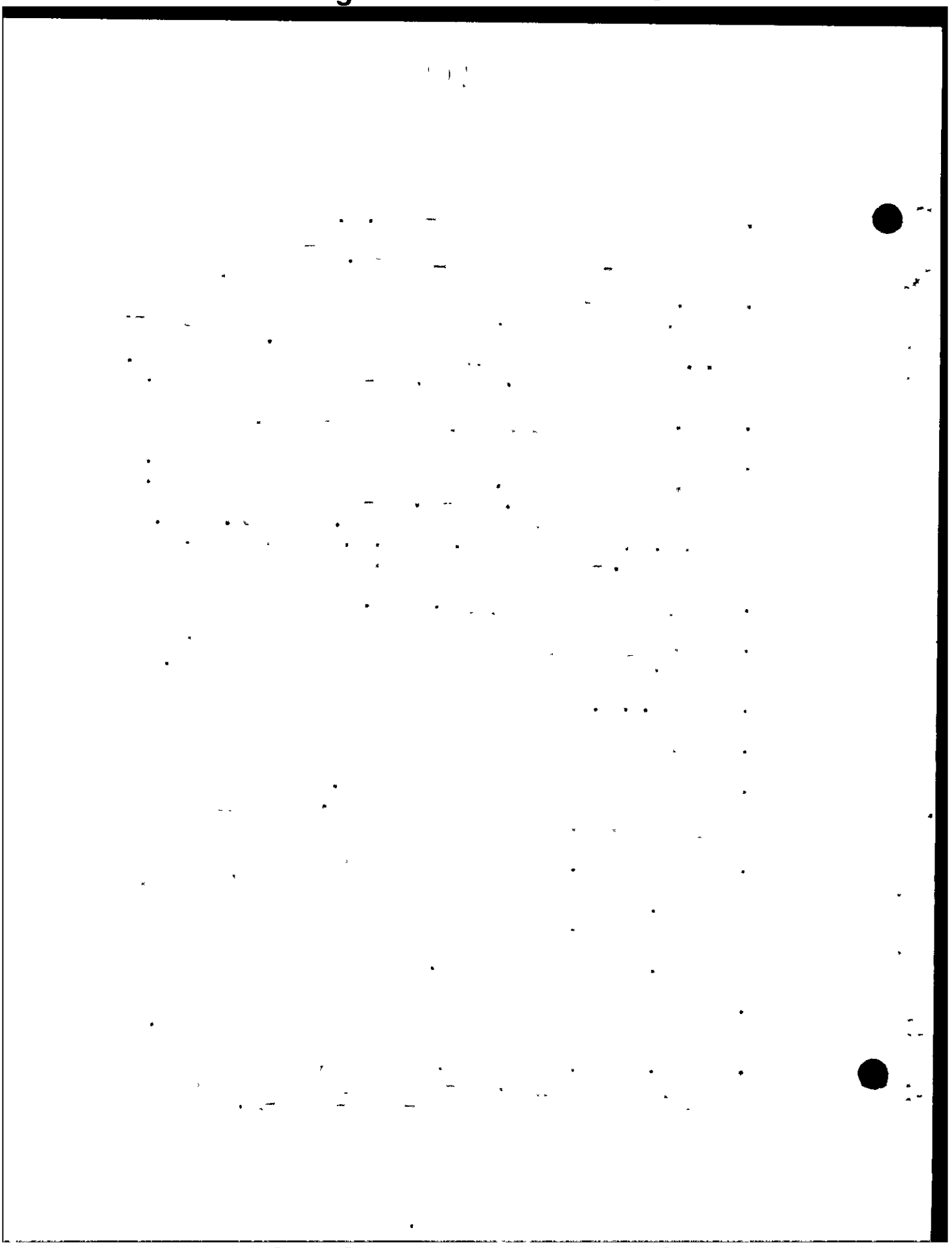
8. Ibid.

9. AFHQ to AGWAR, cablegram #4140, 27 Oct. 1942, in theater messages, AFIHI files; Kenneth Crawford, Report on North Africa, 66, 83.

10. Col. William C. Bentley, "Report to Commanding General, Twelfth Air Force, of Paratroop Operation 'Torch' Mission," 20 Nov., in History of 60th Troop Carrier Group (1942) and Historical Sec., USSAFE, "Operation Torch: The Dispatch of Aircraft from the United Kingdom by the Eighth Air Force," 14 Sep. 1944, in AFIHI files.

11. For the flight of the Paratroop Task Force to Africa and its dispersal see History of 60th Troop Carrier Group (1942).

12. John A. Parris, Ned Russell, Leo Disher, and Phil Ault, Springboard to Berlin, 109-125; The Landings in North Africa, 67-69; Rame, Road to Tunis, 16-21, 41-42, 46-51.



13. Ibid., 41, 50; ltr., Doolittle to Arnold, 19 Nov. 1942; Hq., 12th AF, Tafaraoui, Air Intelligence Report #1, 10 Nov. 1942, in Operations Br., AGO, Secret and Confidential Sec., Analysis Files Subsec., 202-81.1, G-2 Journal, 11 Nov.-14 Nov. 1942.

14. Rame, Road to Tunis, 40-41.

15. Ltr., Doolittle to Arnold, 19 Nov. 1942; "Journal of Actions of the High Command of Moroccan Troops: Period of the 8th to the 11th of November, 1942," in Operations Br., AGO, Secret and Confidential Sec., Analysis Files Subsec., 202-81.1, Western Task Force; History of 31st Fighter Group.

16. Ibid.; ltr., Doolittle to Arnold, 19 Nov. 1942; interview with Col. J. S. Allard, 24 Mar. 1943.

17. Hq., 12th AF, Tafaraoui, Air Intelligence Report #2, 10 Nov. 1942.

18. Rame, Road to Tunis, 32, 42, 48-51.

19. The Landings in North Africa, 70; ltr., Doolittle to Arnold, 19 Nov. 1942; Hq., 12th AF, Tafaraoui, Air Intelligence Report #3, 10 Nov. 1942.

20. Ibid.; 12th AF, Weekly Intelligence Summary #1, 16 Nov. 1942, in AFABI, Reception Br., Collection Div.; Commander in Chief to Combined Chiefs of Staff, cablegram #248, 10 Nov. 1942, in theater messages, AFIHI files.

