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**AIR PHASE
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AIR PHASE OF THE ITALIAN CAMPAIGN

TO 1 JANUARY 1944

(Short Title: AAFRH-15)

AAF Historical Office
Headquarters, Army Air Forces
June 1946

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FOREWORD

This study, prepared by Lt. Col. Albert F. Simpson, AAF Historical Office, tells the story of the planning which preceded the invasion of Italy in September 1943, and recounts Allied air operations and organizational developments during the first four months of the Italian campaign. The study follows Air Phase of the North African Invasion, November 1942; The Twelfth Air Force in the North African Winter Campaign; The Conquest of Pantelleria (in process); and Participation of the Ninth and Twelfth Air Forces in the Sicilian Campaign, thus carrying to 1 January 1944 the story of air operations in the Mediterranean. Like other studies prepared by the Historical Office, this study is subject to revision as additional information becomes available.

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NOVEMBER 1942-AUGUST 1943

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Air Phase of the Italian Campaign to 1 January 1944

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Chapter I

STRATEGIC PLANNING FOR THE INVASION OF ITALY,
NOVEMBER 1942-AUGUST 1943Early Plans for Post-Tunisian Operations

On the surface it would seem logical to assume that from the day the Allies completed their successful invasion of North Africa (11 November 1942) an assault on the mainland of Italy was a foregone conclusion. Actually such was not the case, for there were other areas than Italy along the shores of the Mediterranean which long offered attractive possibilities as sites for Allied operations, and there were always strong differences of opinion between the Americans and the British as to the nature and extent of post-Tunisian operations. Not until after the end of the Tunisian campaign in May 1943 was it definitely decided that an assault on the Italian mainland was preferred to operations against Sardinia, or the Balkans, or southern France, or in the Aegean; and even then a segment of Allied thought held to the thesis that any future attack on Italy should be limited to an air offensive in order that the full weight of Allied manpower and resources might be thrown against the Axis in a cross-Channel invasion of northern Europe. An operation against the mainland of Italy was not even included in the long-range planning of the Allied leaders in the days when they were setting up the invasion of North Africa (Operation TORCH) and the Sicilian campaign (Operation HUSKY).

Although the decision to invade Italy did not materialize until the summer of 1943, there were nevertheless early plans for hitting Italy

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from the air for the purpose of reducing the Axis war potential and in the hope that heavy and sustained bombing might result in the collapse of Germany's junior partner; and Allied bombers based in North Africa began pounding Italy nine months before Allied ground troops set foot on the peninsula.*

On 11 November 1942--the date on which French Morocco and Algeria capitulated to the Allies and therefore the first date on which it was possible to project definite plans which looked beyond the littoral of Northwest Africa--the Assistant Chief of Air Staff, Plans at Headquarters, Army Air Forces requested the Assistant Chief of Air Staff, Intelligence for information which was needed in the preparation of a strategic plan for an air offensive against Italy, to be conducted from North African bases. Specifically, data was desired on the strength, composition, and disposition of Axis air forces and antiaircraft artillery in Italy, Corsica, Sardinia, and Sicily, and on the targets which were vital to a continuation of Italy's war effort. Further, Intelligence was asked to submit an appraisal of the probable effect on the over-all Axis war effort of a major air offensive against Italy and her possessions.¹ On 19 November, Intelligence provided Plans with the desired data.²

At the same time the British Prime Minister was presenting to President Roosevelt his conception of future strategy in the Mediterranean. In a cable dated 18 November 1942 Mr. Churchill declared that after North Africa had been conquered "the paramount task" before the Allies would

* RAF bombers had been hitting a few targets in northern Italy at irregular intervals since August 1940. However, these attacks were too small and too few to be considered as a real^{air} offensive against Italy.

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be that of "using the bases on the African shore to strike at the under-belly of the Axis in effective strength and in the shortest time." The statement might be considered as implying an invasion and a subsequent operation by land on the Italian mainland; but at the moment Mr. Churchill appeared to be concerned only with an air offensive, for he followed the statement by a discussion of air strategy against Italy. The largest installations for American bombers, said the Prime Minister, ought to be set up on the tip of Tunisia so that long-range bombers which would be sent to North Africa by the United States, together with American bombers already based in the Middle East, could operate most effectively against Italian targets; at the same time the bombing weight of the British night attack should be brought to bear whenever the weather was more favorable over Italian targets than over German. "All the industrial centers should be attacked in an intense fashion, every effort being made to render them uninhabitable and to terrorize and paralyze [sic] the population." After Tunisia was in Allied hands, the Prime Minister continued, we should seize either Sardinia or Sicily. From either of the two islands attacks on Naples, Rome, and the Italian fleet "would raise the war against Italy to an intense degree."³

At the time Mr. Churchill sent his appraisal of future operations in the Mediterranean to Mr. Roosevelt he had in his possession a cable from the President which expressed the hope "that you with your Chiefs of Staff in London and I with the Combined Staff here" might survey "possibilities" which included a "forward movement directed against Sardinia, Sicily, Italy, Greece and other Balkan areas and . . . the

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possibility of obtaining Turkish support for an attack through the Black Sea against Germany's flank."⁴ It is evident from these two messages that the Allied leaders, as early as November 1942, were envisioning future operations against the mainland of Italy; but it is also evident that they had evolved no specific plan for such operations.

The Prime Minister's communication to the President was promptly referred by the U. S. Joint Chiefs of Staff (JCS) to the Combined Subcommittee of the Combined Staff Planners (CSP) with instructions to prepare a reply.⁵ This committee submitted its report on 27 November¹⁹⁴²/₇₆. The paper consisted of a majority report and a minority report. The former announced the following conclusions relative to future strategy in the Mediterranean: after Tunisia had been taken either Sicily or Sardinia should be seized--either operation being preferred to activity in the Balkans or against Spain--and of the two islands Sicily was considered the more valuable prize.⁷ After the conquest of Sicily the Allies could "extend the offensive by naval and air action, and limited land operations, to the mainland of Italy," or raid southern France, or capture Crete and the Dodecanese.

The minority report, presented by the USAAF member, Col. R. P. Williams, agreed with the majority report that current offensive action should be continued until the Axis was expelled from North Africa and lines of communication in the Mediterranean secured. Exploitation, however, should consist essentially of an air offensive. The North African theater should be organized and developed into a theater for air operations, auxiliary to and integral with the UK. The two theaters should be

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considered as one insofar as air operations were concerned and should be under a single commander who could exploit the flexibility of the air arm in a well-considered strategic air plan. The crux of the minority contention was that the best way to aid the U.S.S.R. and the soundest way to prepare for a cross-Channel invasion was by smashing the capacity of Germany to wage war--and this could be done only by an air offensive.

Both the majority and the minority reports were considered by the Combined Staff Planners at their meeting on 30 November, but the American and British members were unable to agree concerning future strategy in the Mediterranean and postponed action on the paper.⁸ Meeting again on 3 December they still were unable to come to a decision and decided to continue discussion of the paper the following day.⁹

When the OPS met on the 4th it had before it four informal memorandums prepared respectively by the British members, the U. S. Army members, the USAAF members, and the U. S. Navy air member.¹⁰ The Navy paper is of no moment for the present discussion. The other three papers present such important but divergent views that they serve to show clearly why a decision on post-TORCH action had to wait for a Roosevelt-Churchill conference. Briefly, the three views were:

1. British members: The main weight of Allied effort in the Mediterranean should "be against Italy," and as an initial step "an operation" against either Sardinia or Sicily should be undertaken at the earliest possible date.

2. U. S. Army members: If an invasion of southern Italy should be decided upon, then Sicily should be taken after Tunis; otherwise, "the

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time factor and the availability of troops" would determine whether Sicily or Sardinia should be invaded; but no further move ought to be made until lines of communication through Gibraltar had been made secure.

3. USAAF member: "The best way to win the war" was by "an all-out air offensive" from the UK against Germany's capacity to wage war, followed "by a land invasion against the continent across the English Channel." In the Mediterranean, operations should consist of air attacks against Italian objectives and Axis shipping, with North Africa being developed as "an air operating area integral with the United Kingdom."

In their meeting on the 4th the GPS still were unable to come to an agreement and referred the matter back to the Combined Sub-Committee.¹¹ On 8 December the subcommittee announced that it was unable to reach a decision and stated that it held the unanimous opinion that before a policy for future action in the Mediterranean could be recommended the global strategic concept of the United Nations would have to be reviewed and made available to the subcommittee.¹² The GPS, after duly considering the report, informed the Combined Chiefs of Staff (CCS) that, owing primarily to "lack of an accepted global strategy for the conduct of the war," they were unable to reach an agreement on operations subsequent to TORCH.¹³ In their 54th meeting, 31 December 1942, the CCS took note of this paper.¹⁴ And there the matter of future strategy in the Mediterranean stood when the President and the Prime Minister met at Casablanca in mid-January 1943.

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~~RESTRICTED~~~~CONFIDENTIAL~~The Casablanca Conference, January 1943

The Casablanca Conference, insofar as future operations in the Mediterranean were concerned, decided that Sicily was to be invaded (Operation HUSKY) during the period of the favorable July moon and that the bombing offensive--as soon as North Africa had been cleared of Axis troops--would be directed primarily toward inflicting the greatest possible losses on Axis air and naval forces in preparation for HUSKY, toward direct support of that operation, and toward the destruction of the oil refineries at Ploesti, Rumania.¹⁵ Nothing was said about an invasion of the mainland of Italy, and for this omission there appear to have been four fundamental reasons: first, it was hoped that the conquest of Sicily plus heavy bombing of the Italian mainland would result in the collapse of Italy; second, it seemed best to plan one step at a time in the Mediterranean so that the Allies might take advantage of future changes and developments, political as well as military, few of which could be foreseen or forecast at long range; third, any operation against Italy beyond the seizure of Sicily would have to be planned with reference to a projected invasion across the English Channel; fourth, the U. S. Chiefs of Staff and the British Chiefs differed sharply as to the importance of future operations in the Mediterranean, the British consistently being more interested in that region than were the Americans.

In spite of the fact that no specific plans for operations in the Mediterranean beyond HUSKY were laid down at Casablanca, there was considerable discussion of what steps should be taken in order to hurt Italy and if possible to knock her out of the war. The view of the British

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Chiefs of Staff was that the Allies should expand the bomber offensive against the Axis to the maximum, that operations in the Mediterranean offered the best chance of compelling Germany to disperse her resources, and that "with this end in view we should take as our primary objective the knocking out of Italy." Sir Alan Brooke, British Chief of Staff, argued strongly that an effort should be made to force the collapse of Italy by bombing attacks from UK, North Africa, and Sicily, but he did not believe that the Allies could undertake any other offensive operations against Italy in 1943 unless she should collapse completely as a result of HUSKY.¹⁶ The Americans, on the other hand, made it clear that they were more interested in the security of shipping in the Mediterranean and in the effect of Allied operations on Germany's strength on the Eastern Front than in eliminating Italy from the war; and General Marshall stated that the U. S. Chiefs of Staff were concerned as to whether future operations in the Mediterranean would bring advantages commensurate with the risks involved.¹⁷

The British, probably as a result of the American position and being anxious to continue operations in the Mediterranean, suggested that if HUSKY were delayed the Allies should invade Sardinia (Operation BRIMSTONE). They believed, said Air Marshal Portal, that the taking of that island might result in the collapse of Italy, an event which would have "the most favorable effect on the Russian Front." General Marshall not only did not agree with the British that it was important to knock Italy out of the war but was definitely opposed to BRIMSTONE.¹⁸ In taking this position Marshall was expressing the agreed opinion of the U. S. Chiefs

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of Staff, who had discussed at five meetings among themselves and two with the President the matter of an invasion of Sardinia and had decided that they were strongly opposed to the idea, inasmuch as the only advantage to be gained from taking the island would come from its value as a base for bomber operations against Italy and southern France.¹⁹

During the course of these discussions the British began to shift their interest from an operation against Sardinia to the already planned invasion of Sicily; they found, however, that the Americans not only were opposed to BRIMSTONE but also were disinclined toward HUSKY unless it could be launched not later than the first part of July. The Americans were interested in taking Sicily but only because it would give a greater degree of protection to shipping in the Mediterranean, might eliminate Italy from the war, and would afford a good base for bombing the Italian mainland.²⁰

At the third meeting at Casablanca between the President and the Prime Minister, on 23 January, the possibility of direct action against the mainland was discussed. Mr. Roosevelt believed that HUSKY might further break the morale of the Italian people to the point where they would revolt; therefore, the Allies must be ready to act, perhaps in Sardinia or even in Italy itself. General Marshall announced that after the close of the Tunisian campaign a growing air bombardment of Italy would be launched. The Prime Minister suggested that it would be advisable to maintain a threat of bombardment against Rome as an additional means of cracking Italian morale, but felt that the bombardment should not be carried out without further consultation between himself and Mr.

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Roosevelt, with which opinion the President agreed.

When the Casablanca Conference had completed its discussions and made its decisions, it still had not decided to undertake anything more than air operations against Italy. But it believed that the future operations which it had planned for the Mediterranean (i.e., HUSKY) might "result in the collapse of Italy."²¹

Theater Planning, March-May 1943

Following the Casablanca Conference no further steps toward direct action against the mainland of Italy were taken by the Allied top-level planners until the TRIDENT Conference in May 1943; and not until April did Allied Force Headquarters (AFHQ) in Algiers pay much attention to preparing new plans. But the Allied air forces kept Italy constantly aware of the fact that it had picked the wrong side in World War II.

As early as December the air forces based in the Middle East had launched a small-scale air offensive against southern Italy as part of an over-all plan to curtail the flow of supplies to Rommel's hard-pressed army in eastern Libya. This humble beginning of an air war against the Italian mainland continued as a minor operation until April 1943, when it was augmented by attacks by planes of the Northwest African Air Forces operating from bases in Tunisia and Algeria; thereafter, the attacks grew in size and fury until they paved the way for the successful Allied invasion of Italy in September 1943.

The first attack against the Italian mainland by U. S. aircraft stationed in the Mediterranean came on 4 December 1942 when 20 B-24's

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of the 98th and 376th Bomb Groups, Ninth Air Force (Middle East) hit Naples harbor. One battleship received a direct hit and several near misses and there were near misses on a cruiser and two small vessels.²² During the remainder of December attacks by Liberators of the Ninth were fairly frequent but in January bad weather limited missions against the mainland to two, the more important one being a small affair of 11 January when eight aircraft dropped 10 tons of bombs on harbor installations at Naples.²³ In February the Ninth carried out 48 sorties against that city, dropping a total of 116 tons of bombs on port installations and shipping. In March, its B-24's flew 98 effective sorties against Naples, and Liberators of 178 Squadron (RAF)* carried out 11. Considerable damage to harbor installations resulted from these attacks.

In the three months from January through March, Mosquitoes, Beau- fighters, and Spitfires of the PAF, operating from Malta, bombed and strafed trains in the Naples-Taranto-Reggio triangle, destroying or severely damaging 118 locomotives. During the same period these planes, using cannon fire and 250-pound bombs, attacked railroads, sidings, stations, and bridges in southeastern Italy and station buildings, goods yards, and warehouses in southern Italy. Results went beyond mere de- struction: traffic was dislocated, antiaircraft defenses were forced to spread out, and the Axis began to be pinched for sufficient locomotives.²⁴

During the first three months of 1943, planes of the Twelfth Air Force had concentrated their efforts on Tunisian targets, and on the few

* In order to distinguish between USAAF and RAF squadrons, a policy of omitting the "th," "st," and "d" after the squadron number of RAF units is followed.