21. The Landings in North Africa, 6-11.

22. Crawford, Report on North Africa, 27.

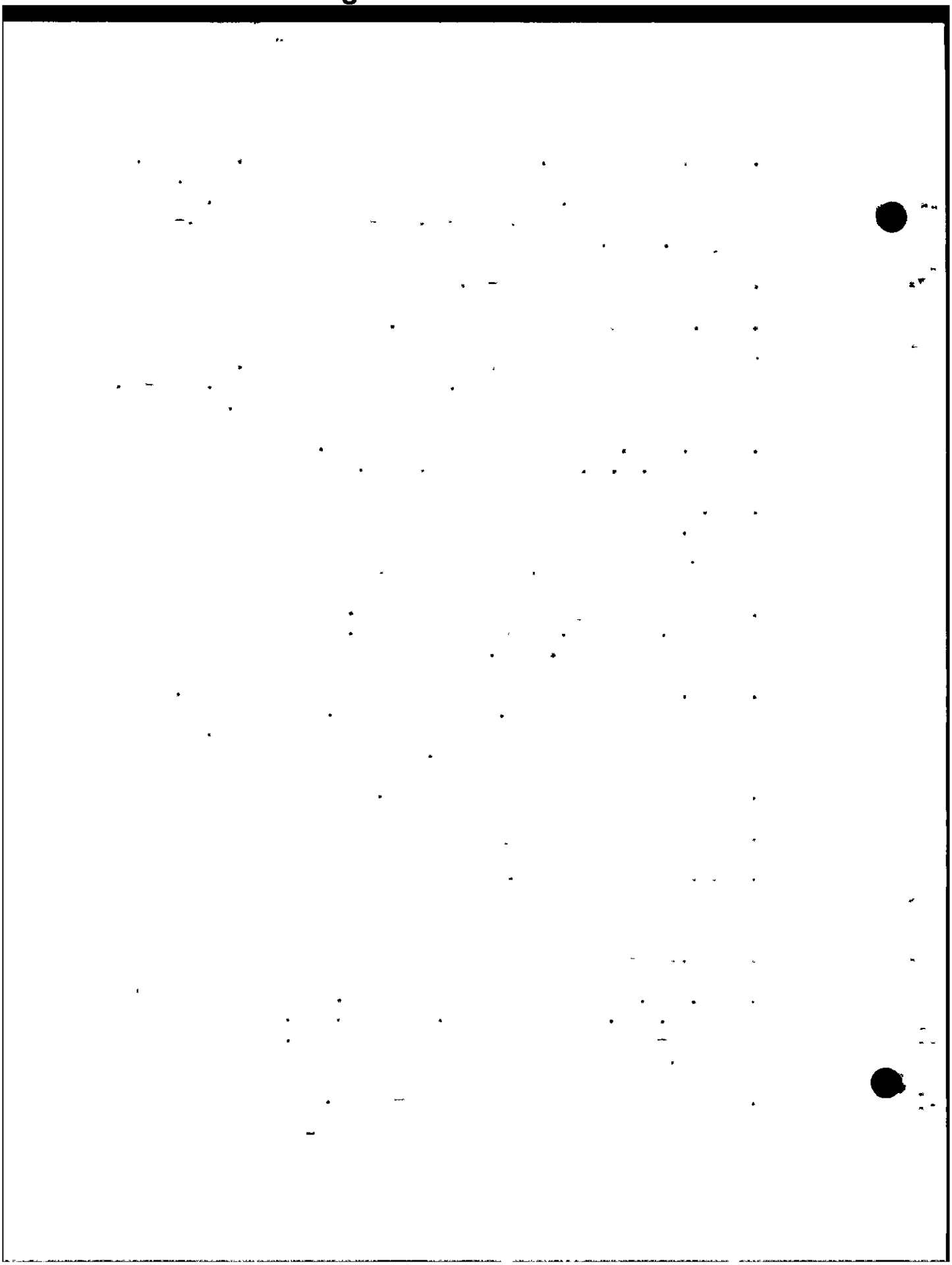
23. O.N.I. Weekly, 11 Nov. 1942, p. 76.

24. The Landings in North Africa, 11.

25. Ibid., 79-84.

26. Ltr., Hq. Task Force A, Munitions Bldg., Washington, to CG's, 3d Inf. Div., 2d Armored Div., 9th Inf. Div., Constitution of Sub-Task Forces of Task Force "A", 1 Oct. 1942, in AFIHI files.

27. The Landings in North Africa, 11-19, 28.



28. Ibid., 18; Brig. Gen. Arthur R. Wilson, "Report on Operations in North Africa," /Wilson Report/ 22, submitted to Chief of Staff, 12 Dec. 1942, in AAG 370.2-Spec., Report of Operations in Africa.

29. Torch Outline Plan, CCS, 103/3, 26 Sep. 1942; AGWAR to USFOR, cablegram #R1577, 6 Oct. 1942, in theater messages, AFIHI files; Hq. XII Air Support Command, at sea, Field Order #1, 23 Oct. 1942, in files North African Sec., Theater Gp., WDOPD; Constitution of Sub-Task Forces of Task Force A; The Landings in North Africa, 34, 46, 55.

30. Crawford, Report on North Africa, 27-31.

31. The Landings in North Africa, 29; Wilson Report, 30-31.

32. Crawford, Report on North Africa, 30-31.

33. Wilson Report, 3-4; The Landings in North Africa, 46-54, 60-61.

34. Ibid., 34-46.

35. Ibid., 32-33, 44; Wilson Report, 31; interview with Col. Percy Black, 26 Mar. 1943.

36. Interviews with Capt. J. J. Clark, USN, 27 Nov. 1942 and Lt. Col. Philip C. Cochran, 3 June 1943; COMTASKFOR 34.8, Northern Attack Group, to ABFOR, London, cablegram unnumbered, 11 Nov. 1942, in theater messages, AFIHI files; Hq. Army Air Force Service Command, MTO, "History of the Original XII Air Force Service Command . . .," 62, in AFIHI files; Histories of 21st Engineer Aviation Regiment; XII Air Support Command (to 31 Dec. 1942); and 33d Fighter Group.

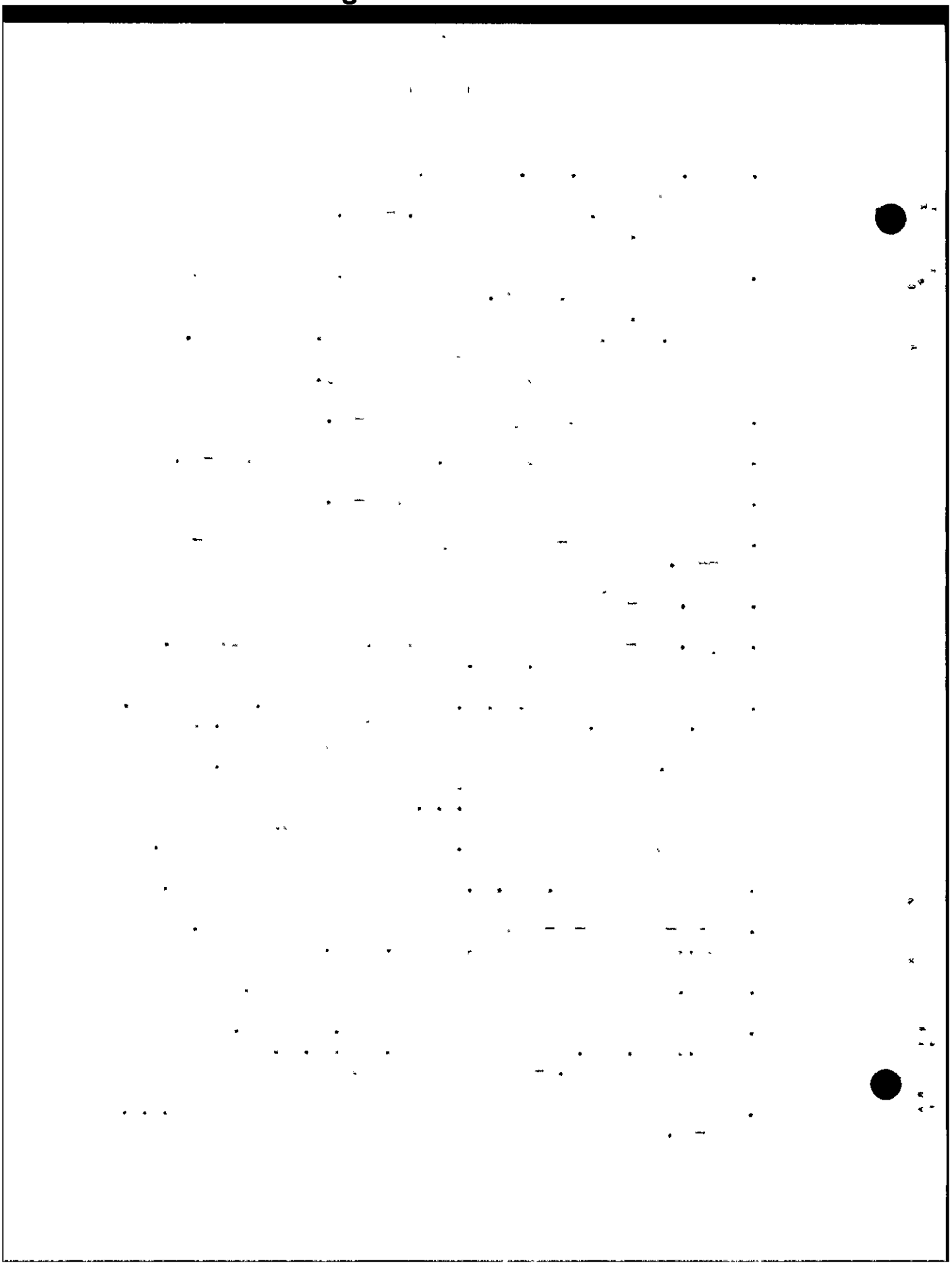
37. Interview with Lt. Col. J. Vincent Sheehan, 3 June 1943.

38. CM-IN-6362 (11-15-42), London to AGWAR, #522, 14 Nov. 1942; ltr., Doolittle to Arnold, 19 Nov. 1942.

39. Ibid.; Histories of 1st and 14th Fighter Groups.

40. War Diary, 97th Bombardment Group, Nov. 1942-Feb. 1943; ltr., Maj. Gen. Carl Spaatz to Lt. Gen. H. H. Arnold, 23 Nov. 1942, in AAG 312.1-A, Operations Letters.

41. "History of the Original XII Air Force Service Command . . .," 48-59.



42. Ibid., 59-66; History of 33d Fighter Group; ltr., Doolittle to Arnold, 19 Nov. 1942.

43. "History of the Original XII Air Force Service Command . . .," 32-43; interview with Col. Max Schneider, 8 Jan. 1943; memo for AC/AS, OC&R, by Dir. of Base Services, Data for Presentation to General Arnold with Respect to Matters of Interest to Base Services, 5 Jan. 1943, in Air AG 320.2, Eighth Air Force.

44. Ibid.; interview with Col. Schneider; ltr., Maj. Gen. James H. Doolittle to Maj. Gen. Davenport Johnson, 8 Jan. 1943, in AAG 312.1-A, Operations Letters; History of 14th Fighter Group; files of Supply History Subsec., Report Sec., Control Div., Hq. ASF.

45. Interview with Brig. Gen. D. A. Davidson, 1 June 1943; ltr., Spaatz to Arnold, 23 Nov. 1942; ltr., Doolittle to Arnold, 19 Nov. 1942.

46. Ibid.; interview with Gen. Davidson; Algiers to AFCP, cablegram unnumbered, 21 Nov. 1942, in theater messages, AFIHI files.

47. Ltr., Doolittle to Arnold, 19 Nov. 1942.

48. Ibid.

49. Ltrs., Maj. Gen. Carl Spaatz to Lt. Gen. H. H. Arnold, 31 Oct. 1942 and 23 Nov. 1942, in AAG 312.1-A, Operations Letters.

50. Ltrs., Spaatz to Arnold, 23 Nov. 1942, with incls.

51. Ibid.

52. Ibid.; Maj. Gen. Ira C. Eaker to Maj. Gen. George E. Stratemeyer, 6 Dec. 1942 and 2 Jan. 1943, in AAG 312.1-A, Operations Letters.

53. Ltr., Doolittle to Arnold, 19 Nov. 1942; CM-IN-9667 (11-22-42), London to AGWAR, #986, 20 Nov. 1942; Rame, Road to Tunis, 117.

B I B L I O G R A P H Y

Files

AAF Classified Files (cited AAG with decimal)

These files contain a variety of primary materials. 312.1-A Operations Letters provides valuable correspondence between Generals Arnold and Stratemeyer in Headquarters, AAF and Generals Eaker, Spaatz, and Doolittle in the field. 370.2 Spec. Report of Operations in Africa contains a detailed report on the operations of the Western Task Force by Brig. Gen. Arthur R. Wilson.

Secretary, Air Staff classified files (cited Air AG with decimals)

The 320.2 series proved most valuable.

311.2	Misc. Communication by Wire
320.2	Twelfth Air Force
320.2	Eighth Air Force
370.5	England
452.1	Bolero

The Adjutant General, Operations Branch, Secret and Confidential Section, Analysis Files Subsection

202-81.1, G-2 Plans and Personnel. Herein is a series of naval orders for the assault on Oran which sheds light on the paratroop mission against the Oran airdromes and gives general information on the Allied order of battle, enemy capabilities, etc. There is also an early outline plan for the Center Task Force and a series of daily air intelligence reports detailing the action against the French by AAF units based at Tafaraoui.

202-81.1, Western Task Force. Contains "Journal of Actions of the High Command of Moroccan Troops: Period of the 8th to the 11th of November, 1942," captured and translated by the Americans, giving a French account of the defense of North Africa.

Assistant Chief of Air Staff, Plans

The files of the Offices Services Division and of the Combined and Joint Staff Division are indispensable to study of the TORCH planning and of the origins of the Twelfth Air Force.

War Department General Staff, Operations Division, Theater Group, North African Section

In these files are found the Torch Outline Plan CCS, 103/3, 26 Sep. 1942 and Annexes 1, 5, and 6. Annexes 5 and 6 constitute the outline plans for the Center (Oran) Task Force and the Western (Casablanca) Task Force, respectively. Annex 1 is the outline air plan. Annexes 1a to 1e /to Torch Outline Plan/ are entitled as follows:

1a Air Force Requirements
1b Assignment of Units
1c Dates of Arrival, Airdrome Areas, and Missions
1d Air Estimate of the Situation
1e Enemy Scale of Effort

Unit Histories and Diaries

The documents in this list are filed in the Archives of AC/AS, Intelligence, Historical Division, cited as AFIHI files.