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occasions when they had gone beyond North Africa they had dropped their bombs on ports and airdromes in Sicily and Sardinia. But by April the ground situation in Tunisia was so improved that the Twelfth's heavy bombers were able to raise their sights to the Italian mainland.²⁵

The first attack was on 4 April against Capodichino airdrome (A/D), located on the outskirts of Naples, with 27 B-17's hitting buildings and the landing and dispersal areas.²⁶ Naples itself was visited during April by 83 sorties of Ninth Air Force B-24's, 16 sorties of Liberators from 178 Squadron, and 64 sorties of B-17's from the Twelfth.²⁷ Shipping, harbor installations, and marshalling yards (M/Y's) were hit. Other major attacks during the month were against Grosseto A/D (the center of an important system of airfields between Rome and Pisa), attacked by 43 B-17's, and Bari A/D, hit by 62 B-24's. In addition, two attacks delivered by the Twelfth Air Force sank the Italian heavy cruiser Trieste and severely damaged the heavy cruiser Gorizia in La Maddalena harbor, Sardinia, thereby depriving the Italian Navy of two of its three heavy cruisers. Minor attacks during April were delivered by heavy bombers from the Middle East on Bari, San Giovanni, Crotone, Cosenza, and Pizzo, all in southern Italy.²⁸

Also during March and April--as in January and February--Malta-based Mosquitoes, Beauighters, and Spitfires bombed and strafed locomotives, railway stations, warehouses, and other installations on the mainland below a line, Naples-Bari.²⁹

All of the attacks delivered against the mainland of Italy by the air forces during the period from December 1942 through April 1943 were

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directly in support of the Tunisian campaign. Nevertheless, they were the opening guns of an invasion of Italy, and the damage which they inflicted upon communications, installations, and morale would contribute heavily to the success of that invasion.

Meanwhile, during March and April, with the Tunisian campaign going well and plans for the invasion of Sicily rapidly taking shape, it was natural that men in the Mediterranean theater should look beyond Sicily and begin to consider ways and means of forcing Italy to capitulate or of taking full and quick advantage of a possible post-HUSKY collapse of that nation. It should be noted that such plans as were formulated emanated from Allied Force Headquarters in Algiers and not from Washington and London where future operations in the Mediterranean were being considered but not formulated. It should also be noted that planning at AFHQ had to take into consideration--in fact, had to be based upon--two very different possibilities: first, that Italy would collapse at the end of the Tunisian campaign or during or immediately after HUSKY; second, that Italy would not collapse but would continue to oppose the Allies. Throughout the spring and summer of 1943 every plan for future action against Italy had to take into consideration those two diametrically opposite possibilities--which in large measure explains why approximately a dozen different schemes for invading the peninsula were drafted and considered. There are times when it is extremely difficult to evaluate national morale; that was particularly true in the case of Italy in the spring and summer of 1943. Yet, the state of morale in Italy would largely determine the type and degree of opposition which the Allies might expect to encounter

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in the event that they invaded the mainland and, therefore, would determine the type of operation which would be launched, the size and locale of the invasion, and the forces necessary to exploit initial successes.

Early in March the G-3 section of AFHQ prepared a memorandum outlining the course of action for the Allied forces in the Mediterranean in the event of an Italian collapse after the conclusion of the Tunisian campaign or after HUSKY had been launched. The planners believed that Germany would not then attempt to defend Italy but would use all available forces in defense of the Balkans, and on this thesis the G-3 section laid out general plans for using Italy, Corsica, Sardinia, and Sicily as bases for the launching of an invasion against southern France or for offensive action into the Balkans. In a follow-up memorandum a more detailed plan of action was proposed: first, to establish air bases in Sicily; second, as quickly as possible to set up air bases in the Heel of Italy, using one division of infantry and one of airborne troops to seize and hold the area in the first stage of Allied occupation; third, to assault the Kotor-Dubrovnik sector on the Dalmatian coast.³⁰

Likewise in March AFHQ made plans for a course of action in the event that Italy did not collapse after the end of the Tunisian campaign. The first matter to be considered was what action to take if HUSKY for any reason should become impracticable. AFHQ felt that there were four alternative courses which were possible. One was to establish a bridgehead on the eastern shores of the Adriatic; a second was to seize Crete and the Dodecanese. Neither operation was considered as worth while. A

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third possibility was an assault on the Toe and Heel of Italy, but such an operation was held unlikely to succeed because of Axis air opposition and because the assault would be open to attack from three sides—from Italy, Sicily, and the Balkans. The fourth course of action would be to occupy Sardinia and Corsica, and it was concluded that this was the best alternative to HUSKY. Five divisions would be required for the job; these, and adequate air forces, were already available as a part of the HUSKY force.³¹

Toward the end of April AFHQ again promulgated a plan of action, this time on the assumption that HUSKY would be carried through. After HUSKY, said the memorandum, if it were decided to maintain the offensive against Italy the first step should be the capture of Sardinia and Corsica. The next step would be to use the two islands and Sicily as bases from which to launch a heavy bombing offensive against Italy. This might force Italy out of the war. If it did not, a final step would have to be undertaken: a direct assault against the mainland. The memorandum suggested three possible areas of assault. The first called for a landing at Genoa and/or Leghorn followed by an advance into the Lombardy Plain; the second for a landing in the Rome area; the third for an assault in the Heel. The first was obviously the most risky but, at the same time, offered the quickest way of knocking Italy out of the war and of hurting Germany. The second was less risky but a slower way to force the capitulation of Italy. The third was by far the safest course of action, but it was also the least calculated to produce important results. It

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appeared to the planners that the final decision as to the course to be taken would have to be determined by the state of Italian morale, the extent of German capabilities, and the forces available to the Allies; also that in default of satisfactory evidence of a distinct lowering of Italian morale at the time of final decision, the three plans should be considered in the following priority: assault on the Heel, landing in the Rome area, invasion via the Lombardy Plain.³²

On 7 May AFHQ produced its final planning memorandum prior to the TRIDENT Conference. This memorandum, more ambitious than its predecessors, considered future strategy over the entire Mediterranean. Its first plan of action was predicated upon the assumption that Italy would not collapse after HUSKY. Three possible courses of action would then be open. The first would be against southern France. This, the planners felt, would not be feasible because of insufficient forces, unless it were undertaken simultaneously with a cross-Channel invasion (Operation EOUNDUP); moreover, it would first be necessary to seize Corsica and Sardinia. The second course of action would be to attack the Balkans. This was not favorably considered because it could be undertaken only after the Aegean and Greece had been cleared--also because it would be both dangerous and slow without adequate air support, which would be possible only from air bases on the Toe and Heel of Italy. The third course would be to conduct a campaign against the mainland of Italy. This would have certain advantages: it would provide air bases from which southern Germany, Czechoslovakia, the Rumanian oilfields, and the Danubian supply routes could be bombed; it would force the Germans to increase

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their commitments in the Balkans; it would deny to the Axis the use of valuable bases for submarines and surface forces; and it might influence Turkey to enter the war against Germany. On the other hand there would be disadvantages: the Allies might run into a long, hard campaign; control of occupied territory would require a large garrison force; there might not be enough troops available to hold a heavy German counter-offensive; and the Allies might easily become involved in heavy shipping and economic commitments to Italy.³³

The planners found it not much simpler to suggest a definite course of action to be followed pursuant to an Italian collapse after HUSKY. That Sardinia and Corsica should be occupied immediately was an obvious conclusion. An invasion of southern France was held to be unlikely, however, until after 1943. As to whether the Balkans should be invaded, and as to whether the mainland of Italy should be occupied and if so what portions of it would have to be held--those knotty problems the planners sidestepped by stating that they were matters which would have to be decided by the Combined Chiefs of Staff.³⁴

The TRIDENT and Algiers Conferences, May 1943

On 12 May 1943 the President and the Prime Minister opened the TRIDENT Conference at Washington. The Tunisian campaign was ended; plans for the invasion of Sicily, decided upon at Casablanca, already were being worked out in minute detail at AFHQ; the time had come for Mr. Roosevelt and Mr. Churchill and the Combined Chiefs of Staff to decide upon post-Sicilian operations in the Mediterranean.

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It was immediately evident that the President and the Prime Minister held different opinions as to the course to be followed after HUSKY. At their first meeting, 12 May, the Prime Minister said that the initial objective of the Allies lay in the Mediterranean: to force Italy out of the war by whatever means might be best. There were great advantages, he felt, to be derived from the elimination of Italy. In the first place, Turkey might well let the Allies use bases from which Ploesti and the Aegean could be bombed; secondly, Germany would either have to give up the Balkans or withdraw large forces from the Russian front to defend them; thirdly, the menace of the Italian fleet would be removed; and, finally, German morale would be hard hit.³⁵

The President, however, feared that to commit large armies to an Italian campaign might result in heavy attrition of Allied forces and be a drain on resources, especially if Italy had to be occupied and supplied. To this argument Mr. Churchill replied that it would not be necessary to occupy all of Italy--it would be enough just to hold such ports and air bases as would be needed for operations against the Balkans and southern Europe. At this point the matter was turned over to the Combined Chiefs of Staff for study and recommendations.³⁶

The U. S. and the British Chiefs of Staff held views on post-HUSKY strategy which were quite as divergent as those of the President and Prime Minister. In general, the Americans wanted to conduct limited offensive operations, principally air attacks, so as not to prejudice in any degree a cross-Channel operation from the UK, even going so far as to say that they would forbid the employment of American ground and naval

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forces east of Sicily. The British wanted strong action against Italy, including amphibious operations against the Italian mainland or islands.³⁷ The differences between the views of the two staffs³⁸ are worthy of detailed examination.

The American view was that the main operation must consist of a vigorous air offensive against Germany, to be followed by a full-scale invasion from UK in the spring of 1944. In the Mediterranean area HUSKY was to be accomplished and thereafter only limited offensive operations would be conducted. These would be designed to destroy the Italian war potential by air attacks, to support the U.S.R. by the diversion of Axis troops and materiel, to force the dispersion of enemy ground and air strength so as to aid the cross-Channel invasion, and to maintain the security of the present Allied positions and communications in the Mediterranean.³⁹

The British held that the main task for 1943 in the European theater was the elimination of Italy from the war, the achievement of which would contribute materially to the defeat of Germany. The breaking of the Axis would have most serious effects on the psychological and material strength of Germany. The results would be: first, the withdrawal of some 35 Italian divisions from Greece, Yugoslavia, and southern France, which would force Germany to let go of one or more of those countries (with all that this implied in loss of raw materials and prestige and in the extension of the range of Allied bombers) or to substitute German for Italian troops at substantial cost to the Russian front; second, the elimination of the Italian Navy would enable the Allies to transfer

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many naval units to the Pacific or Indian oceans; third, Sardinia and Corsica would serve as a base for mounting an operation against southern France in the spring of 1944 as an aid to a cross-Channel invasion; finally, the collapse of Italy might bring Turkey in on the side of the Allies.

It was possible, the British continued, that Italy might be eliminated by air action alone but to count on such a development would be most unwise. They considered it essential, therefore, to "follow up a successful HUSKY by amphibious operations against either the Italian islands or the mainland, backed up, if possible, by operations in other parts of the Mediterranean." The British believed that only in that way would the Allies reap the full benefit of victories in Africa and Italy and only thus could they employ the powerful and experienced American and British forces and the assault craft gathered in the Mediterranean.

The British admitted that such operations would delay the build-up (Operation BOLERO) for a cross-Channel invasion in 1943 but argued that the delay would be outweighed by the fact that the elimination of Italy, together with other successful Mediterranean operations, would ease the task confronting the Allied armies when they landed in Europe from the UK. The British concluded their arguments by stating that they did not believe "that there is any method of giving effectual help to the Russian front throughout this year other than a continuance of Mediterranean operations and the intensification of our bomber offensive."⁴⁰

The position of the U. S. Chiefs of Staff was bolstered on 14 May by the receipt of a paper prepared by General Eisenhower and his commander

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of Allied naval forces in the Mediterranean, the British Admiral Sir Andrew Browne Cunningham. This document, entitled "Operations after Husky," set forth two possible courses of action. The first called for an attack against the Italian mainland with the object of advancing on Naples. The attack would be directed against one or more of three areas: Reggio-San Giovanni, on the Toe opposite Messina (Operation BUTTERESS); Grotone, on the Ball and Instep (Operation GOBLET); and the Heel (Operation MUSSET). The paper noted that such an attack on the mainland would require large forces; that once the operation was begun the Allies would be committed and might well become involved in a major campaign of unforeseeable duration and requirements. The second possible course of action would be to occupy Sardinia (Operation BRIMSTONE) and Corsica (Operation FIREBRAND). This course, it was observed, could be carried out with limited forces; moreover, after the operation was completed the Allies would still have liberty of action for further strikes.⁴¹

It appeared to General Eisenhower and Admiral Cunningham that the deciding factor between these two courses of action would be the state of Italian morale after HUSKY. They concluded therefore that at the present time it was better for the Allies not to commit themselves to operations against the mainland because it was not yet possible to assess the morale of the Italians; they further concluded that it presently appeared the next operation after HUSKY should be BRIMSTONE and FIREBRAND.

Finally, the paper noted that Air Marshal Tedder, C-in-C of the Allied air forces in the Mediterranean, was in disagreement with the Eisenhower-Cunningham conclusions on the ground that the value of Sardinia

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would be almost altogether a defensive one whereas Italy would be an exceedingly valuable prize because it would afford bases for long-range bombing.⁴²

On the same day, 14 May, the British Chiefs of Staff presented a strong memorandum to the CCS in which they insisted that the attack on Italy must be continued relentlessly until her elimination from the war was insured. If Italy collapsed, the memorandum declared, Germany must divert large forces from the Russian front to the Balkans, thus paving the way for a cross-Channel invasion which, with bombings from the UK and Italy, would cause Germany to collapse. In the opinion of the British Chiefs there were two alternatives after HUSKY: (1) an assault on the Toe and Heel; (2) the capture of Sardinia. Their conclusion was that preparations should be made at once for the establishment of a bridgehead on the Toe during or immediately after HUSKY, with General Eisenhower planning an alternate operation against Sardinia. The final decision as to which operation would be mounted was to be made by the CCS at the conclusion of HUSKY. The memorandum concluded by stating that if Italy should collapse after HUSKY the Allies should immediately occupy southern Italy, establish forces in central Italy to prevent German infiltration, and occupy Corsica and Sardinia.⁴³

On the 17th the British Joint Staff Planners, after consulting with the U. S. JPS, urged that Italy be eliminated by air action supplemented either by landings on the Toe, Heel, and Instep or by a landing on the Toe followed by landings on Sardinia and Corsica. All of these operations were to take place between mid-August and mid-October.⁴⁴ The U. S. JPS

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promptly countered by insisting that a cross-Channel invasion was the all-important operation. The Americans argued that operations on the Italian mainland, no matter how successful, would produce few advantages out might prejudice the invasion by diverting men, planes, shipping, etc. from UK; accordingly, no more advances in the Mediterranean should be undertaken after HUSKY. The Americans even went so far as to hold that the activities of the air forces should be limited to protecting shipping and to long-range bombing of Italy, feeling that the latter alone might knock Italy out of the war.⁴⁵

The CCS had reached an impasse. But they quickly solved the difficulty by shifting onto the shoulders of General Eisenhower at least a part of the burden of deciding what strategy should be followed after HUSKY. It was agreed (20 May) that the Commander-in-Chief of the North African Theater should be instructed to mount such operations in exploitation of HUSKY as would best be calculated to eliminate Italy from the war and to contain the maximum number of German forces. Each operation was to be subject to approval by the CCS. The Allied C-in-C was to have at his disposal all the forces presently in the Mediterranean with the exception of four U. S. and three British divisions which were to be held in readiness from 1 November onward for withdrawal to UK; the additional air forces which were being provided on a temporary basis for HUSKY were also not to be considered as available for post-HUSKY operations.⁴⁶

At the 5th meeting of the President and Prime Minister, held on 24 May, the British withdrew the support which they had given previously