History of the 1st Fighter Group

History of the 14th Fighter Group

History of the 31st Fighter Group

History of the 33d Fighter Group

History of the 52d Fighter Group (1942)

History of the 81st Fighter Group

History of the 350th Fighter Group

History of the 310th Medium Bombardment Group

History of the 319th Medium Bombardment Group

History of the 320th Medium Bombardment Group

War Diary of the 97th Heavy Bombardment Group

History of the 60th Troop Carrier Group (1942). Includes various documents relating to the Torch paratroop mission.

History of the XII Air Support Command (to 31 Dec. 1942). This file contains a mass of documents relating to the organization of the XII Air Support Command, the employment of the 33d Fighter Group, and the plans for the Western Task Force.

History of the 21st Engineer Aviation Regiment.

History of the 12th Weather Squadron. File contains valuable report on activities of the 12th Weather Region written by Col. Von R. Shores, Weather Officer, Twelfth Air Force.

"Historical Summary of VIII Air Support Command . . .," Books I and II.

"Torch in the Sky," dated 21 Oct. 1942, London. An account of the origins of the Twelfth by an air officer engaged in the planning at Norfolk House.

Interviews

The interviews in this list are on file in AC/AS, Intelligence, Reception Branch, Collection Division. The date is that of the interview.

Allard, Col. J. S., A-1, Twelfth Air Force, 24 Mar. 1943
Black, Col. Percy, member of Gen. Patton's staff, 26 Mar. 1943
Clark, Capt. J. J., USN, commander USS Suwannee, 27 Nov. 1942
Cochran, Lt. Col. Philip C., in charge of P-40 replacements on HMS Archer, 3 June 1943
Davidson, Brig. Gen. D. A., Engineer, Northwest African Air Forces, 1 June 1943
Dixon, Lt. Col. Palmer, Advance A-2, Twelfth Air Force at Gibraltar, 10 June 1943

Schneider, Col. Max, on A-4 staff, Twelfth Air Force, 8 Jan. 1943
Sheehan, Lt. Col. J. Vincent, on General Cannon's staff, 3 June 1943

Also in the Reception Branch are documents on the Torch paratroop mission filed under K-14599.

Message Files

Extensive use was made of cable and radio messages. Files are of two general types: War Department messages in either AAF Message Center or AFIHI files, and message files sent in from Twelfth Air Force historical officers, in AFIHI files. These latter are cited as "theater messages." A list of theater message files consulted follows:

Bundle 10, Books 1-14
Bundle 11, Books 1-13
Bundle 12, Books 1-3
Bundle 14, Books 1 and 2

Special Studies

VIII Bomber Command, "The First 1,100 Bombers Dispatched by Eighth Bomber Command," 2 vol. in AFIHI files. Useful for operational background of Twelfth Air Force units.

Hq. Army Air Force Service Command, MTO, "History of the Original XII Air Force Service Command from Activation (22 August 1942) to Reorganization (1 January 1944)," in AFIHI files.

Historical Section, USSAFE, "Operation Torch: The Dispatch of Aircraft from the United Kingdom by the Eighth Air Force," 14 Sep. 1944, in AFIHI files. This also has information on other contributions of the Eighth to Torch.

U. S. Office of Naval Intelligence, The Landings in North Africa, November 1942, 1944. One of a series of Combat Narratives. Deals primarily with the action against Casablanca.

Books

Crawford, Kenneth G., Report on North Africa, Farrar & Rinehart, New York, 1943

The author is primarily concerned with the political aspects of the invasion.

Parris, John A., Ned Russell, Leo Disher, and Phil Ault, Springboard to Berlin, Thomas Y. Crowell Company, New York, 1943

A series of sketches—for the most part, personal narrative.

Rame, David, Road to Tunis, The MacMillan Company, New York, 1944

Excellent description of the battle for Oran.

I N D E X

A

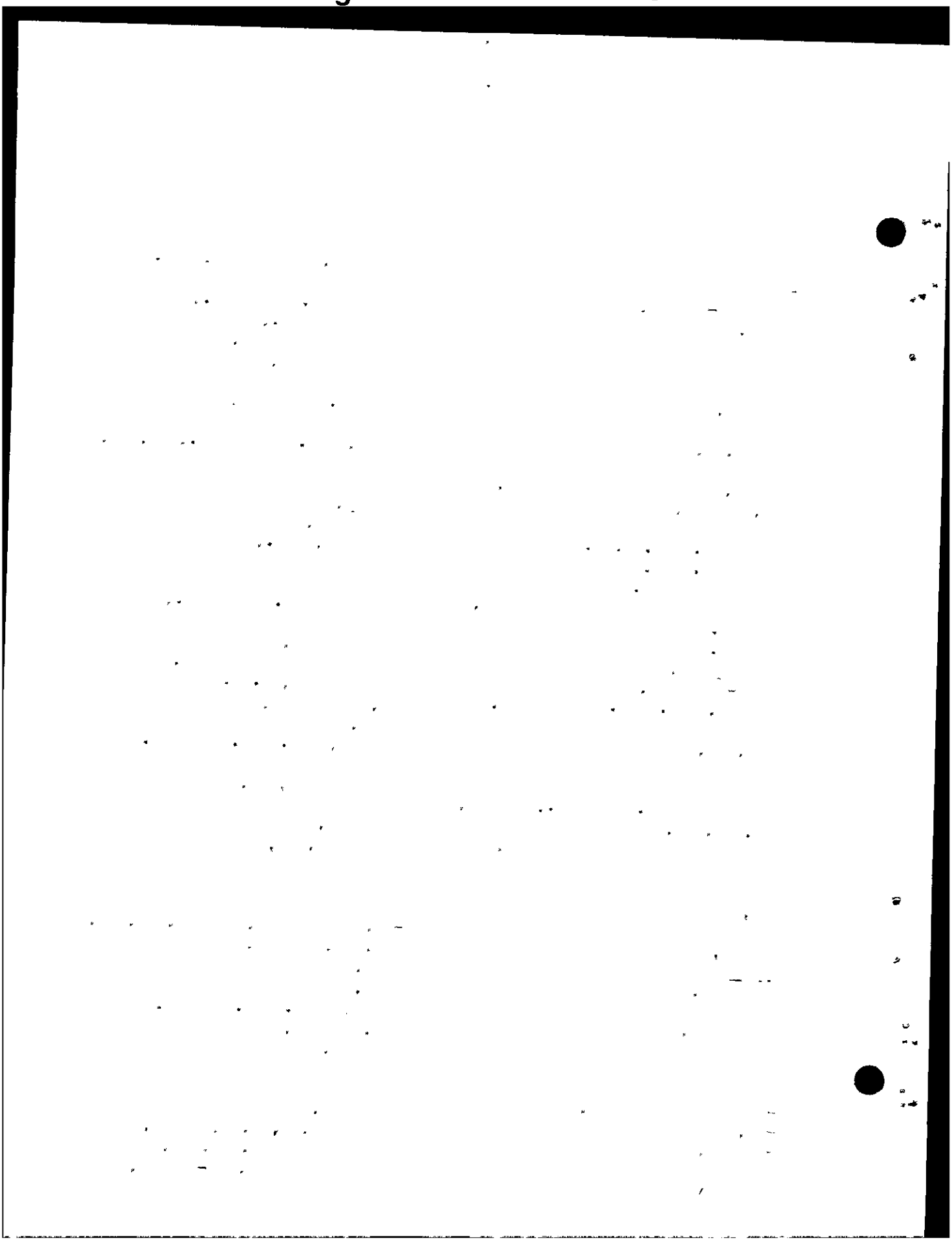
A-20, 15, 24, 26, 35, 50, 83
Abbeville-Drucat, 34, 35
Agadir, 68
Airacobras, 38, 39
Air Ministry, 20, 38
Albacores, 54, 56, 63
Albatros, 68
Aldermaston, 41
Algeria, 1, 4, 5, 6, 53, 58, 59, 66, 67, 83, 85
Algiers, 8, 12, 19, 52, 61, 72, 78, 83, 86, 87
Algeciras, 12
Allard, Lt. Col. J. S., 16
Allen, Maj. Gen. Terry, 65
Allied Force Hqs., 16, 21, 24, 32, 33, 39, 40, 41, 42, 43, 44, 49, 50, 85. See also Norfolk House, London.
Alynbank, 42, 54
Amiens-Longueau, 34
Anderson, Maj. Gen. Jonathan W., 70
Antelope, 42
Arabs, 59, 67
"Arcadia Conference", 2
Archer, 49, 75
Arnold, Lt. Gen. Henry H., 14, 16, 18, 27, 46, 85
Arzeu, 55, 56, 61, 62, 64, 77, 78, 79
Assistant Chief of Air Staff, Plans, 3, 15, 16
Atcham, 35, 45
Augusta, 68, 74
Aurora, 54
Australia, 15
Avengers, 69
Azores, 39, 69
Axis, 1, 2, 3, 5, 9, 13, 26, 53, 54