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to Operation BRIMSTONE, Mr. Churchill saying that he was very much opposed to any idea of an operation to capture Sardinia as a sequel to HUSKY. He felt that the conquest of Sardinia would have no influence on the securing of the great prize which would be open to the Allies if they could take the Heel and Toe of Italy and make contact with the Balkan insurgents. Sir Alan Brooke and General Marshall then explained why the CCS had decided to leave to General Eisenhower the responsibility for formulating basic plans for future operations in the Mediterranean: General Eisenhower would not be able to tell which operation he could undertake until the situation had declared itself. The idea, then, was to plan several operations and to decide, at a meeting to be held after HUSKY had been launched, which of them to carry out.⁴⁷

The following day, 25 May, at the 6th meeting between the two Allied leaders, it was decided that the Prime Minister and General Marshall shortly would proceed to North Africa where they would confer with General Eisenhower relative to future operations, at which time (it was believed) plans more definite than those formulated at TRIDENT could be made.⁴⁸ At the same time the CCS, having assessed the available means at the disposal of the United Nations and having evaluated their ability to carry out projected or potential operations during 1943 and 1944, announced that with the forces available (except for an additional 108 transport aircraft which would be needed for BRIMSTONE) one of two sets of operations designed to result in the collapse of Italy could be undertaken: (1) an air offensive against Italy to be followed by assaults against the Toe, Instep, and Heel (BUTTERFLIES, GOBLIN, MUSKET), the landings

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not to take place simultaneously; (2) an air offensive against Italy to be followed by an assault against the Toe and invasions of Sardinia and Corsica (LUTHERSS, BRIMSTONE, FIREBRAND).⁴⁹

The final report on the results of the TRIDENT Conference, as prepared by the CCS and approved by the President and the Prime Minister, stated that General Eisenhower was to be instructed to mount such post-HUSKY operations as he felt would be best calculated to knock Italy out of the war and at the same time pin down the largest number of German forces and that a final decision as to the exact operation or operations to be undertaken would be made by the CCS.⁵⁰

When the TRIDENT Conference came to an end the Prime Minister and General Marshall wasted no time in getting to North Africa for their projected discussions with General Eisenhower. On 29 May the Algiers Conference opened with Mr. Churchill, Generals Marshall and Eisenhower, Sir Alan Brooke, General Alexander, Air Marshal Tedder, and other high-ranking officials in attendance. When the conference ended on 3 June surprisingly little had been added to the pro and con arguments which had been presented at TRIDENT and no change had been made in the agreements arrived at in Washington. The British still favored strongly an invasion of southern Italy, the Prime Minister going so far as to state that he was willing to move additional troops, shipping, supplies, etc. into the Mediterranean, even at the expense of other areas, in order to strike a hard and direct blow at Italy. The Americans, on the other hand, declared that they were not so much opposed to the idea of an attack on Italy as they were concerned over the requirements for troops, shipping, and

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materiel necessary to carry out the operation, and over the degree of opposition which might have to be met. The Americans also argued that no final decision could be made until the result of HUSKY was known and the situation on the Russian front was clear, and insisted that the only logical approach to the problem was to set up two forces, one to train for operations on the Italian mainland and the other for operations against Sardinia and Corsica. The conference finally agreed to leave the matter of post-HUSKY operations in the hands of General Eisenhower who was to report his plans as soon as possible after the launching of HUSKY, with any differences of opinion between the British and American leaders to be settled by the British and American governments.⁵¹

Final Strategic Plans, AFHQ, June-August 1943

AFHQ promptly went to work. As a matter of fact its G-3 section had been busy on the problem of how best to knock Italy out of the war even while the Algiers Conference was in session. A directive from the GCS stating that operations after HUSKY would be designed to eliminate Italy from the war and to contain the maximum German forces had arrived at AFHQ just as the conference assembled, and on 31 May the G-3 section, in order to implement the directive, advanced the following conclusions:

1. If Italian resistance appeared to be weakening shortly after the launching of HUSKY, operations BUTTRESS and GOBLET should be initiated, with a target date of 1 September for the former and 1 October for the latter.
2. If Italian resistance and German reaction during HUSKY were

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A Adriatic Sea

Ionian Sea

ROME ITALY

PLANS for the INVASION of ITALY
[] PLANNED BUT NOT EXECUTED
[] PLANNED AND EXECUTED

B. BRACUDA
FIFTH ARMY

AVALANCHE
FIFTH ARMY

BUTRESS
TO CORPUS
FORCIBLY
AVAILABLE
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strong, BRIMSTONE and FIREBRAND should be launched, with 1 October as the target date.

3. If BUTRESS and GOBLET were undertaken and there then appeared to be a good prospect of Italian collapse, MUSKET could be launched on a reduced scale.

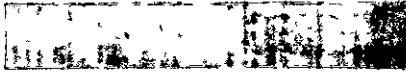
Finally, G-3 warned that the undertaking of any offensive operation after HUSKY would depend upon the release of a majority of the landing craft employed in HUSKY.⁵²

A week later AFHQ produced an outline of a plan to assault Italy south of Naples-Bari as an immediate follow-up to the conquest of Sicily. The plan called for three operations, to be conducted successively. The first would be against the port and airfield at Reggio and the port of San Giovanni. Essentially this was operation BUTRESS. The second would be against the port and airfields at Crotone (GOBLET). The third would be against an unnamed port and adjacent airfield in the Heel. Basically this was MUSKET. Then, if all went well in the Toe and Heel, a drive against Naples would be possible.⁵³

It is interesting to note that at this stage of the planning G-3 stated emphatically that "an assault on the west coast of the Italian mainland would not be practicable."⁵⁴

During the next three weeks AFHQ produced no new plans for operations against Italy, the principal reason being the need for further assessment of requirements and of Italian morale. The last two weeks of June offered a good chance for evaluating Italian morale, the Allies having taken the islands of Pantelleria and Lampedusa on 11 and 12 June respectively.

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On 28 June the G-3 section presented a new memorandum to the Chief of Staff, AFHQ. The ever-present question, as the memorandum indicated, was how many landing craft and how much shipping would be available for post-HUSKY operations and when these would be available. At least 30 days would be required for overhauling landing craft before a new assault could be launched. The memorandum then considered the matter of Italian morale. Joint Intelligence Center (JIC) Algiers had reported some deterioration and expected more to result from HUSKY, but it did not anticipate that HUSKY would cause the Italian Army to collapse. "To achieve this it will be necessary to carry out operations on the mainland, and collapse of resistance would be unlikely to come until our forces had made a rapid advance toward the Naples-Rome area." This view, said the memorandum, seemed to be shared by the Germans inasmuch as they appeared to be reinforcing Italy.

In the light of the above conditions G-3 recommended that BUTRESS be carried out and followed if necessary by GOBLER. Enemy resistance and terrain difficulties would make for slow progress to Naples, but G-3 felt that further amphibious operations against a major port such as Naples or Taranto would not be practicable "owing to the difficulty of providing adequate air support" and because of the shortage of serviceable landing craft. If Italy should collapse after HUSKY and the German forces in southern Italy withdraw, then the Naples area and the heel ought to be occupied and squadrons of the Tactical Air Force be based there, and Rome should be taken and units of Strategic Air Force be located on the adjacent airfields.⁵⁵

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On the same day (28 June) General Eisenhower informed the CCS that if MUSKY were successful but Italian resistance did not collapse he would either mount BUTTRESS, to be followed by GOBLET if necessary, or he would carry out BRIMSTONE. Which of the two operations would be undertaken would depend on the state of Italian morale and the number and location of German forces. The Commander-in-Chief preferred BUTTRESS but felt that it would be unsound to mount it unless he had enough forces to occupy the Heel and to exploit the operation as far north as Naples. If BUTTRESS should prove not to be feasible he would probably undertake BRIMSTONE in October. For either operation he considered that he would have enough aircraft except for long-range fighters. He did not believe that it would be possible to mount MUSKET (as a third and final operation against the mainland, after BUTTRESS and GOBLET) during 1943 because he did not have enough landing craft, adequate air cover would be doubtful, and by October the weather would not be suitable.⁵⁶

On 17 July the CCS accepted General Eisenhower's strategical concept and expressed their interest "in the possibilities of a direct amphibious landing operation against Naples in lieu of an attack on Sardinia."⁵⁷

On 20 July General Eisenhower ordered all planning on BRIMSTONE to cease.⁵⁸ Henceforth, there would no longer be any question as to whether to attack Sardinia or invade Italy--Sardinia was out, and future planning would revolve entirely around the question of what area on the Italian mainland should be hit.

For approximately a month after 28 June AFRH did not produce any further plans for operations against Italy. There was no reason why it

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should--in fact, there was no good way by which it could--go beyond the basic and flexible plans which had already been set forth until the Sicilian campaign was well under way. Only then would it be possible to determine the degree of German resistance which might be expected, to evaluate the state of Italian morale, to know definitely how many landing craft would be available, to assess the effect of bombing on defenses and communications on the mainland, and to put a reasonably accurate finger on all of the other factors which might mean the difference between success and failure.

The fact that no other plans were published by AFHQ between 28 June and 24 July does not mean that there was nothing being done in the theater in preparation for post-HUSKY operations.⁵⁹ On 29 June the A-5 staff section of Northwest African Air Forces (NAAF), which had been made responsible for the air planning for operations against the Italian mainland, assembled at the École Normale at Bouzarea, near Algiers, where in the next two months it drew up air plans for no less than five major amphibious operations. Planning was carried out in close cooperation with staffs representing the Army and the Navy, which themselves were working out the details of possible operations for the Fifth Army and for the several naval elements located in the Mediterranean.⁶⁰

On 24 July AFHQ published a planning paper, and it was at once evident that in the period since 28 June the planners had not been idle. For this document was not concerned with those two old stand-bys BUTRESS and BRIMSTONE but with an entirely new operation, an amphibious landing in the Naples area (TOPHAT). Six weeks earlier the G-3 section had

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announced that no assault on the west coast of Italy would be practicable but now, in the light of developments in Sicily, it had come to the conclusion that such an operation offered attractive possibilities, especially in the area around the all-important city and port of Naples with its numerous and excellent adjacent airfields. The study did not elaborate upon the advantages and disadvantages of the several sectors north and south of Naples where landings might be made but came immediately to the conclusion that the Salerno plain was the best choice, especially from the point of view of German defenses. "The key factor in the operation would be air protection," said the paper; therefore the early capture of an airfield would be essential, and Montecorvino airfield was suitably located.

The paper then presented an estimate of ground, naval, and air forces which would be available for the operation. The estimate was based upon the assumption that this newly conceived operation would replace MUSKIEP and could employ the forces which would have been allotted to it. As far as the air forces were concerned it was estimated that for the Salerno and BUTRESS operations (the latter to precede the Salerno landing) there would be available 2,437 bombers and fighters plus 312 troop carrier planes, the figures being based on an assumption of 75 per cent serviceability and a normal flow of replacements. Aircraft of the Ninth Air Force and the Coastal Air Force, some of which could be expected to take part in the operation, were not included in the estimate.

Finally, the paper recommended that the assault should employ four divisions, one of them armored, should be launched before 20 October, and should not take place at all unless the Allied forces which had previously

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landed on the Toe had reached the line Amendolara-Castrovillari-Belvedere by about 5 October.⁶¹

On 24 July AFEHQ published the final draft of a paper on the advantages of undertaking MUSKET, and on the following day compared MUSKET with possible operations against the Naples area. The paper came to the conclusion that operations to seize the Naples area would be much more effective in exploiting an advance on the mainland of Italy than would similar operations designed to seize the Heel.⁶² The advantages and disadvantages of TOPHAT, as presented in the paper, merit examination inasmuch as the TOPHAT action, launched against the Salerno area under the title of AVALANCHE, was destined to become the principal operation against the Italian mainland.

The advantages listed were as follows: it would give the Allies control of a strategically important area capable of maintaining any forces which could be placed in Italy in 1943 and would enable large Allied forces to be deployed relatively close to the primary Italian objective, Rome; it would tend to draw off and thus contain large Axis forces and would force the enemy's troops in the Heel to withdraw or risk annihilation; it would lighten the pressure on Allied troops moving up through Calabria (the Toe) by cutting through the German communications on the west coast and would threaten the entire rear of Axis forces in Calabria; it would expedite exploitation of the Italian mainland to a greater degree than would the same forces in occupation of the Heel; and it would give the Allies sufficient airfields to continue operations against the Italian mainland, Central Europe, and the Floesti area.

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Disadvantages given were that the operation could not be mounted until the Calabrian campaign had reached the line Amendolara-Belvedere and that landings could be opposed by German forces slightly more rapidly around Salerno than in the Heel.⁶³ To these disadvantages should be added two which had been listed in the paper of the 24th that dealt with Operation MUSKET. They were: first, that there was no major port in all the long coastline from San Giovanni to the Naples area; second, a direct assault against the Naples sector would have to be made outside of the effective range of single-engine fighters.⁶⁴

The COS wasted no time in deciding that an assault against the Salerno area was the right operation to use as a follow-up to BUTTRESS. On 26 July they cabled General Eisenhower that he should "plan forthwith AVALANCHE to be mounted at the earliest possible date" using the resources already available for PRICELESS (a code word covering all post-HUSKY operations), "with the object of expediting the elimination of Italy from the war." The COS promised that carrier-borne aircraft to the extent of the planes of one heavy carrier and four escort carriers would be made available, thereby helping materially to reduce what was probably the greatest potential hazard to the proposed operation, inadequate fighter cover over the beaches.⁶⁵

On the same day General Eisenhower met his own chiefs of staff in Tunis and ordered the preparation of two alternative plans for the invasion of Italy. The first was BUTTRESS, as originally conceived. The second was AVALANCHE, employing the Fifth Army with one U. S. and one British corps, and contemplating the later use of French troops. General Eisenhower



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informed the CCS that political and military developments in Italy would soon reveal which of the two plans should be put into effect.⁶⁶ He also noted that he was planning to rush one division of infantry and one of airborne troops into Naples on short notice (Operation AD HOC AVALANCHE) if Italy should suddenly collapse or if there should develop a rapid German withdrawal from southern Italy. His main concern, he said, was to strike Italy as soon as possible after HUSKY.⁶⁷

A week later General Eisenhower had decided that it would be wiser not to plan for AVALANCHE and BUTTRESS as alternative operations, but that both operations should be launched. "A lodgement must be made in the BUTTRESS area before any bold stroke should be attempted, such as AVALANCHE." Having made this decision he informed the CCS that if BUTTRESS progressed satisfactorily he would send the British 10 Corps in on the right flank at AVALANCHE to drive toward a junction with the Eighth Army moving up from the Toe. But if BUTTRESS should move slowly AVALANCHE would be materially delayed and he would employ the 10 Corps in direct support of BUTTRESS.⁶⁸ The CCS agreed with these ideas.⁶⁹

While AFHQ had been busy with over-all plans for invasion of Italy's long and difficult coastline, NAAF had been working on air plans for each of the several assaults under consideration. On 4 August⁷⁰ it published plans for operation BUTTRESS and its counterpart BAYTOWN. BUTTRESS was currently conceived of as an amphibious assault mounted from North Africa against the Toe of Italy with the object of capturing the area Nicotera-Cittanova all inclusive, together with the port and airfield at Vibo Valentia, and of exploitation toward Catanzaro preparatory to dominating

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the entire Toe. BAYTOWN was an assault against the Toe from Sicily, across the Strait of Messina. It was either to be launched at the same time as BUTTRESS or coordinated with it as to timing. NAAF noted that there was, however, the possibility that BUTTRESS might be replaced by an operation farther north, in which case BAYTOWN probably would be laid on as a holding and diversionary attack. If BUTTRESS and BAYTOWN were launched simultaneously, or were coordinated as to timing, air action in preparation for and support of the two operations would constitute one task; but if BUTTRESS should be replaced by an operation in the Naples area the air forces would be fully used in the northern attack, and apart from the neutralization of the enemy's airfields only limited air support would be available for BAYTOWN.⁷¹