B

B-17, 24, 34, 65, 77, 78, 82
B-25, 14, 15, 26, 37, 50
B-26, 14, 15, 24, 26, 36, 37
BACKBONE, 12, 20
Baer Field, Fort Wayne, Ind., 36, 37
BANTAM, 42
Bartron, Col. Harold A., 80
Baton Rouge, La., 38
Batterie des Passes, 67
Batterie Ponsot, 67
Bay of Biscay, 43
Beam, Col. Rosenham, 18
Beaufighters, 58
Bentley, Col. William C., 40, 41, 58, 59
Bermuda, 69
Bernadou, 72
Biggin Hill, 45
Birmingham, Ala., 19
Biter, 54
Bizerte, 10, 78
Blackburn, Col. Thomas W., 17
BLACKSTONE, 70
Bluie West #1, 37
BOLERO, 5, 6, 26, 34, 36, 44
Bolling Field, D. C., 19
Bone, 8, 19, 57, 84
Bougie, 19
Brereton, Maj. Gen. Lewis H., 17
British Chiefs of Staff, 10, 46
British fleet, 42, 62
Brooklyn, 68
BRUSHWOOD, 70
Burtonwood, 39, 57

C

C-47, 34, 40, 41, 42, 50, 56, 57, 58, 59, 60, 63, 66, 78
Cadiz, 12
Cairo, 15
Cannon, Brig. Gen. John K., 18, 19, 48, 76, 80, 84
Canaries, 69
Cap Blanc, 55
Cap Figalo, 59
Cap Tenes, 19, 20
Casablanca, 2, 5, 8, 9, 10, 11, 12, 17, 18, 20, 23, 24, 26, 39, 40, 43, 44, 47, 49, 52, 61, 66-76, 77, 79, 80, 83, 84, 85



Casco Bay, 69
Cazes, 25, 75, 76, 79, 82
Central Africa, 2
Center Naval Task Force (British), 54
Center Task Force, 11, 12, 13, 20, 54, 55, 61, 62
Ceuta, 12
Charger, 47, 48
Chelveston, 41
Chenango, 48, 49, 69, 75, 77
Chesapeake Bay, 38
Chivenor, 50
Churchill, Prime Minister, 5, 7
Clark, Lt. Gen. Mark W., 11, 33, 46, 57, 81, 82, 84
Cleveland, 68
Cochran, Maj. Philip, 75, 79
Colorne, 34
Combat Command B, 54, 55, 56, 62, 64, 65
Combined Chiefs of Staff, 6, 7, 8, 10, 11, 12, 26, 43, 46
Combined Staff Planners, 5
Contessa, 25, 69
Courtrai-Wevelghem, 34
Craig, Brig. Gen. Howard A., 33, 43
Craw, Col. Demas T., 18
Craw Field, 83. See also Port Lyautey.
Cunningham, Adm. Andrew B., 10
Curtiss 75A, 68

D

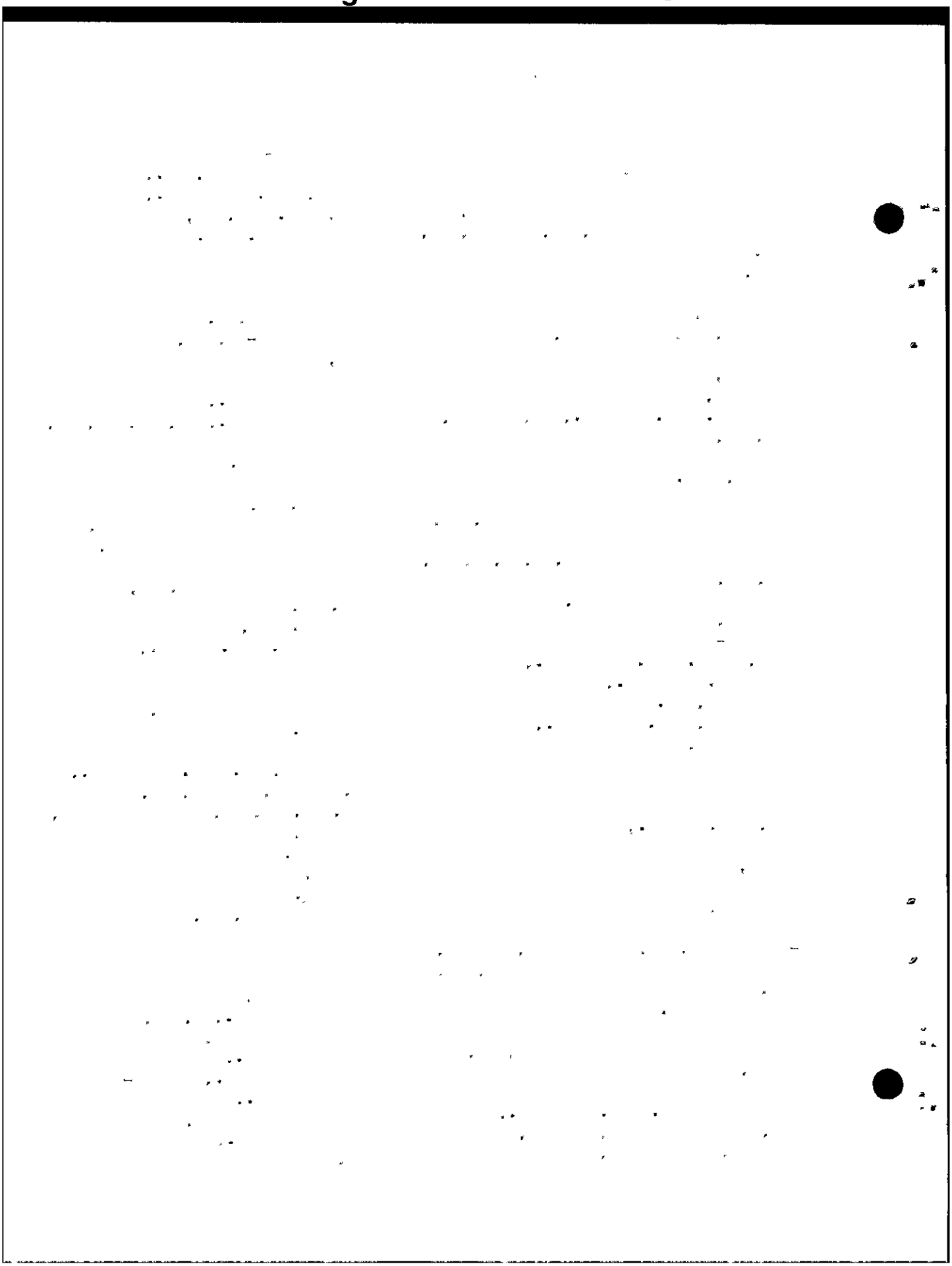
Dahl, Col. Leo P., 32
Dakar, 2, 3, 69
Dallas, 73, 74
Dasher, 54
Dauntless, 68
Davidstow, 50
D-day, 8, 11, 18, 23, 25, 31, 33, 41, 42, 44, 45, 52, 56, 62, 63, 66, 68, 70, 71 72, 74
de Gaulle, Gen. Charles, 1
Delhi, 54
Devoitine 520, 53, 59, 61, 63, 66, 68
Dieppe, 45
Djebel Mourdjadjo, 62
Doolittle, Brig. Gen. James H., 14, 16, 17, 18, 33, 43, 44, 46, 48, 55, 65, 76, 82, 83, 84, 86, 87
Douglas DB-7, 53, 68
Dow Field, Bangor, Me., 34
Duncan, Col. Claude E., 17
Dunn, Col. Ray, 17, 40
Dunton, Brig. Gen. Delmar, 17, 29