On 31 July Air Marshal Tedder had designated General Spaatz as responsible for planning and preparing the air phase of AVALANCHE and for its execution. On 4 August the A-5 section of NAAF began working on an air plan for AVALANCHE⁷² and on 8 August published its first findings. From the contents of the document it is evident that AVALANCHE and BUTTRESS had come to be considered as alternative operations, which meant that present plans envisioned either an AVALANCHE-BAYTOWN or a BUTTRESS-BAYTOWN combination.⁷³ According to the NAAF study the arrangements which were being made for setting up BUTTRESS would form a part of the arrangements for mounting AVALANCHE. This was possible because shipping for BUTTRESS could sail for AVALANCHE with no change in loading, because supplies for either operation would move direct from Northwest Africa,

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and because a majority of the air forces required for either operation were already in Sicily. There were, however, some differences in the requirements for the two invasions. AVALANCHE would call for a build-up of approximately 20 squadrons of tactical aircraft by D plus 14, while BUTRESS would call for a build-up of only about 16 squadrons by D plus 20; also AVALANCHE would require more tonnage and personnel than BUTRESS, the excess amounting to some 12,200 tons of supplies, 440 personnel, and 85 vehicles.⁷⁴

By 5 August General Eisenhower had come to the conclusion that a direct assault against the port and city of Naples (Operation BARRACUDA) had little chance of being undertaken, even if Italy should suddenly collapse, but that the possibilities of a successful AVALANCHE were steadily increasing. On 9 August he met with his commanders at Tunis. It was agreed that "every effort must be made to mount AVALANCHE and with the X Corps so equipped with landing craft that it can be used either on that operation or on BUTRESS, if latter proves necessary." It was also agreed that it was vitally important for operations in the Toe to move steadily northward, for if the Eighth Army should be stopped in the Toe it would be impossible to launch AVALANCHE during 1943. General Eisenhower then informed his commanders that they were to proceed with "all preparations for AVALANCHE, with target date 7 September"; that BUTRESS would precede AVALANCHE; and that operation BARRACUDA was canceled.⁷⁵

The progress of plans for invading the mainland of Italy naturally pushed into the background all plans for invading Sardinia (BRIMSTONE) and Corsica (FIREBRAND) as alternative operations to AVALANCHE and

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BAYTOWN. Plans for BRIMSTONE and FIREBRAND were not discarded, however. Almost from the beginning it had been planned to use French ground troops against Corsica and as early as 7 June AFHQ had recommended that General Giraud nominate a ground commander to lead the invasion, working in coordination with American and British air and naval commanders and with the command authority to be exercised jointly under AFHQ.⁷⁶ This plan was satisfactory to the CCS. On 10 August--after the decision to launch AVALANCHE had been made firm--General Marshall informed President Roosevelt that the present plan was to let French troops take Corsica and to have a part in any operations against Sardinia which might be necessary. But, said General Marshall--and this indicated the new trend of Allied thinking relative to the two islands--it was hoped that Sardinia would fall of its own weight after the mainland had been invaded and that operations necessary to take it would be relatively insignificant. A few days later Sir Alan Brooke declared that he agreed with the JCS view that there would be no advantage in attacking Sardinia and Corsica at the present time; that there were indications of a German withdrawal from Sardinia; and that it was now believed that if Italy collapsed Germany would not continue to defend either of the islands.⁷⁷

Ten days later, on 20 August, the CCS had seen no reason to change their opinion on the Sardinian-Corsican situation. They believed that the chances were excellent for Fifth Column activities to establish conditions in Sardinia that would permit an unopposed occupation or, with help from local anti-Fascist Italians, at least an unopposed landing. The CCS also believed that Corsica might well be considered for similar action, and suggested that the Fifth Column there should be aided by

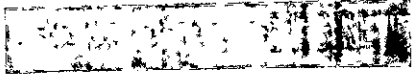
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the SOB (Special Operations Executive [the British OSS]). General Eisenhower's opinion having been requested, he wired the COS that as long as the Germans had 22,000 garrison troops plus 6,400 flak troops on Sardinia the chances for an unopposed landing based on Fifth Column activities seemed remote. He felt that Corsica might be easier to take than Sardinia because the Germans had only the equivalent of one combat team there and the local French had already set up well-organized resistance groups which were being strengthened by arms and supplies sent in by SOB. He believed that he would be unable to move against either of the islands for some time to come because operations on the Italian mainland would absorb all available landing craft and shipping for a long period, but he would watch the situation and exploit any opening that might develop.⁷⁸

These opinions of General Eisenhower were in keeping with his attitude of a week earlier when he had informed General Marshall that he considered it desirable to occupy Sardinia and Corsica but that no effort should be diverted from the main task: the invasion of the mainland.⁷⁹ BRIMSTONE and FIREBRAND, then, were moved into the background and became secondary operations, with the time and nature of their employment to be determined by the situation which existed after DAYTON and AVALANCHE had been launched.

After the U. S. Chiefs of Staff had been informed of the progress of AEAQ's plans for setting up AVALANCHE, General Marshall cabled General Eisenhower asking if he agreed that the JCS were right in believing that present forces in the Mediterranean were adequate to drive beyond Rome,

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set up a line there, seize Corsica and Sardinia, and then invade southern France in May or June 1944. General Eisenhower replied that if the Allies could get a firm grip on the Naples area they would be in a good position, but he noted that the question of whether the force available would be adequate depended entirely on the reaction of the Germans. ⁸⁰

By 10 August, then, it had been definitely decided that Italy would be invaded during the first few days of September and that the invasion would consist of two parts, separate but coordinated, one against the Toe and the other against the Salerno area. There was never much question about hitting the Toe: it was the closest point to Sicily, its defenses were not strong, the Axis had few airfields there, and the area was within easy reach of Allied fighter planes; moreover, exploitation of a successful assault on the Toe might easily result in outflanking the Instep and Heel, and even offered possibilities of a drive against Naples. On the other hand, a decision to invade in the Naples area was not so easily made despite the advantages which would accrue from the seizure of Naples with its excellent port and numerous near-by airfields and its proximity to the exceedingly important city of Rome. Naples itself was heavily defended; to the north the available beaches, along the Gulf of Gaeta, lay behind shoals and were backed up by either rugged hills or marshes and streams; to the south, rising abruptly from the sea, were the high, rough mountains on the Sorrento Peninsula and along the Amalfi Drive as far south as Salerno. From Salerno to Paestum there were good beaches, but mountains a few miles inland would restrict movement, make egress from the area difficult, and give to defending troops and artillery the advantage of high ground.

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Nevertheless, developments during the month of July made it highly desirable to carry out an invasion as close to Rome as possible. The downfall of Mussolini, the accelerated development of the Sicilian campaign, numerous signs that Italy could not continue to prosecute the war and indications that she was about ready to sue for peace, the lessening of the naval and air capabilities of the Germans in the Mediterranean, and an increase in Allied strength--all combined to convince Allied planners that an invasion in the Naples area had a better-than-even chance of success. An examination and analysis of possible spots for the initial assault indicated that the beaches between Salerno and Paestum offered the best site. The beaches were excellent and of considerable length; Axis defenses were limited in number; the area was not too far from the Toe to permit forces pushing out from the vicinity of Paestum to join with units driving north from the Toe; an airfield was available at Montecorvino, only three miles inland; most important of all, the area was within fighter range from bases around Messina and Gerbini.⁸¹

The decision to invade Italy via the Toe and the Salerno beaches did not, however, stop the G-3 section of AFHQ from exploring one other possible invasion site, the Rome area.⁸² A seaborne assault in the vicinity of Rome offered a number of attractions: if Rome fell, Italian morale would probably be so crushed that all organized Italian resistance would end; the seat of government would be in Allied hands; communications between northern and southern Italy would be almost completely severed; and the enterpriser could be expected to enjoy considerable tactical surprise. But the operation had an even larger number of unattractive

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features: its convoys would have to pass through an area within range of enemy fighter-bombers on both flanks but outside effective shore-based fighter protection; the assault would have to be made without adequate fighter cover in an area well supplied with enemy air bases; the Germans could readily concentrate in the Rome area, and were already there in some force; the enemy's rate of build-up in the area would be likely to exceed that of the Allies; the terrain favored the defense; the only port, Civitavecchia, would probably sustain only the initial assault formations and supporting air forces; and to hold Civitavecchia and the line of communications to Rome it would be necessary to protect a strip some 40 miles long, a commitment which would limit considerably the forces which could then be employed to capture and hold Rome itself. Weighing the pros and cons, the G-3 section recommended "that further consideration on a seaborne assault to capture Rome be suspended."⁸³

No plans for operations other than AVALANCHE, BUTTRESS, and BAYTOWN were considered at this time. The only thing left to decide, therefore, was whether BAYTOWN or BUTTRESS would be launched as the prelude to AVALANCHE. From the beginning AVALANCHE and BUTTRESS had been considered alternative operations and as it became increasingly evident that AVALANCHE could and would be launched, BUTTRESS began to receive less and less consideration. On 16 August General Eisenhower informed his commanders that BAYTOWN would take place as early as possible, followed by AVALANCHE; at the same time he cabled the CCS that the crossing of the Strait of Messina should and would be attempted as soon as supporting guns and supplies could be accumulated, that AVALANCHE would be launched on 9 September (barring unforeseen changes in the situation), and that

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the Toe would be assaulted between 1 and 4 September.⁸⁴ On 17 August the NAAF, Fifth Army, and Navy planners in Algiers--who had been planning for AVALANCHE and BUTTRESS simultaneously--dropped BUTTRESS, and on the 19th General Eisenhower announced that BUTTRESS was canceled and AVALANCHE was being mounted.⁸⁵

The QUADRANT Conference, August 1943

General Eisenhower's decision met with the approval of the President, the Prime Minister, and the CCS, currently engaged in the QUADRANT Conference at Quebec. As a matter of fact, discussions relative to Italy dealt but little with the question of the invasion of the Italian mainland. Discussions by the President and the Prime Minister apparently were limited to opinions as to how far north the Germans would set up a line of defense and whether Sardinia would automatically fall to the Allies.⁸⁶ Discussions by the CCS--prior to their final meeting--dealt principally with the value of Italian bases for air raids on southern Germany.⁸⁷

However, the leaders looked beyond the assault phase and drew up an over-all plan for future operations in the European and Mediterranean theaters. Their most important decision was that OVERLOED (the cross-Channel invasion of northern Europe) and POLARBLANK (the destruction of the German fighter force and the smashing of the German war potential by air attacks) were to have first priority. This meant that operations in the Mediterranean would be of secondary importance to operations out of UK. Future activities in the Mediterranean theater were to be conducted with available resources for the purpose of bringing about the

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collapse of Italy and to create diversions of enemy forces and destroy vital Axis installations on the Continent. Operations were to be in three phases: (1) Italy was to be eliminated as a belligerent, and air bases were to be established as far north as the Rome area--and, if possible, in the Ancona area--for bombing the Reich and the Balkans; (2) Corsica and Sardinia were to be seized; (3) constant pressure was to be maintained on German forces in northern Italy and there was to be created a situation favorable for eventual entry of Allied forces--including the bulk of the re-equipped French army and air force--into southern France. ⁸⁸

At their final meeting at Quebec the CCS listened to reports by two members of General Eisenhower's staff relative to the invasion of Italy. Brigadier Whitely reported that BAYTOWN was not expected to meet with much opposition but that there was considerable concern over AVALANCHE. The concern, he said, was owing primarily to the fact that the assault was being undertaken with a small force; it was possible for the Germans to oppose the beachhead with as many as six divisions before 1 October, whereas the Allies did not expect to have an equal number of troops ashore until around 1 December. Whitely also noted that movement and maintenance would be difficult because of heavy demands on ports and personnel and because of poor communications and limited snipping. He doubted that General Eisenhower would be able to maintain a sufficient number of divisions on an operational scale to take care of a heavy German reaction. Brig. Gen. Lowell W. Rocks reported on the air plans for the two assaults: fighters would provide cover, the Tactical Bomber Force would stop movements of

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enemy reinforcements, and Strategic Air Force would operate against enemy airdromes and communications.⁸⁹

The CCS then discussed the twin invasions. They felt that BAYTOWN would not meet strong opposition. AVALANCHE, however, could run into trouble, for when the Germans realized that it was not in great strength they might throw six divisions against it before the end of September even though poor inland communications would handicap their troop movements. Air plans were then considered. With two exceptions, the discussion covered no more than the points which had been presented by General Rooks relative to the employment of fighters, tactical bombers, and strategic bombers--the exceptions being the CCS observations, first, that General Eisenhower had requested that the B-24's which had been used in the Floesti raid of 1 August be left in the theater so as to increase Strategic's attacks on enemy airfields, and, second, that it was not planned to move units of Strategic onto the mainland until the Allies had possession of the airfields around Rome.⁹⁰

Having wound up the conference, the CCS sent to General Eisenhower extracts from the decisions which they, the President, and the Prime Minister had made relative to future operations in the Mediterranean⁹¹ and gave him details of the forces, supplies, shipping, etc., which would be available to him for carrying out these operations.⁹²

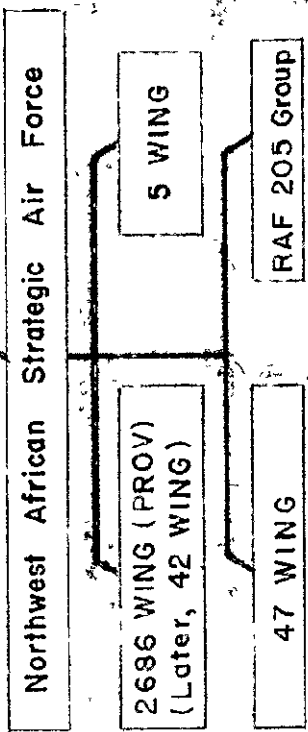
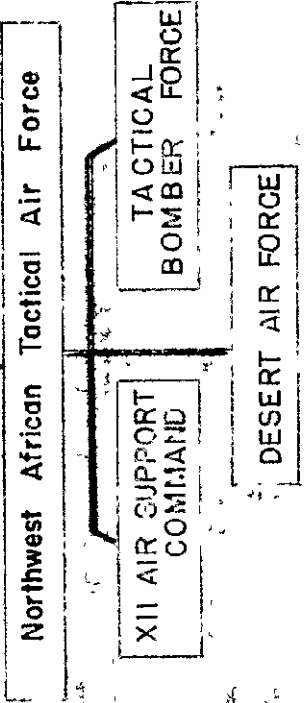
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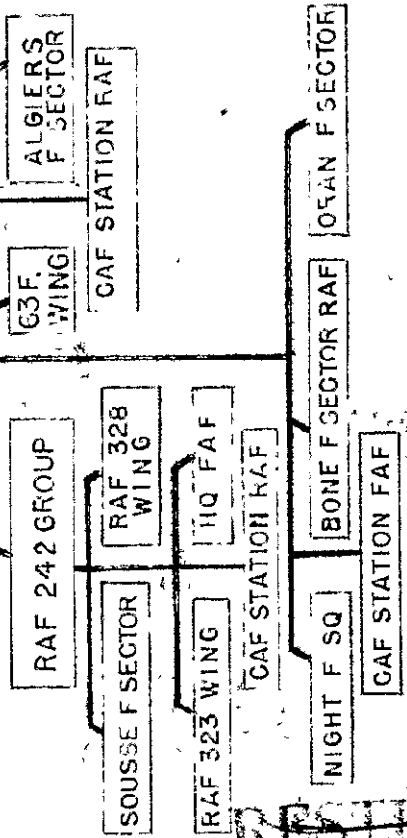
NORTHWEST AFRICAN AIR FORCES



NORTHWEST AFRICAN TROOP CARRIER COMMAND



NORTHWEST AFRICAN COASTAL AIR FORCE



Northwest African Training Command

NORTHWEST AFRICAN AIR SERVICE COMMAND

Photo Reconnaissance Wing

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Chapter II

FINAL PLANS FOR THE INVASION OF ITALY

Organization of HAAF

The decision to mount ANVIL and BAYTOWN having been made by General Eisenhower and approved by the U. S. and British leaders, there still remained the all-important task of working out the numerous and complex details necessary to the launching of the two operations. The job was made easier for General Eisenhower and his assistants by three factors: first, the conquest of Sicily had been completed on 17 August; second, the greater part of the planning had already been done; third, no revamping of the existing air forces organization was necessary, the Sicilian campaign and the last half of the Tunisian campaign having shown that the organization which had been established on 18 February 1943 was a sound one and entirely adequate for launching an invasion of Italy.