E

8th Air Force, 4, 7, 14, 15, 17, 26, 27, 28-35, 36, 38, 50, 84, 85, 86
18th Combat Team, 65
18th Weather Sq., 32
81st Fighter Gp., 24, 26, 38, 39, 48
82d Fighter Gp., 26
VIII Air Force Service Command, 29, 30, 31, 39, 51
VIII Air Support Command, 30, 31
VIII Bomber Command, 30, 31, 34, 35
VIII Fighter Command, 30, 31, 38, 40, 49, 50
Eagle Sq., 38, 45
Eaker, Maj. Gen. Ira C., 29, 85, 86
Eastern Assault Force, 12, 19, 52
Eastern Task Force, 19, 54
Eglinton, 45
Egypt, 47
Eisenhower, Lt. Gen. Dwight D., 8, 9, 10, 11, 12, 14, 15, 16, 17, 18, 21, 27, 43, 46, 47, 50, 78, 84, 85, 86
El Aouina, 78
El Hank, 67
Epervier, 53
ETOUSA, 26, 27, 84, 86

F

1st Air Force, 16
1st Armored Div., 54, 55, 56
1st Army, British, 12
1st Fighter Gp., 24, 34, 35, 77
1st Infantry Div., 54, 55-56, 62, 65
1st Ranger Bn., 54
4th Bomber Wing, 14, 16
14th Fighter Gp., 24, 34, 35, 39, 77, 82, 83



15th Bomb. Sq. (L), 24, 35
41st Service Gp., 76
44 Group, RAF, 49, 50, 51
47th Bomb. Gp., (L), 15, 26
47th Infantry, 70, 72
48th Fighter Sq., 78
49th Fighter Sq., 78
50th Fighter Sq., 35
51st Troop Carrier Wing, 40, 51
52d Fighter Gp., 24, 34, 38, 43-45, 49, 65, 66, 83
58th Fighter Sq., 79
503d Parachute Inf., 40, 56, 58
F-4, 29
Fedala, 25, 67, 70, 72, 74, 75, 76, 80
Fijis, 16
Fleurus, 52
Foreign Legion, 53, 64, 73
Fort Lamoune, 55
Franco-German Armistice, 1, 53
Frank, Maj. Gen. Walter H., 29
Fredendall, Maj. Gen. Lloyd R., 54
French 75's, 64
French air force, 57, 63, 73, 76, 77, 82
Furious, 54
FW-190, 35
French naval units, 53, 68, 69, 71, 72, 74

G

Galligan, Maj. C. J., 60
German Air Force, 10. See also Luftwaffe.
German-Italian Armistice Commission, 1, 67
Gibraltar, 9, 10, 12, 20, 23, 33, 42, 43-45, 49, 50, 52, 58, 61, 62, 63, 65, 77, 78, 83, 84
Glenn Martin 167, 53
Gloucester, 49, 50, 51
GOALPOST, 25, 46, 71
Gourock, 37, 40
Goxhill, 34, 45
Greenland, 37
Grenier Field, N. H., 44
GYMNAST, 2, 3, 5, 6, 9, 21
  MODIFIED, 2
  SUPER, 2

H

Hampton Roads, 69
Hansell, Brig. Gen. Haywood S., Jr., 29, 85
Hardwick, 37
Harmon, Maj. Gen. E. N., 70
Hartland, 54, 55, 60, 62. See also Pontchartrain.
Hawkins, Lt. Col. J. R., 63
Hethel, 37
Hewitt, Rear Adm. Henry K., 68
H-hour, 41, 56, 58, 61, 71
Holland, 35
HOW, 68, 69
Hunter, Brig. Gen. Frank O'D., 49
Hurn, 50, 51
Hurricanes, 44, 54, 56, 63

I

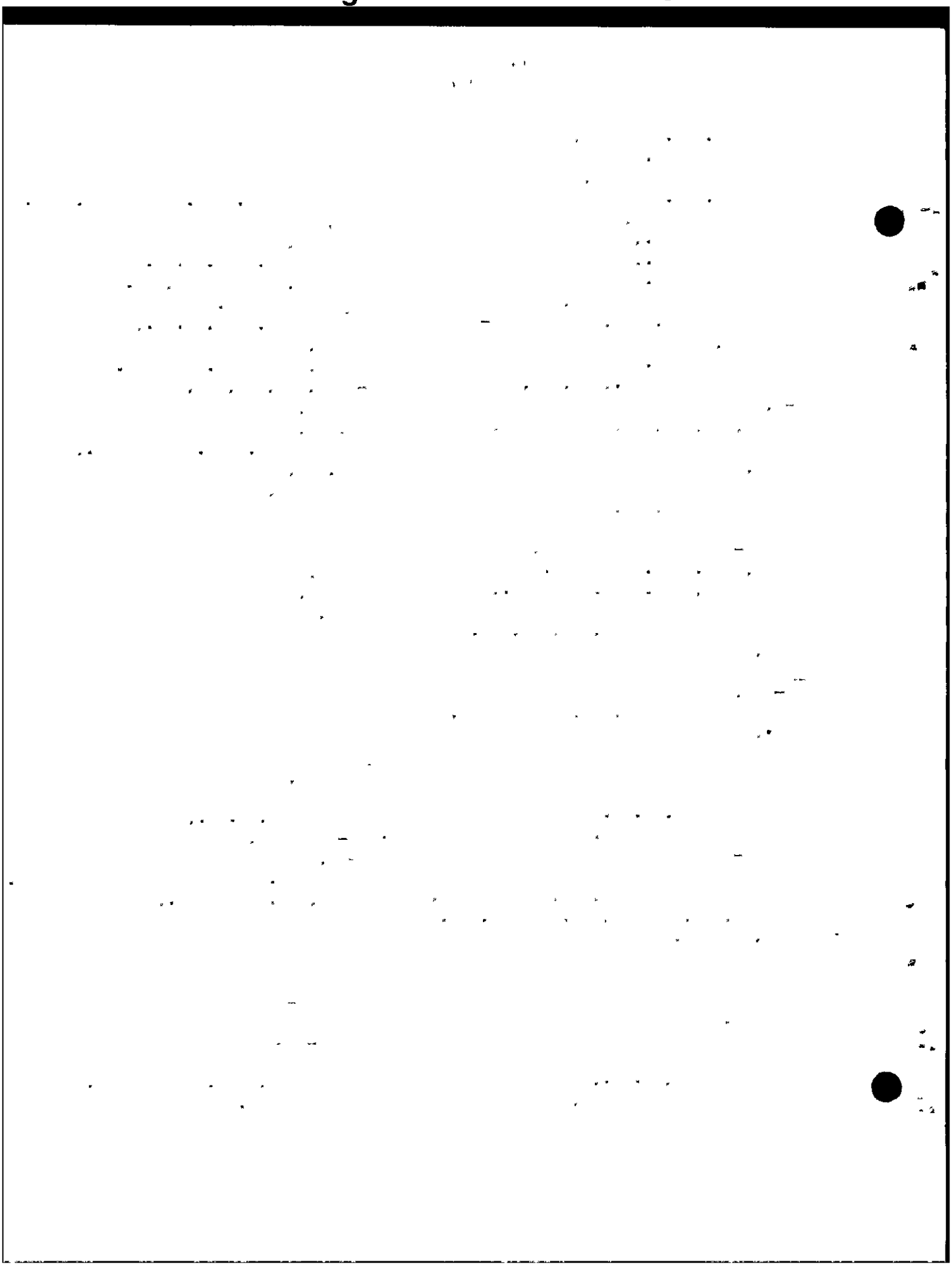
Ibsley, 34, 51
Iceland, 27, 34, 35, 37
India, 15
Iraq, 28
Italian Air Force, 29
Italy, 3, 4, 61

J

Jamaica, 54
Japanese, 47
Jean Bart, 67, 72, 74
Johnson, Dr. N. K., 32
JPB-BLACK, 2, 3,
JU-88, 43
Junior, 28. See also 12th Air Force.
Junkin, Lt. Samuel F., 45

K

Kasba, 73, 74
Kingston-McCloughry, Air Marshal, 49
Kirton-in-Lindsey, 34
Kurier, 34
Kuter, Brig. Gen. Laurence S., 85



L

Lahoulle, Gen. Auguste, 76
Lakehurst, 70, 72
Lands End, 56
Langford Lodge, 57
Largs, 42, 54
La Senia, 23, 41, 52, 53, 56, 57, 58, 59, 60, 62, 63, 64, 65, 77, 79, 82
Le Havre, 35
Le Malin, 68
Liore et Olivier-45 bomber, 68
Les Andalouses, 55, 56, 62
Le Trait shipyards, 34
Libya, 3
Lille raid, 34
London, 7, 10, 18, 41, 46
Lorient, 29, 34
Lourmel, 41, 52, 59, 62
Luftwaffe, 29, 35. See also German Air Force.
Lyautey, Marshal, 67

M

McWhorter, Rear Adm. E. D., 69, 77
Madrid, 59
Maison Blanche, 78, 83
Malaga, 12
Malone, Lt. Col. A. J. Russell, 40-41
Malta, 20
Marauders, 37
Marrakech, 68, 70, 72, 74, 82
Marshall, Gen. George C., 14
Mascara, 53
Massachusetts, 68
Mazagan, 72
Meade, Sq. Leader P. J., 32
Meaulte, 34
Mediouna, 25, 82
Mediterranean, 2, 3, 7, 17, 21, 52, 59
Medjerda River, 86
Medjez-el-Bab, 86
Mehdia, 25, 67, 70, 71, 73, 76
Meknes, 68, 82
Melilla , 59
Mersat Bou Zedjar, 55, 56, 62
Mers-el-Kebir, 52, 60, 62, 65, 79
Mervine, 72
Meteorological Office, Air Ministry, 32
Michelier, Vice-Adm. Frix, 68
Middle East, 2, 6, 17, 27, 46, 47, 85
Midway, 47
Miller, Lt. Col. Joseph A., 32
Miller, Maj. Gen. Henry J. F., 29
Miramar Hotel, 75
Milan, 68
Misserghine, 60, 62, 65
Mole du Commerce, 67
Momyer, Maj. William W., 47, 75
Morocco, 1, 3, 5, 7, 8, 9, 10, 12, 42, 46, 63, 67, 68, 70, 75, 76, 82
  French, 8, 9, 38
  Spanish, 4, 8, 9, 10, 11, 12, 20, 24, 26, 54, 59, 61, 70, 71
Mostaganem, 10, 53
Moul el Bahar, 55, 62
Munitions Bldg., 19
Murphy, Robert, 57
Mustoe, Col., 32

N

9th Air Force, 16, 17, 86
9th Infantry Div., 69, 70, 71
97th Bomb. Gp. (H), 24, 30, 34, 35, 78, 83
Nemours, 12
New Caledonia, 16
Newport News, 25
New York, 68, 72
Nogues, Gen. Auguste, 67, 71
Norfolk Group Plan, 8, 9, 12, 17, 41
Norfolk House, London, 8, 14, 16. See also Allied Force Hqs.
Norfolk, Va., 69
Norstad, Col. Lauris, 16, 55
Northern Task Force, 12
Nouvion, 77

O

Oggaz, 52
Oran, 8, 9, 10, 11, 12, 17, 18, 19, 20, 23, 24, 26, 39, 40, 41, 42, 44, 52-66, 70, 71, 72, 77, 79, 83, 84, 86
Oran Air Force, 55
Oujda, 12

P

P-38, 15, 22, 24, 34, 35, 39, 50, 77, 83
P-39, 24, 26, 29, 38, 39, 44, 45, 48, 50
P-40, 24, 47, 48, 49, 69, 75, 77, 82
Padgate, 45
Parachute Infantry Bn., 57
Paratroop Task Force, 40-43, 50, 57, 58, 60, 61, 66
Patton, Maj. Gen. George S., 11, 14, 19, 42, 43, 47, 48, 69, 72, 80, 81
Pearl Harbor, 2
Petain, Marshal, 1
Philadelphia, 48
Philadelphia, 68, 72
Philippeville, 19
Polebrook, 78
Pontchartrain, 55. See also Hartland.
Portal, Sir Charles, 27, 43, 46
Port Lyautey, 22, 24, 25, 42, 46, 68, 71, 73, 75, 76, 79, 80, 82. See also Craw Field.
Portreath, 50, 58
Portugal, 39, 77
Potez 63, 53, 68
Potez airplane factory, 34
Predannock, 50, 57, 58
Presque Isle, 37
Prestwick, 37
Primaguet, 68
Provisional Weather Sq., 31. See also 12th Weather Sq.