A broad picture of the structure of the Allied air forces in the Mediterranean when the final plans for the invasion were being made is essential to an understanding of the campaign in southern Italy.¹ All Allied air forces in the Mediterranean were under the Mediterranean Air Command (MAC), headed by Air Chief Marshal Tedder. MAC was a small planning and policy staff of American and British officers which coordinated the requirements of subordinate commands and served as a sort of "brain trust" for the Mediterranean air arm. There were three principal elements under MAC: Headquarters, Malta (Air Vice Marshal Park); RAF, Middle East (Air Chief Marshal Douglas), which had in it the U. S. Ninth Air Force

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under Maj. Gen. Lewis H. Brereton; and the Northwest African Air Forces (NAAF), a combined American and British force under Lt. Gen. Carl Spaatz, who also served as Tedder's deputy. The American element of NAAF was the Twelfth Air Force, commanded by General Spaatz.

Internally, NAAF was organized into the following functional subdivisions:² Northwest African Strategic Air Force (NASAF), under command of Maj. Gen. James Doolittle; Northwest African Tactical Air Force (NATAF), Air Vice Marshal Sir Arthur Coningham; Northwest African Coastal Air Force (NACAF), Air Vice Marshal Sir Pugh Lloyd; Northwest African Troop Carrier Command (NATCC), redesignated XII Troop Carrier Command on 1 September 1943, Brig. Gen. Paul L. Williams; Northwest African Air Service Command (NAASC), Brig. Gen. Harold A. Cartron; Northwest African Training Command (NATC), Col. John W. Monahan; and Northwest African Photo Reconnaissance Wing (NAFRW), Col. Elliot Roosevelt. Each of these elements of NAAF had in it both American and British personnel and planes, and several had one or more units representing South Africa, Canada, Australia, France, and Poland.

NASAF was composed of one wing (four groups) of U. S. B-17's, one wing (three groups) of U. S. B-26's, one wing (two groups) of U. S. B-25's, and four PAF wings of Wellingtons. There were also two groups of U. S. B-24's, presently on loan from the Fifth Air Force but soon to be transferred to the Twelfth. Escort for the bombers was supplied by NASAF's three P-38 and one P-40 fighter groups, all from the United States. The American element of NASAF was XII Bomber Command; the RAF element was

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the 205 Bomb Group.

MACAF was broken down into three parts. One was XII Air Support Command which consisted of two groups of A-36's, two groups of P-40's, one group of Spitfires, and one squadron of P-51's for reconnaissance. XII ASC was entirely American in personnel. The second element was the Tactical Bomber Force (TBF), made up of two U. S. groups of B-25's, one U. S. group of A-20's, one PAF wing of Baltimores and one of Bostons, one SAAF wing of Bostons and Baltimores, and a squadron of RAF Hurricanes. The third element was Desert Air Force (DAF), which was almost entirely British. The Desert Air Force operated through an Advance Headquarters and a Rear Headquarters. Under the former were two U. S. groups of P-40's, three wings of RAF Spitfires, and one wing of RAF Kittyhawks--all of the RAF elements being attached from the Middle East. The Rear Headquarters controlled three RAF wings (flying a mixture of P-40's, Hurricanes, Spitfires, and Hudsons) and one Polish flight.³

MACAF was the most heterogeneous element in the theater, and it flew an amazing collection of planes. Its principal lower echelons were: the PAF 242 Group which was composed of two RAF wings flying Spitfires, Hurricanes, Beaufighters, Baltimores, Wellingtons, and Hudsons; the 62d Fighter Wing (Palermo Sector) with one U. S. Spitfire group and one squadron of RAF Beaufighters; the Tunis Sector; and the Sousse Sector.⁴ The disposition of the other elements of Coastal was determined largely by the responsibility of that air force for defending Allied territory and convoys over the vast stretches of land and water from Casablanca to Bizerte. Hence, within Coastal were the Algiers Sector, Bone Sector,

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Oran Sector, Casablanca Sector, and CAF Port Lyautey, CAF Blida, CAF Tafaraoui and CAF Bone. These elements had in them U. S., RAF, and EAF squadrons and flew everything from P-39's to Swordfishes and from Spitfires to Walruses. All of the U. S. squadrons were elements of XII Fighter Command. Two other units completed the CAF line-up: a group of P-39's (U. S.) used for patrolling offshore and a P-24 group employed in anti-submarine activity.

Northwest African Troop Carrier Command consisted of the 51st and 52d Troop Carrier Wings. The former was composed of three U. S. groups flying C-47's and C-53's and one RAF wing flying Albenarles and Halifaxes; the latter was composed of four U. S. groups with C-47's. Troop Carrier's normal jobs were to transport airborne troops, tow gliders, move in supplies and equipment to forward areas, and evacuate wounded. When ordered, it would transport personnel and supplies in rear areas.

Northwest African Air Service Command was a combination of the original XII Air Force Service Command (XII AFSO) and the supply and maintenance elements of the RAF Eastern Air Command. It coordinated U. S. and RAF requirements in supply, aircraft repair and maintenance, airfield construction, aircraft erection, and other service activities which were needed by the air arm.⁵ Assigned to AAFSC were one group of U. S. C-47's and one mixed squadron of RAF C-47's and Hudsons, all under the operational control of Mediterranean Air Transport Service (MATS).

MATS, under Brig. Gen. Robert A. Kauch, had been established in May and activated in July 1943. Its functions were to control all transport

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aircraft engaged in the movement of supplies, personnel, and mail in North Africa north of 30° latitude, and to coordinate all schedules involving such movement. On 5 July it began operating, its planes flying regular schedules between North African points. Some of MATS' aircraft--all of which were C-47's--were transferred to it from MAASC; the remainder stayed under assignment to MAASC but were under the operational control of MATS. XII AFSC exercised administrative control over the new transport service, and much of the administrative personnel which was assigned to MATS was drafted from XII AFSC.⁶

Northwest African Training Command (redesignated XII Air Force Training Command on 26 August 1943) consisted of one U. S. P-39 group, two U. S. A-36 squadrons, and two French squadrons of P-39's. The command had been organized primarily to provide training in combat aircraft by experts versed in tactical methods and practices then in actual use at the front. It also taught pilots to fly new types of aircraft and prepared for combat those pilots with no operational training. Presently, it was training both USAAF and FAF pilots and crews. The administrative structure of the Training Command was firm, but its personnel--except for administrators and trainers--was fluid because of a steady inflow of personnel to be trained and a regular outflow of personnel whose training was completed.⁷

Northwest African Photo Reconnaissance Wing was made up of the U. S. 3d Group, which had in it one squadron each of E-17's, F-4's, F-5's, and BT-14's; one RAF Spitfire squadron; one SAAF F-8 (Mosquito) squadron; and one FAF F-4 squadron. One group of U. S. P-38's was scheduled for early

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arrival in the theater and for assignment to MAPRI. Thirty more F-8's also were scheduled for shipment.⁸ The P-38's were particularly desired by MAPRI, for theater pilots considered them as equal to, if not better than, the Spitfire Mark-9 at 30,000 feet and above.⁹

On 31 August NAAF had in it 5,695 RAF and 4,215 U. S. aircraft, a total of 10,110 planes.¹⁰ These strength figures, however, are misleading for they are by no means a true index of the fighting power of NAAF. Probably two-thirds of the RAF planes were nonoperational,¹¹ which meant that the RAF had only around 2,000 planes which could be used against the Axis, and this reduced the total NAAF strength to about 6,200. Figuring 75 per cent serviceability the Allies had some 4,650 planes available. But this figure also is misleading; for it includes various types of aircraft at various stations all the way from Casablanca and Gibraltar to Messina and Malta, many of which could not support an invasion of the mainland. According to 23d SCORU (Statistical Control and Operational Report Unit), the Twelfth Air Force had only between 2,000 and 2,100 operational bombers, fighters, and transport planes at the end of August.¹² Probably not more than 2,500 to 2,750 of NAAF's planes were of the right type and in the right place to be employed directly in an invasion of Italy,¹³ and not more than 3,500 could be counted on for service during the subsequent campaign.¹⁴

As to personnel, NAAF had in it on 31 August 170,418 RAF and 97,020 USAAF personnel, a total of 267,438 bodies.¹⁵ However, personnel figures likewise have to be read closely, for they include thousands of bodies

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whose location and/or duty was such that they could contribute only indirectly--in some cases very indirectly--to an invasion of Italy and a following campaign.

Outline Plans for BAYTOWN and AVALANCHE

It is unnecessary to follow in detail the various stages through which the over-all plans for BAYTOWN and AVALANCHE passed; it is enough to know the details of the final plans for each operation.

BAYTOWN was to be essentially a British affair, employing the British Eighth Army, with air cooperation provided by the predominantly British Desert Air Force. Planning for this operation was much easier than planning for AVALANCHE, primarily because BAYTOWN was to consist merely of moving two divisions across the narrow Strait of Messina and landing them in an area where Axis defenses were believed to be weak, and secondarily, because it was no problem to provide adequate air cooperation from near-by Sicily. The final plans called for one British division to land at Gallico and Catona and one Canadian division to land at Reggio. Both landings were to be covered by artillery fire from the Messina side of the strait and by naval fire. Air cover would be furnished by DAF. The immediate objectives of the Eighth Army were Reggio and the Toe airfields; its ultimate mission was to clear the Toe and sweep northward for a junction with the right wing of AVALANCHE and to fan out toward the east for a link-up with other British forces which were to be landed near Taranto between D plus 2 and D plus 7 in Operation GIBON.¹⁶

Up to D minus 7 the Allied air forces were to pave the way for BAYTOWN

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by attacks on enemy airfields with the object of neutralizing the GAF. From D minus 6 to D minus 1 the assault areas were to be isolated, enemy movements into them interdicted, and defense positions reduced. On the night of D-1/D-day Troop Carrier would drop airborne forces while night fighters would cover the assault convoys. On D-day fighter cover over the assault areas would be furnished by DAF, and normal close air action by Tactical Air Force. Subsequent air operations would be the usual ones of preventing the enemy air forces from interfering effectively with the Eighth Army, of hitting Axis concentrations, and of giving direct assistance to the ground forces.¹⁷

DAF would exercise operational control over Tactical Bomber Force under the direction of Tactical Air Force through D-day. After D-day the greater part of TBF was to be turned over to XII Air Support Command for use in AVALANCHE, but the 47th Bombardment Group (U. S. A-20's) and the 232 Wing (RAF Baltimores) would be retained by DAF for coordination with the Eighth Army as it moved up the Toe.¹⁸ DAF, along with Headquarters, Malta, would be responsible for the protection of any convoys during AVALANCHE which might move along the south and east coasts of Sicily.¹⁹

D-day for BAYLORN was set for the early morning hours of 3 September. The Outline Plan for Operation AVALANCHE,²⁰ prepared by the Fifth Army planning staff, was published on 15 August. A corrected version was issued on 26 August to meet changes in the strategic situation. The plan, as revised, assumed that Italian resistance would be approximately that encountered during HUSKY and that Germany would be forced to keep the bulk

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of her air and ground forces on the Russian front. It further assumed that BAYWOLF would be mounted. The plan called for an invasion of the Italian mainland by two corps and by follow-up troops that would bring the total ^{to} 125,000²¹ against enemy forces estimated at 39,000 on D-day but capable of being increased to more than 100,000 by D plus 3. The mission of the Fifth Army was to seize Salerno and the airfield at Montecorvino and then, driving inland, to capture the port of Naples and secure the airfields near-by so that further offensive operations might be carried out from a firm base. The American VI Corps (Maj. Gen. Ernest J. Dawley commanding) and the British 10 Corps²² (Lt. Gen. Sir Richard L. McCreery), sailing from Northwest African ports, would initiate the invasion by simultaneous attacks on the beaches south of Salerno on 9 September, H-hour being 0330.

The Outline Plan also provided for an Army floating reserve, consisting of two forces. Force I had one reinforced regimental combat team of the U. S. 45th Division and was to embark from Sicily prepared to land on D-day over any of the previously assaulted beaches. Force II consisted of one reinforced regimental combat team of the U. S. 82d Airborne Division which was to be prepared to land on beaches not previously established.²³

Follow-up troops included the balance of the 45th Division, the 34th Division, the 13th Field Artillery Brigade, the 1st or 2d Armored Division, the 3d Division, one American tank battalion (medium), and supporting troops. Maintenance for both corps was to be supplied primarily over the beaches until the port of Naples had been made available, although 10 Corps might count on receiving a small amount of supplies through the port at Salerno.

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The 10 Corps (less Rangers and Commandos) was to go ashore on three principal beaches between Picentino Creek and the Sele River, the area lying five to nine miles southeast of Salerno. The Rangers were to land at the town of Maiori and the Commandos at Vietri. The immediate objectives of 10 Corps were the port of Salerno (to be taken by the Commandos moving down from Vietri), Montecorvino airfield, the important rail and road center of Battipaglia, and Ponte Sele on Highway 19 over the Sele River. The Rangers were to advance north from Maiori and seize the Mount di Chiunzi and Nocera-Pagani passes between Salerno and Naples. The Commandos were to seize Vietri and then move east to Salerno.

VI Corps was to land on four beaches between II Fiumarello and Solofrone Creek and just west of the ancient village of Paestum. Its immediate objective was the high ground which ran in an arc from the Sele River through Altavilla, Albanella, and Rocca d'Aspide to Mount Vesole and Magliano. On the extreme right of the VI Corps the 141st Regimental Combat Team was to occupy key points in the mountain arc from Mount Vesole to Agropoli at the southern end of the Gulf of Salerno. The dividing line between the two corps would be the Sele River, and the junction of the forces was planned to take place at Ponte Sele.²⁴

The naval plan,²⁵ entitled Western Naval Task Force Operation Plan No. 7-43 (short title Avon/VI), laid down the organization and missions of the Western Naval Task Force under Vice Adm. H. K. Hewitt, USN. The Task Force was composed of the Control Force, the Southern Task Force, the Northern Task Force, and the Support Carrier Force,²⁶ which, collectively, were to transport the assault troops to their points of debarkation

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off the beaches and to support them by naval gunfire and carrier-based aircraft until they were firmly established on shore. The Control Force included the flagship (USS Ancon), a Ficket Group to screen the attack forces from hostile surface elements, and a Diversion Group which was to make a feint against the beaches northwest of Naples to draw off enemy forces. The Southern Task Force was to carry VI Corps to its beaches, while the Northern Task Force was to transport 10 Corps. The Support Carrier Force, consisting of one carrier and four escort carriers, was to supply the maximum practicable fighter protection to the naval forces and to assist the Sicily-based fighters of XII Air Support Command in controlling the air over the beaches.

Efforts to Strengthen NAAF

Planning for the role of the air forces in AVALANCHE was a complicated and difficult task. Not only did the convoys have to be protected on their long trip from several North African ports but--and this was the greater problem--the assault beaches were barely within range of Sicily-based fighters and were within easy reach of Axis airfields around Naples and Foggia.