Q

Queen Mary, 37, 38
Quesada, Col. Elwood R., 47

R

Rabat, 25, 68, 76, 79, 82
Rabat-Sale, 25, 74, 82
RAF, 4, 19, 20, 22, 27, 30, 35, 43, 44, 45, 49, 52, 85
RAF Eastern Air Command, 19, 20, 22, 32, 44, 49, 50, 51, 82, 86
RAF Fighter Command, 49
Raff, Lt. Col. Edson D., 40, 60
Ramsbury, 41
Rangers, 61, 74
Ranger, 47, 48, 68
Rbia River, 70
RCT, 56, 62
RDF, 42
RESERVIST, 54
Reykjevik, 37
Richelieu, 69
Rodney, 54, 62
Roe, 73
Rommel, 86
Roosevelt, President, 7
Rouen-Sotteville, 34
ROUND-UP, 7
Royal Navy, 54, 55
Royal Navy Fleet Air Arm, 52, 56, 62, 63
Russia, 5, 6, 7, 38
Russian front, 6

S

2d Air Force, 16
2d Armored Div., 69, 70, 71
7th Fighter Wing, 25
17th Bomb. Gp. (M), 26
60th Infantry Regt., 71
60th Troop Carrier Gp., 23, 40, 41, 56, 58, 60, 61, 66
62d Troop Carrier Gp., 40, 41
64th Troop Carrier Gp., 40
68th Observation Gp., 24, 26, 39
II Corps, 54
Safi, 25, 67, 70, 72, 80
Saint-Cloud, 62, 65
Saint Denis du Sig, 52
Sainte-Barbe-du-Tlelat, 62
Saint Eval, 50, 57, 58

Turner, Lt. Col. John F., 16
Tuscaloosa, 68
Typhon, 53

U

U. S. Joint Chiefs of Staff, 9, 10, 17, 46

V

Vandenberg, Col. Hoyt S., 16, 18, 29
VHF, 39
Vichy, 3, 9
  Africa, 2
  France, 1, 3
VILLAIN, 51
Von Arnim, 86

W

Walney, 54, 55, 60, 62. See also Sebago.
War Department, 31, 38
Washington, 2, 5, 7, 12, 18, 81
Welsh, Air Marshal Sir William, 19, 44
Western Air Command, 13, 20. See also
Western Desert, 8, 20, 86 12th AF.
Western Task Force, 11, 12, 13, 17, 19, 27, 38, 44, 46, 54, 61, 66, 67, 70, 71, 74, 80, 81
West Hampnett, 33, 45
Westover Field, Mass., 37
West Palm Beach, Fla., 37
Whitten, Brig. Gen. L. P., 80
Widewing, 85
Wildcats, 68
Williams, Col. P. L., 40

X

X beach, 55

Y

Y beach, 55
Youks les Bains, 78, 82

Z

Zane, Col. Robert T., 16
Z beach, 55

Saint-Leu, 62
Sanders Air Commodore A. P. M., 43
Sangamon, 47, 48, 68
Santee, 47, 48, 69, 72
Sardinia, 4, 53
Savannah, 68
Scilly Islands, 58
Schofield, Lt. Col. T. J., 58
Seafires, 54, 56
Sebago, 55. See also Walney.
Sebkra d' Oran, 59, 60, 61, 63, 65, 66
Sebou River, 25, 67, 73, 74, 76
Shahan, Lt. Elza, 34
Sherwood, Maj. F. H., 58
Shores, Col. Von R., 32
Sicily, 4
Sidi Ahmed, 78
Sidi-bel-Abbes, 53, 64
Solomons Island, Chesapeake Bay, 69
SOS planners, 81
Spaatz, Maj. Gen. Carl, 14, 27, 28, 31, 78, 82, 84, 85, 86
Spain, 3, 4, 8, 9, 10, 11, 13, 20, 58, 59, 71, 83
Spitfires, 15, 23, 24, 43, 44, 45, 48, 56, 58, 62, 63, 64, 65, 66, 83
State Department, 21
Stornoway, 37
Surprise, 53
Suwannee, 48, 69

T

3d Infantry Div., 69, 70
12th Air Force, 13, 14-51, 52, 55, 56, 62, 76, 78, 80, 81, 82, 83, 84, 85, 86, 87. See also Western Air Command and Junior.
12th Weather Sq., 31-33. See also Provisional Weather Sq.
21st Engineer Avn. Regt., 76
27th Bomb. Gp. (L), 83
27th Fighter Sq., 34
31st Fighter Gp., 23, 24, 34, 38, 43-45, 49, 62, 63, 64, 65, 77, 83
33d Fighter Gp., 24, 26, 27, 44, 46-49, 69, 73, 75, 76, 79
301st Bomb. Gp. (H), 24, 30, 34
308th Fighter Sq., 62, 63
309th Fighter Sq., 62, 63
310th Bomb. Gp. (M), 15, 26, 36, 37
319th Bomb. Gp. (H), 15, 24, 36, 37
320th Bomb. Gp. (H), 15, 24, 36, 37
324th Fighter Gp., 47
325th Fighter Gp., 47
327th Fighter Gp., 47
340th Bomb. Sq. (H), 78
341st Bomb. Sq. (H), 78
350th Fighter Gp., 26, 29, 38, 39
III Ground Air Support Command, 18, 19
XII Air Force Service Command, 17, 25, 29, 76, 78, 80
XII Air Support Command, 19, 20, 24, 25, 48, 75, 76, 83, 84. See also XII Ground Air Support Command.
XII Bomber Command, 17, 30, 84
XII Fighter Command, 17, 30, 84
XII Ground Air Support Command, 18. See also XII Air Support Command.
Tafaraoui, 23, 41, 42, 52, 56, 57, 60, 61, 62, 63, 64, 65, 66, 77, 78, 79, 83
Tangier, 12, 20, 40
Taza Gap, 12
Texas, 68
Tlemcen, 53
Tobler, Maj. J. A., 58
Tokyo raid, 14
TORCH, 1-13, 14-28, 29, 30, 31, 32, 33, 35, 36, 39, 40, 42, 46, 47, 56, 70, 80, 83, 84, 85
Tornade, 53
Tramontane, 53
Trebelzue, 50, 51
Troubridge, Commodore Thomas, 54
Truscott, Brig. Gen. Lucian K., 71
Tunis, 8, 10, 13, 19, 78, 86
Tunisia, 1, 7, 9, 10, 11, 12, 19, 24, 34, 57, 67, 82, 83, 85, 86
Turbinlite equipment, 35