The distance from Salerno to Trapani was 226 miles, to Gerbini 224 miles, and to the Messina area 173 miles. Fighter radius, including 10 minutes of combat, was as follows: P-39, with one long-range tank, 350 miles; A-36, with one long-range tank, 300 miles; Spitfires, with one 90-gallon tank, 180 miles; P-39 and P-40, with one 75-gallon tank, 150 miles; Beaufighters, 300 miles. The above figures meant that P-38's could reach

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the assault beaches and remain over them for an average of one hour, that A-36's could stay for 30 minutes, and that Spitfires could stay for 20 minutes. P-39's and P-40's were not able to reach the area and return and so could be used only for convoy duty near Sicily. Beaufighters, operating from Germini, could provide protection at night over the beaches and the offshore shipping.²⁷

In addition to the Sicilian fields there was some possibility of using the fields at Reggio and Vibo Valentia on the Toe, respectively 184 and 152 miles from Salerno.²⁸ Their use, however, could not be considered in planning because there was no way to forecast the success of BAYTOWN.

The distance which the fighters had to fly in order to cover the beaches created two potential bottlenecks. One was in the supply of 90-gallon tanks for the Spitfires. Toward the end of MUSKY there were only 840 of the tanks in the theater; but by the time AVALANCHE was launched additional tanks had been shipped in, and fortunately during the operation the commitment of fighters was on a smaller scale than anyone could have anticipated. The other danger was that there would not be enough airfields to take care of the Spitfires, all of which had to operate from the Messina area in Sicily. Fortunately again, fast work by aviation engineers in preparing fields and a carefully planned schedule of operations removed that danger.²⁹

AFHQ's concern over the possibility that it might be difficult to provide adequate fighter cover for the assault because of the distance involved was increased by the fear that there might not be enough bombers and fighters on hand to neutralize the enemy's air arm and disrupt his

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lines of communication. This would be a bigger job in Italy than it had been in Tunisia or in Sicily, yet nothing would contribute more to the protection of the assault forces. Unfortunately, the long and strenuous Tunisian campaign and the intensive effort required during HUSKY had thinned out and worn down both crews and planes. General Eisenhower felt that the best guarantee of success would be a temporary doubling of the number of heavy bombers currently in the theater, for then the German air force could be paralyzed and the German ground forces immobilized. On 23 July he suggested to the CCS that if they would shift several groups of B-17's from the Eighth Air Force to the Mediterranean, letting them operate against Italy from early August until a week after AVALANCHE had been launched, that the chances of success would be greatly enhanced. This suggestion was refused by the CCS on the ground that it "would seriously impair the combined bomber offensive at a critical period."³⁰

Two weeks later General Eisenhower asked that three P-24 groups which had been sent down from UK and which had bombed Floesti in the great raid of 1 August be left in the Mediterranean for employment against targets in Italy. General Eaker, commanding the Eighth Air Force in UK, protested, saying that the three groups were his only experienced B-24 units and that he wanted them for blows against the CAF before the advent of bad weather. General Arnold agreed with General Eaker. General Eisenhower then argued that without the groups he "would be skating on very thin ice in AVALANCHE." If the invasion were successful, he declared, the Allied Air Forces would be provided with most favorable bases for the continuation of the air offensive against Europe, "but to have a fair chance to gain these bases

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we need this strength at this time." He felt, too, that there was an immediate need for the units because of the quality and quantity of German ground troops in Italy and because the Germans were reportedly bringing in an additional bomber group. The only way to prevent concentration of Axis forces would be by bombing; and the only way to keep down the Axis air threat would be by hitting Italian airfields prior to D-day. If the three groups of B-24's were returned to the UK from the Mediterranean, IAAF would have only four B-17 groups and two understrength B-24 groups. Moreover, there were not enough replacements for the six groups, to say nothing of the fact that the P-38 pilots were nearing exhaustion. Air Marshal Hedder and General Spaatz also were convinced that loss of the three groups would add much to the risks connected with AVALANCHE.³¹

In spite of these arguments General Arnold returned the groups to UK on the ground that the Eighth had to destroy a preponderance of the German fighter factories before the onset of bad weather. He suggested that the Mediterranean would receive an indirect support from the departed groups as their attacks would pull German fighter aircraft from the Mediterranean and their destruction of German industries would be reflected in a reduction of GAF defensive ability.³²

There had been one other possible way by which IAAF could increase its heavy bomber strength to the point where it could feel that it had enough long-range offensive aircraft to guarantee the neutralizing of the enemy's airfields and the disruption of his lines of communication. That was by re-equipping the medium groups in the Mediterranean theater with

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B-17's. The bombardment striking power of an air force is measured in terms of the weight of bombs which can be dropped on enemy targets in a given period of time. Expressed mathematically, striking power is the sustainable number of sorties multiplied by the weight of bombs which can be dropped per sortie. In the Mediterranean theater, during the late spring and summer of 1943, B-17's were dropping 2.545 tons of bombs per sortie while B-25's were dropping only 1.305 and B-26's only 1.330; moreover, only one-half of all B-17 missions were escorted by fighters, while nine-tenths of all B-26 missions had fighter escort. General Spaatz had come to the conclusion that by re-equipping most of his medium groups with fortresses he would not only increase the striking power of IAAF but would release fighter aircraft for use in other types of operations, and on 24 June he had suggested to AC/AS, Plans at Headquarters, AAF that the change-over be made.

Plans studied the "desirability, feasibility and acceptability" of the Spaatz suggestion and came to the conclusion that the conversion and re-equipping of five groups of mediums would effect a delay in the build-up program of the Eighth Air Force and that the conversion would deprive the ground forces of needed tactical cooperation. On this basis General Spaatz' suggestion was rejected.³³

Being unable to bolster his heavy bomber strength, General Eisenhower then asked for the loan of four groups of medium bombers from UK, but the request was turned down by General Marshall.³⁴ The final blow to hopes of an increase in air strength came a few days before the launching of AVALANCHE when General Eisenhower was informed that the USAAF would send

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him no more P-38's until October. HAAF especially needed P-38's as they were extremely valuable for long-range fighter work, serving as convoy and bomber escort, covering assault areas, and giving ground cooperation. The loss rate (60 in August and 24 in the week ending 5 September) already exceeded the replacement rate, and less than 250 were currently available.³⁵

It began to appear that Air Marshal Tedder had had a clear picture of the strength that would be available when he informed General Spaatz on 31 July that the air forces which he would have at his disposal for the planning and execution of future air operations would have to come "from the resources already permanently allotted to your command."³⁶

However, before the invasions were launched HAAF was to be strengthened somewhat by the addition of several units from the Ninth Air Force. Approval to shift these units had been requested by General Eisenhower early in August and General Marshall had endorsed the plan on 7 August. General Eisenhower, with the approval of General Brereton of the Ninth, was to set the time of the transfer. The only restrictions on the shift were: first, that it was not to interfere with TIDALWAVE (operations against the Ploesti oil fields) and, second, that some U. S. troops would have to remain in the Middle East to support the Air Transport Command, assist the British, and handle intelligence.³⁷

The number of planes which could be made available to HAAF by the Ninth was increased early in August when 36 planes and crews from the Eighth Air Force and 26 planes and crews from the United States were sent to the Ninth to be distributed among its five B-24 groups.³⁸

Effective 22 August the 57th, 79th, and 324th Fighter Groups (P-40's)

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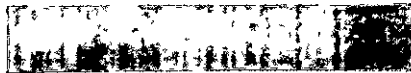
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were transferred from the Ninth Air Force to XII Air Support Command and the 12th and 340th Bomb Groups (B-35's) to XII Bomber Command; effective 23 August the 316th Troop Carrier Group (less the 37th Squadron) went to XII Troop Carrier Command. All of these units, being American, thus came under the direct administrative control of the Twelfth Air Force. In addition to the above units seven Air Service Command units were transferred between 23 and 26 August. In all, 1,300 officers and 7,000 enlisted men were transferred.³⁹

General Eisenhower also was able to add to his air strength by the addition of several hundred gliders. He had decided as soon as AVA-LANOME had been projected that he would employ airborne troops in the operation and had ordered the 82d Airborne Division returned from Sicily to Kairouan (Tunisia) for assembling, re-equipping, and training. On 1 August he asked for 320 Waco gliders (CG-4A's) and 50 Horsa gliders to be delivered at once. The request for the Wacos was promptly approved by the CCS. The request for the Horsas was also approved but, as they had to be towed from UK by RAF planes, further approval of the British Air Ministry was necessary. This was given and the Horsas were moved to the Mediterranean by the RAF 38 Wing. The wing then stayed in the theater, on loan, until October 1943.⁴⁰

These additions gave NAF a total of some 700 Wacos and 60 Horsas, which together were enough to take care of planned operations. But the decision to use large numbers of airborne troops threatened to create a new bottleneck: transport aircraft to haul paratroopers and to tow gliders. The bottleneck never materialized, however, partly because the RAF 38

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Wing was available, and partly because the final commitment of transport aircraft totaled only 318 planes, whereas 365 were available.⁴¹

The Air Plan for AVALANCH!

The Over-All Plan. General Eisenhower had stated that the plans for AVALANCH! would not be altered whether he received additional air strength or not;⁴² consequently, MAAF's A-5 section prepared its air plans long before D-day, and in terms of known available aircraft. The broad task assigned to MAAF fell into four main divisions:

1. To neutralize the enemy air forces by air bombardment.
2. To provide air protection over the assault convoys, the assaults, and subsequent operations.
3. To prevent or effectively retard the movement of enemy forces into the assault area, and assist the operations by air action.
4. To transport and drop airborne troops engaged in the operation.⁴³

In addition the air forces were to provide:

1. The defense of territory already held by the Allies.
2. Protection of Mediterranean convoys.
3. Attacks on Axis convoys and naval units.
4. Antisubmarine reconnaissance and strikes.
5. Strategical and tactical photographic reconnaissance.
6. Air-sea rescue.
7. Air transportation.⁴⁴

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Strategic Bombing. To carry out the first and third of the four major tasks, NAIF had four B-17 groups, two B-24 groups (on loan from the Ninth Air Force), nine squadrons of Wellingtons, three groups of B-26's, and two groups of B-25's in Strategic Air Force, plus two groups of B-25's in Tactical Bomber Force. Assuming a 75 per cent serviceability in all units there were 346 heavy day bombers, 388 medium day bombers, and 122 medium night bombers--a grand total of 856 bombers for neutralizing the Axis air forces and isolating the battle area.⁴⁵

As a matter of fact Strategic had already gone a long way toward realizing these two objectives before the end of the Sicilian campaign on 17 August permitted it to throw its entire weight against the mainland of Italy. It has been noted above that beginning on 4 December 1942 the Ninth Air Force initiated a moderate bombing effort against Italy in support of the Desert Campaign, that Malta-based planes added to the effort in January 1943 with bombing and strafing attacks on railroads, stations, warehouses, etc., and that the scale of these attacks slowly but steadily increased throughout the winter and spring of 1943; it has also been noted that on 4 April 1943 the Twelfth Air Force joined in the attack on the mainland.⁴⁶ With the end of the Tunisian campaign in mid-May, Strategic was able further to increase its air campaign against Italy, and while these attacks basically were in preparation for HUSKY they also were clearing the way for AVALANCHE and BAYTOWN.

During May major air assaults were delivered against Taranto and Reggio di Calabria (across the Strait from Messina), Civitavecchia (the principal port between Naples and Leghorn), Grosseto, Lido di Roma A/D,

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Capodichino A/D, Ponigliano A/D (a few miles from Naples), Foggia, Leghorn, and Naples. The largest single mission was against Leghorn with 92 B-17's bombing its railroad yards, shipbuilding yards, and oil tanks. However, the heaviest weight of bombs for the month fell on Foggia and its principal airrome in four attacks by a total of 96 B-24's and 94 B-17's.⁴⁷

During the first 10 days of June the heavies were busy with the job of reducing Pantelleria, and the Italian mainland enjoyed a comparative respite from Allied bombers; but in the last two-thirds of the month the heavies and mediums gave key spots on the peninsula a hard pounding. At Spezia a battleship, a cruiser, docks, and oil storage facilities were damaged when 112 Fortresses unloaded over the city and its harbor; Reggio and San Giovanni were hit by a total of 156 sorties; and Leghorn's industrial area was pounded with 261 tons of bombs dropped by 96 B-17's. Other localities which received major assaults were Naples, Grottaglie A/D (near Taranto, on the Heel), Cancellio (on the Volturno, 25 miles above Naples), Battipaglia (an important road and rail center some 13 miles southeast of Salerno), Bari, and Salerno. During the period the main weight of Allied attacks was directed against enemy bases and communications, primarily to hinder the movement of reinforcements from Italy to Sicily. This was especially true of the efforts of the Twelfth Air Force, whose heavies carried out 317 effective sorties and whose mediums flew 566.⁴⁸

During May and June, Malta-based Beaufighters and Spitfires continued the system of sweeps which they had initiated in January, bombing and

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strafing trains, railway stations, airfields, etc.⁴⁹

During July the heavies and mediums of the Twelfth and Ninth Air Forces hit Italy often and hard, concentrating their efforts against airdromes and marshalling yards. Some 45 major attacks were made, totaling more than 3,000 sorties. The greatest single raid was on 19 July when 500 B-17's, B-24's and B-25's hit Rome's marshalling yards (and a near-by airdrome) in a fine exhibition of precision bombing. The next largest single assault was against Naples, delivered by 363 heavies and mediums of the Twelfth and Ninth; marshalling yards, industrial areas, and fuel installations were hit. On five other occasions Naples was the target for attacks, with considerable damage resulting to her docks, M/Y's, stocks, and other military objectives. The A/D at Vibo Valentia (up the Toe from Reggio) received the third heaviest attack of the month, being hit by 123 mediums, and was bombed on three other occasions by heavies or mediums. San Giovanni's M/Y, ferry slips, and railroads took the fourth hardest single pounding when the town was hit by more than 100 B-17's. In all, it was visited four times.⁵⁰

Airdromes which were bombed during July included Reggio, Crotona, Foggia, Bari, Pomigliano, Montecorvino, Capodichino, Grosseto, Capua (20 miles north of Naples), Grottaglie, Aquino (between Naples and Rome), and Viterbo (45 miles north of Rome). M/Y's and railroads were hit at Reggio, Foggia, Salerno, Battinaglia, Bologna, and at several points on the Toe.⁵¹ The peak of Strategic Air Force's bombing effort prior to the end of the Sicilian campaign came during the two-week period of 10-24 July.

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Thereafter, the effort fell off, the decline being due in large measure to pilot fatigue.⁵²

Toward the end of July the air forces set up Operation ~~PARADE~~ for the purpose of destroying the air ferry service which the Germans were operating between Sardinia and the Italian mainland. Regular sweeps were carried out over the Tyrrhenian Sea. Results of the operation were limited, however, until late in September.⁵³

During the first 17 days of August attacks were continued against M/Y's and A/D's. The M/Y's at Rome received their second bombing. Foggia's satellites and Viterbo were hit hard, as was Crotone. Other targets included Sapri (in the Toe, Gulf of Policastro), Battipaglia, Naples, Grazzanise A/D (near Naples) and Reggio, and other towns on the Toe. An interesting development during the period was the beginning of a series of attacks against road and rail bridges, a procedure which in time would push the old standard operation against M/Y's into the background. Bridges over the Angitola River (at the narrowest part of the Toe) were attacked six times by B-25's and B-26's, and a railroad bridge at near-by Catanraro was bombed.⁵⁴

Thus, by the time the Sicilian campaign came to an end bombers from NAAF and the Ninth Air Force already had dropped several thousand tons of bombs on key cities, M/Y's, A/D's, harbors, bridges, and other installations on the mainland, and the program of neutralizing the Axis air forces and of cutting communications to the AVALANCHE-BARFOLK areas was well under way.

It is, of course, impossible to evaluate the effect which the Allied

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bombing of airfields, lines of communication, harbor facilities, shipping, warehouses, and other installations during the Tunisian and Sicilian campaigns had on the Axis military potential, ability to resist, and morale at the time of the invasion of the Italian mainland, or to determine how large a part these preliminary bombings played in the success of AVALANCHE and BAYTOM. The damage inflicted by early bombings could have been repaired, so that an airfield which had been useless during the Sicilian campaign might again be handling its normal complement of planes when Allied troops went ashore at Salerno, and a railway line which had been completely interdicted during July might be in full operation by September. But the effect of bombing is always cumulative, and there is no doubt that the tons of demolitions and incendiaries which fell on key spots on the mainland between 4 December 1942 and 17 August 1943 not only contributed heavily to the success of the Tunisian and Sicilian campaigns but built up a degree of destruction which, with the concentrated attacks that were laid on in the period between 13 August and the launching of BAYTOM and AVALANCHE, reduced sharply the ability of the German Air Force to interfere with the invasions and limited the reinforcements and supplies which the Axis could move into southern Italy. Every bomb which fell on an Italian target, no matter how many weeks before the invasion, contributed something to reducing the Axis war strength and the morale of the Italians and thus to the success of the invasion.

Cover for Canyons, Assaults, and Beaches. The second major task

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assigned to the air forces was to provide air protection over the assault convoys, the assaults, and subsequent operations. Protection for the convoys from the time they left the normal convoy routes was to be the responsibility of Coastal Air Force (CAF) up to the last light of D minus 1, when the responsibility would pass to Tactical Air Force (TAF).⁵⁵ CAF would take care of any AVAランチ convoy which might pass through the Strait of Messina. For carrying out its assignment CAF had some 850 aircraft, 372 of which were RAF units attached from the Middle East and India, and 478 of which were French Air Force units.⁵⁶ The number of planes was more than enough for the single job of protecting the assault convoys-- but CAF had many other tasks to perform. It was charged with the defense of Allied territory, including airports, ports, cities, and military installations; it watched over normal convoys; it conducted reconnaissance of enemy shipping; it carried on a constant air war against Axis submarines and surface craft; it was responsible for air-sea rescue for all Allied air units in the western Mediterranean. Its operations extended from Casablanca to Sicily and over thousands of square miles of ocean. Furthermore, a large number of its planes were types such as Swordfishes, Dakotas, Walruses, and Albatrosses, none of which could be used for convoy duty.⁵⁷ General Eisenhower felt that CAF's forces were inadequate for its several tasks and strengthened it by giving it a B-24 antisubmarine squadron which had been operating under the Navy at Port Lyautey in French Morocco.⁵⁸

It was planned that on and after D-day CAF would be responsible for shipping to within 40 miles of the beaches, and that TAF would be responsible beyond that point. TAF planned, upon taking over from CAF

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the protection of the inshore convoys, to furnish cover by employing two squadrons of P-38's and one each of A-36's and Spitfires, plus one of Seafires. For example, elements of the 1st, 14th, and 82d Fighter Groups (P-38's), on loan from Strategic, would keep 4 aircraft over the convoy at all times from 0900 to 1000, 8 aircraft from 1000 to 1300, 12 from 1300 to 1400, 20 from 1400 to 1500, 24 from 1500 to 1600, 28 from 1600 to 1700, 36 from 1700 to 1800, 40 from 1800 to 1900, and 36 from 1900 to 1950.⁵⁹

XII Air Support Command was given the job of furnishing adequate air cover for the assault and for subsequent ground operations. This was the most difficult of all the tasks assigned to the air arm. The fields closest to the Salerno beaches were those around Messina and they were out of P-39 and P-40 range and barely within range of Spitfires carrying 30-gallon tanks, which meant that the job of protecting the landings would fall upon NAAF's three groups of P-38's, two groups of A-36's, one group of U. S. Spitfires, and 18 squadrons of RAF Spitfires, with four squadrons of Beaufighters handling the situation at night. The Outline Air Plan for Operation AVA~~LAN~~ estimated that the P-38's would fly two sorties each per day, staying over the assault area for one hour, and that each Spitfire would fly two sorties, staying over the assault area for 20 minutes, which would give an average of 36 land-based aircraft constantly over the beaches on D-day. In addition, 110 Seafires (from one light fleet carrier and four escort carriers) would be available to provide fighter cover amounting to a continuous patrol of 22 aircraft during D-day and 11 to 16 aircraft on D plus 1. This would give a total of 58 planes over the

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beaches at all times during the daylight hours of D-day. One group of P-38's was to be especially trained to fly in darkness so that it could take off before dawn and return to base after dark, and thereby provide cover for the assault area during the first hour of dawn and the last hour of dusk.⁶⁰

Patrol areas for the fighters were laid out as follows:

1. Capri-Salerno: Seafires at 12,000-16,000 feet; P-38's at 10,000-14,000 feet; A-36's at 5,000-7,000 feet.
2. Agropoli-Fisciotta: P-38's at 10,000-14,000 feet.
3. Salerno-Agropoli: Spitfires at 16,000-20,000 feet; A-36's at 5,000-7,000 feet.⁶¹

Assuming 75 per cent serviceability in all units it was estimated that the air forces would have available for convoy and assault cover around 322 single-engine fighters, 206 twin-engine fighters, 32 night fighters, and 110 carrier-based Seafires, a total of 670 aircraft.⁶² The number was sufficient for an ordinary operation but if the German and Italian air forces should react sharply the number might well be inadequate because of the limited time that each plane could operate over the beaches and because the length of the patrol was certain to result in early pilot fatigue. For these reasons it was recognized from the beginning that the first major objective of the ground forces must be Montecorvino airfield, three miles inland, and that aviation engineers would have to go ashore immediately behind the ground forces for the purpose of constructing landing strips in the Paestum area.⁶³ Further, it was planned (assuming that Montecorvino would be taken on D-day or D plus 1) to fly in fighter squadrons as follows:

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D-day or D plus 1: 3 squadrons of Spitfires (U.S.)

D plus 1 or D plus 2: 4 squadrons of Spitfires (RAF) and
1/3 squadron of nightfighters

D plus 2 or D plus 3: 4 squadrons of Spitfires (RAF)

D plus 3 or D plus 4: 3 squadrons of P-40's (U.S.)

D plus 5 or D plus 6: 6 squadrons of A-36's (U.S.)⁶⁴

When established ashore these units would be under the control of the 64th Fighter Wing, XII ASC.⁶⁵

This build-up was to continue steadily after D plus 6, provided air-fields were available--which meant, provided the Naples complex was in Allied hands--so that by D plus 28 (7 October) it was planned to have on the mainland 36 squadrons of single-engine fighters, 7 squadrons of light bombers and fighter-bombers, 8 squadrons of medium bombers and 5 squadrons of Coastal Air Force planes, a total of 56 squadrons.⁶⁶

Of great importance to XII ASC in its multiple job of protecting shipping and the beaches, coordinating with the ground troops, and directing air reconnaissance was the decision to set up a fighter director control on shipboard. The USS Ancon, flagship for the commander of the Western Naval Task Force, was chosen as the director vessel for all land-based fighter aircraft in the assault area. Maj. Gen. Edwin J. House, commanding XII ASC, 8 officers and 9 enlisted men of XII ASC, 1 officer and 2 enlisted men of EBF, 1 officer each from the 31st and 33d Fighter Groups, 20 enlisted men from the 927th Signal Battalion, 9 enlisted men from the 64th Fighter Wing, and 2 RAF officers and 2 enlisted men were to comprise the group which would direct the fighters from the Ancon.

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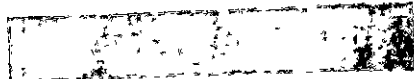
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HMIS Hilary, with 4 officers and 3 enlisted men from XII ASC, 64th Fighter Wing, and DAF, would serve as the auxiliary fighter control ship, with USS Samuel Chase as standby. As soon as fighter squadrons were based on the mainland, General House and his control personnel would go ashore and direct subsequent fighter operations from the headquarters of XII ASC, which would be established as close as possible to the headquarters of the Fifth Army.⁶⁷

Inasmuch as the primary role of XII ASC would be to provide the maximum security for shipping and the beaches against air attack, it was expected that very little air effort for direct support of ground troops moving inland would be available until after the primary aim had been attained. However, the 111th Observation Squadron was placed under the control of XII ASC for reconnaissance both planned and on call. Tactical reconnaissance aircraft were to call the Ancon while returning from their missions, and detailed interrogation results were to be sent by radio from Headquarters, XII ASC (Rear), in Sicily, to the Ancon after the planes had landed. Ground troops which found themselves in need of direct support by fighters and fighter-bombers would send their requests for air assistance through their divisional headquarters, which would pass on the request to Air Support Control, Headquarters, XII ASC. Tentacles were set up in various brigades and divisions for the purpose of communicating with the Ancon.⁶⁸

Air-Navy liaison was established by assigning three naval officers from the Western Naval Task Force to XII ASC. One officer trained P-51

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pilots in spotting procedure; the other two were to act on requests from naval sources for fighter cover and calls for spotting planes.⁶⁹

Airborne Operations. The fourth major task of the air forces was to transport and drop whatever airborne troops General Eisenhower might decide to employ during and after the assault period. As soon as AVANCEMENT had been projected, plans were made for dropping one regimental combat team (reinforced) of the 82d Airborne Division north of Naples for the purpose of destroying bridges over the Volturno River and otherwise delaying enemy forces moving south. Subsequently, it was to withdraw along high ground to the southeast or toward Naples for a junction with the Fifth Army. The 82d had at once been moved from Sicily to Mairouan (Tunisia) for re-equipping and training. By 1 September its air mission had been made slightly more ambitious: it was to land on the night of 8/9 September by glider and paratroop drop near the Volturno, with the intention of seizing and defending the town of Capua and adjacent airfields, as well as destroying the near-by bridges over the Volturno. For this operation 157 C-47's and C-53's and 157 Jaco gliders of the 51st Troop Carrier Wing and 80 C-47's and C-53's of the 52d Wing were to be employed-- a total of 247 aircraft and 157 gliders. Subsequent changes in plans resulted in the 51st Wing being committed for 137 aircraft and 137 gliders and the 52d Wing for 181 aircraft for operations on and after D-day.⁷⁰

In preparation for these operations the 51st and 52d Wings initiated refresher courses in night formation flying, glider training, and parachute infantry dropping. During the last week of August the two wings

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flew special training flights. These were conducted at night, the courses, distances, drop zones (DZ's), landing zones, and objectives simulating as near as possible the ones which would be encountered during the actual AVALANCHE operation. For example, on 27 August the 52d Wing flew from Kairouan, through the Hergla corridor, around Pantelleria to Souficha, to Enfidaville, and then simulated dropping the 506th Parachute Infantry Regiment on a selected DZ 2-1/2 miles southwest of Enfidaville. On the 29th the 52d flew to Malta and returned through the Monastir corridor to the DZ. On both trips the crews were familiarized with naval visual and aural aids and with the employment of Rebecca-Eureka (ground-air communications). On 28 and 31 August the two wings held combined training exercises, the latter trip being a final dress rehearsal for AVALANCHE. On this flight radar was employed, and use was also made of three pathfinder aircraft.⁷¹

On 2 September units of TCC began moving to staging airfields in Sicily, and on 5 and 6 September TCC moved the combat echelon of the 83d Airborne Division from Kairouan to southern Sicily.⁷²

Thus, well ahead of H-hour on D-day, MAAF had completed the necessary plans and preparations for carrying out its four main tasks of neutralizing the enemy air forces, retarding or preventing the movement of Axis forces into the assault area, providing air protection for the convoys, the assaults, and subsequent operations, and, finally, transporting and dropping airborne troops.

Secondary Air Operations. MAAF was also ready to carry out its half-



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dozen other tasks incident to a successful AVALANCHE DAYTON. The majority of these jobs were the responsibility of Coastal Air Force which was to defend the territory held by the Allies (except on the eastern coast of Sicily where Desert Air Force had the responsibility), to protect the normal Mediterranean convoys, to attack Axis convoys and naval units (with which job Strategic would assist when feasible), to carry out antisubmarine reconnaissance and strikes, and to provide air-sea rescue facilities. All of these tasks had long been the normal responsibility of Coastal, and only in the matter of air-sea rescue was it necessary to make special provisions for Coastal's operations during the invasions.⁷³

The first step toward taking care of the crews which might land in the Tyrrhenian Sea between northern Sicily and Salerno was to occupy several small islands which lay north of the Sicilian coast and which could be used as bases for navigational facilities, medical supplies, rescue launches, etc. On 22 August a small naval party took over the two most important of these islands, Lipari and Stromboli.⁷⁴ The next step was to increase the size of the air-sea communication and rescue organization which was already set up under the PAF 242 Group, Coastal Air Force. As finally worked out, the plan provided that the Air-Sea Rescue Control at Headquarters, 242 Group and the air-sea rescue organizations of the Bizerte and Tunis Sectors would remain the same as heretofore, and that the following additional facilities would be provided:⁷⁵

1. HMS Antwerp, available D - 1 to D / 3, operating in an area between 39°N to 39°30' N and 13°30' E to 14° E [i.e., in a square located about half-way between Ermani, Sicily, and Salerno], with VHF and medical facilities, and with wireless and POL for use by rescue boats and planes.

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2. The Island of Ustica, 45 miles NNW of Palermo, with two Controllers, VME, navigational facilities, a cable to Palermo, medical supplies, etc.

3. The Island of Salina, in the Lipari Group, some 30 miles NNW of the Milazzo Peninsula [in NW Sicily], with the same facilities as Ustica.

4. Homeing and landing facilities at Termini and Porizzo in NW Sicily.

5. A control-center for air-sea rescue in the AVA-LANCHE area at Palermo.

6. Eleven marine craft, twelve PBY's, Walruses and Wellingtons for search and rescue, one squadron of Bisleys for search and dinghy dropping.

NAAF's other jobs were to meet requirements for air transportation, other than for airborne troops, and to conduct strategical and tactical reconnaissance. Air transportation was the responsibility primarily of XII Air Force Service Command. XII AFSC was responsible for the movement of all Air Corps passengers and freight; it exercised a limited amount of administrative control over Mediterranean Air Transport Service which, since June 1943, had handled the transportation of all passengers and freight not of Air Corps origin; and it controlled the Ferry Pilot Service which delivered aircraft to depots and combat units. The setting up of missions, whether for ferrying or for the movement by air of passengers and freight, was the responsibility of Northwest African Air Service Command.⁷⁶

In addition to the normal jobs of moving planes, passengers, and freight it was expected that special jobs would be required of the air transportation elements of NAAF as a result of AVA-LANCHE. On 26 August AFSA announced that "provided the tactical situation will permit and aircraft can be made available the following air transport services will be operated" in support of the invasions:

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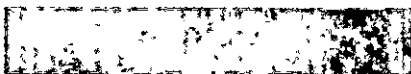
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1. Emergency service for the dropping of supplies by parachute.
2. Emergency service for the delivery of supplies to an airfield in WINDSOOK [area of the DAYTON assault].
3. Regular service for the delivery of ordnance stores.
4. Evacuation of casualties.⁷⁷

For carrying out these commitments, planes of the 29 squadrons of Troop Carrier Command and the two U. S. squadrons and one RAF squadron of Northwest African Air Service Command would be available. To facilitate operations the CG, Troop Carrier Command, in collaboration with the AOC, RAF 216 Group, was ordered to establish an advance control alongside Headquarters, XII ASG for call forward of transport aircraft, arrangements for fighter protection, and for handling other matters incident to Troop Carrier activities in the forward area.⁷⁸

Photo reconnaissance would be handled by the Northwest African Photo Reconnaissance Wing, except for a small amount of tactical reconnaissance which would be performed by the 111th Observation Squadron, assigned to XII ASG. NAPRW was composed of the 3d Photo Reconnaissance Group (U. S.) which had in it seven squadrons of aircraft. A new group, the U. S. 6th, equipped with P-38's, was scheduled to arrive in September.⁷⁹ NAPRW had been taking pictures of Italian cities, harbors, railroads, airdromes, and other installations since the days of the Tunisian campaign. In June and July 1943 its planes had flown 670 photographic sorties, many of them over Italy. In August it flew 528 sorties (484 of which were successful), a majority of which were over mainland targets, and took thousands of

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vertical and oblique photographs. A portion of the verticals, covering the AVALANCHE and BAYTOWN areas, had been enlarged for detailed study; the low obliques had been annotated and made into a schematic map, printed and distributed to units as far down the line as battalions. ⁸⁰

Air Service Command. Basic to any air force operation, and especially important in the launching of an invasion, is the work of the air service command. XII AFSC supplied the U. S. air force with its gasoline and bombs; built, improved, and maintained its airfields; administered its airdromes; provided repair and maintenance for its aircraft; and handled its Air Corps supplies. It assembled the hundreds of replacement fighter aircraft which were brought into the theater on shipboard. Its erection points put together the CG-4A gliders which would be used during the invasion, erecting 555 between the middle of May and 1 July 1943, and an additional 318 during July and August. ⁵¹ This was all noncombat, behind-the-line-of-scrimmage work, but XII AFSC was also scheduled to participate directly in AVALANCHE. Eighteen officers and 194 enlisted men of III Air Service Area Command (one of the three lower echelons of XII AFSC) and subordinate units of Signal Corps, Ordnance, and Quartermaster Corps were to move from Sicily and land on North Beach on D-day, and 440 bodies and 87 vehicles from an engineer battalion, a quartermaster company and an ordnance bomb disposal squad were to move from North Africa and go ashore immediately behind the assault troops. These air service men were to construct temporary landing strips, repair Montecorvino airfield, and move air force supplies from the beaches to dumps and from dumps to airfields so that the fly-in squadrons of fighters would be able to operate at the

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earliest possible moment. By D plus 1b it was planned to have some 3,500 air service troops ashore.⁸²

Last-Minute Changes in Air Plans

By 1 September, then, virtually all of the basic plans for the role to be played by the air forces in AVALANCH had been completed, and the bulk of the preparations necessary for the carrying out of the plans had been finished. Then, with almost dramatic suddenness, certain of the plans and preparations had to be changed.

The changes stemmed back to the middle of the summer when Mussolini's Fascist government had been overthrown. Thereafter, the government of Marshal Badoglio began making plans for withdrawing Italy from the war, plans which were hastened by the Allies' conquest of Sicily; and in August Allied and Italian representatives began secret negotiations for an armistice and an Italian surrender. On 18 August General Eisenhower was informed by the CCS that, with the approval of the President and the Prime Minister, he was to send one American and one British officer to Lisbon to report to the British ambassador and to meet General "C" [General Castellano, Italian Army]. General "C" would be given armistice terms. General Eisenhower was to decide the day and the hour on which the end of hostilities would be announced and in effect; the Italian government would proclaim the surrender immediately after it had been announced by General Eisenhower.⁸³ Maj. Gen. Walter S. Smith (U.S.), who was General Eisenhower's chief of staff, and Brigadier E. W. Strong (Brit.) were sent to Lisbon.⁸⁴

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Progress of the negotiations during the remainder of August led General Eisenhower to the conclusion that in all probability an Allied-Italian armistice would be signed before 9 September, D-day for AVALANCHE, and he began making preparations for taking quick advantage of a withdrawal of Italy from the war by a stroke designed to seize the Rome area. Such a stroke appeared necessary to the Allied Commander-in-Chief for several reasons. The German occupation of Italy had become so strong as to change materially the estimates on which AVALANCHE had been originally planned. Large German reserves in northern Italy could be used aggressively whenever the German commander desired. Allied air action could delay the movements of such reserves but could not completely paralyze communications. The Italians were more frightened of German strength and reprisals than of the threat of Allied invasion or even of Allied bombing. They were especially concerned about Rome and it appeared that they would not agree to an armistice unless assured of help in that area. It seemed to Eisenhower that it would be a good gamble to send one Allied division into the Rome area because the success of AVALANCHE might turn on obtaining enough Italian help to delay materially the movement of German forces into southern Italy.⁸⁵

On the basis of these conditions General Eisenhower decided to employ one airborne division in the Rome sector, provided he could be sufficiently assured of the good faith of the Italians. On 3 September a short-term armistice was signed at Syracuse, Sicily, by General Smith for General Eisenhower and General Castellano for Marshal Badoglio. Troop Carrier Command was immediately notified that on the night of D-1/D-day it would

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 transport a task force of the 82d Airborne Division to the Rome area. The operation was given the code name "GIANT II."⁸⁶

On 6 September, after several days of conversations with General Castellano, General Eisenhower cabled the COS the latest status of his plans for the invasion. ~~DAYTON~~, already launched and moving ahead according to schedule, was to remain unchanged. ~~AVALANCHE~~ also was unchanged except in the matter of employing airborne troops. The 82d Division, originally scheduled to be used in direct support of ~~AVALANCHE~~ by being dropped in the Capua area, would not be so employed but instead would be dropped in the Rome area on the night of D-1/D-day. The Italians, who were preparing airfields at Galdonia, Littoria, Cerneteri, and Furbara (all in the Rome complex) to receive the troop carrier planes and the paratroopers, would undertake to protect the fields against the Germans and would provide transportation, supplies, extra ammunition, etc. The task of the 82d would be to assist the Italians in preventing a German occupation of Rome.⁸⁷

At 0200 hours on 7 September Brig. Gen. Maxwell D. Taylor of the 82d and Col. William T. Gardiner of Troop Carrier left Palermo for Rome for the purpose of completing arrangements for the execution of ~~GIANT II~~. In Rome the two officers speedily became convinced that the mission would meet with disaster: the Germans had built up their strength in the Rome area and had stopped the flow of gasoline and munitions to the Italian troops; the Italians had overcommitted themselves and were in no position to render effective aid to the airborne troops or to guarantee the security of the airfields.⁸⁸ This information was transmitted to General Eisenhower on 8 September. ~~GIANT II~~ was promptly canceled.⁸⁹

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Thus on the eve of the launching of AVALANCHE all of the original plans were in effect with one exception: there would be no drop of airborne troops in the region of Capua for the purpose of stopping the southward movement of German reinforcements for the Salerno area.

Air Operations, 18 August-2 September

While preliminary talks between representatives of General Eisenhower and Marshal Badoglio relative to the surrender of Italy had been in process, that is, from 18 August to the signing of the armistice on 3 September, MAAF's Tactical Air Force had operated on a very limited scale. Its units were engaged in regrouping, reorganizing, and resting in preparation for the intensive operations which would begin when SALVO was launched. This was particularly true of the fighters and fighter-bombers.⁹⁰ Strategic, however, had been busily engaged in smashing Italian cities, port facilities, M/Y's, A/D's, rail and road bridges, and other installations. The outline air plan for AVALANCHE and the plan for SALVO had provided that up to 2 September Strategic would attack enemy airfields in southern and central Italy with sufficient force to prevent effective build-up and with the object of forcing the enemy to move his air units to more northerly fields, thereby neutralizing the Axis air force as far as operations against SALVO and AVALANCHE were concerned. When this requirement had been met the remaining available air effort was to be directed against enemy communications and other suitable targets, the attacks being designed to retard the movement of reserves into the assault areas and to isolate the battlefields.⁹¹

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Strategic's steady attacks on Italian airbases during the summer had put it in a position by 18 August where it did not have to concentrate on airfields but could divide its attacks between that type of objective and communications facilities. As a matter of fact, Strategic had already neutralized virtually all of the more important airfields in southern Italy with the exception of Foggia and its satellites;⁹³ and from the end of the Sicilian campaign to the launching of *BARITONE*, almost all of its major assaults were directed against *M/Y*'s and railroad junctions and stations. *M/Y*'s constituted an unusually good type of communications target in southern Italy. From Naples south there were only four shops (one major and three minor) for repair and maintenance of locomotives, and only 10 *M/Y*'s (excluding Brindisi and Lecce, which were of no importance in the strategic situation).⁹³

The greater part of the supplies which supported the Axis forces in southern Italy had to come down the narrow foot from the northern part of the peninsula, whether they originated in the Po Valley--which contained three-fourths of Italy's industrial installations--or in Germany. In moving down the Boot the supplies had to pass through one or more of three railroad bottlenecks: Rome, Naples, and Foggia. If those points could be smashed the transportation of Axis men and materiel down the Tyrrhenian coast to the Toe and down the Adriatic coast to the Heel would be seriously handicapped. The *M/Y*'s at Rome and Naples had already been hit hard, but the *M/Y* at Foggia, although it had been damaged, was still in full operation. In order to complete the task of cutting communications and at the same time to lay the foundation for the job of isolating the

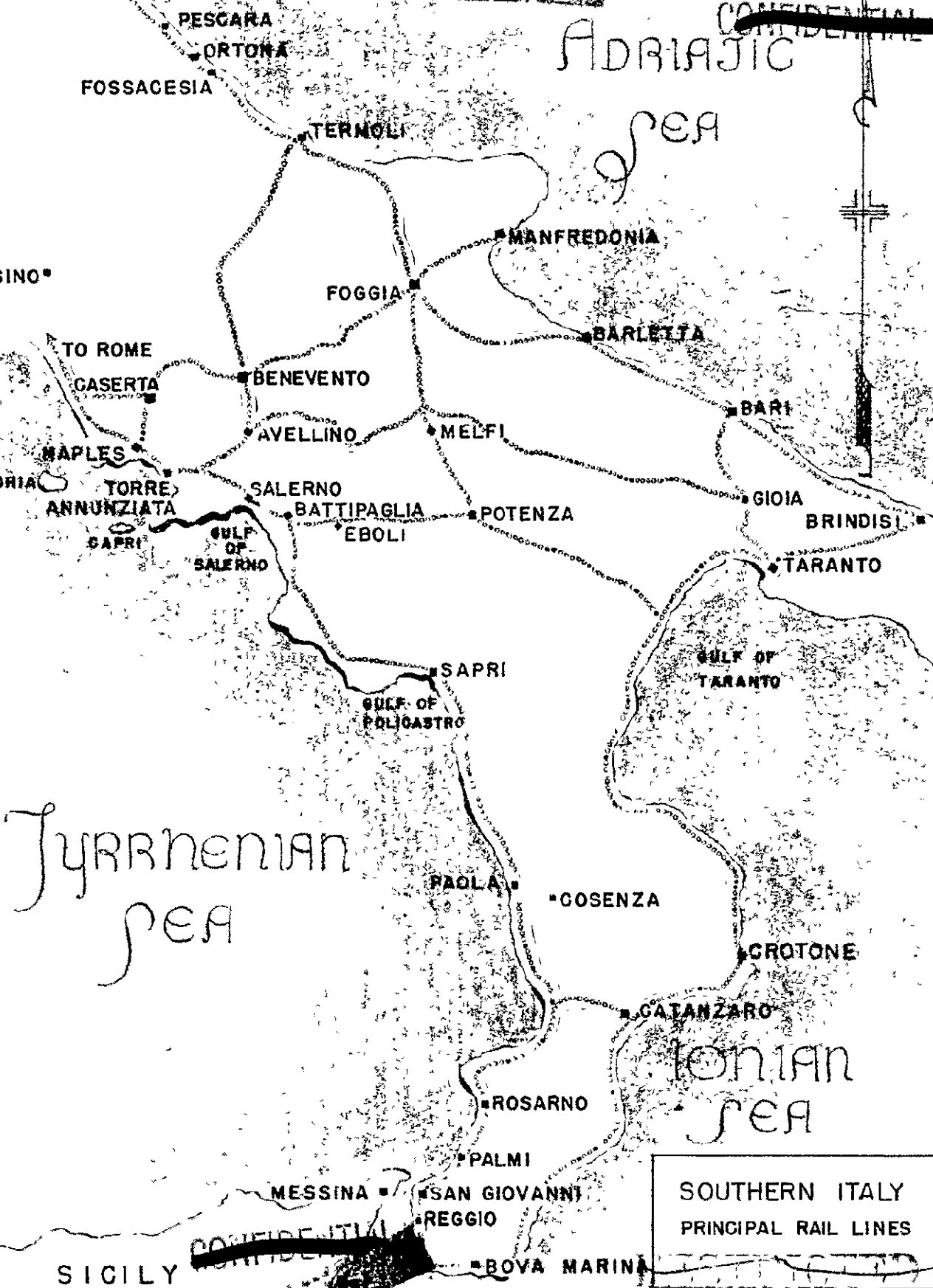
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TO ANCONA

ADRIATIC SEA



CASSINO

TO ROME

CASERTA

NAPLES

ISORIA

TORRE ANNUNZIATA

CAPRI

GULF OF SALERNO

SALERNO

BATTIPAGLIA

EBOLI

POTENZA

GIÒIA

BRINDISI

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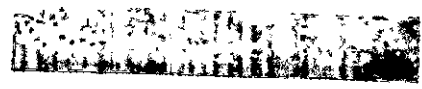
SOUTHERN ITALY
PRINCIPAL RAIL LINES

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two battlefields, Foggia should be knocked out and the rail lines from Rome to Naples, Naples to Foggia, Naples to Salerno, and Salerno to the Inster should be wrecked, with some attention being paid to a few key spots north of Rome.

MAAF started this final phase of the preliminary bombing of Italy on 18 August with an attack by mediums against the rail lines, roads, and bridges of Angitola and Staletti and completed the phase on 2 September with a series of B-17 attacks against M/Y's at Bolzano, Bologna, and Trento and a B-26 raid against the Cancellio M/Y's.⁹⁴ During these 16 days MAAF's U. S. heavies flew almost 1,000 sorties and its mediums (both Strategic and Tactical) flew close to 2,000.⁹⁵

The heaviest attack during the period was directed against Foggia, which was hit on 19 August by 646 tons of bombs dropped by 152 Fortresses and 71 Liberators, the primary target being the railroad junction, and hit again on that night (19/20 August) by Wellingtons. As a result of these bombings the lines to Naples, Manfredonia, and Bari were cut, numerous hits were scored on the M/Y's and on near-by factory buildings and tracks, considerable damage was inflicted on the locomotive and repair shops and on rolling stock in the freight sidings, and the city's electric substation was severely damaged. When the British Eighth Army entered Foggia on 23 September it reported that these two attacks, together with later bombings, had been "most effective," the damage surpassing all earlier estimates.⁹⁶

The second heaviest attack was on Pisa, delivered by 152 B-17's on 31 August, 452 tons of bombs being dropped on the M/Y's, an aircraft



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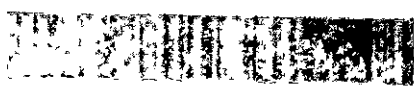
factory, gas works, and other industrial targets. Wide-spread destruction was caused and, in addition, the railway lines to Leghorn and Vada were cut.

Other major attacks by heavies were made against Sulmona, Terni, Bologna, Canello, and Pescara. Sulmona was hit by 69 B-17's on 27 August: the H/Y's and locomotive repair shops were severely damaged, the main line to Pescara was blocked, and at least two explosive stores were hit. Terni was attacked by 76 B-17's on 28 August. The damage to rolling stock was heavy and the line to the steel works was cut. The raid on Bologna was carried out by 71 Fortresses and resulted in the destruction of warehouses, factories, and rolling stock and damage to the Padua-Venice rail line. Canello was the target for 67 B-24's on 21 August, the railway station, air depot and H/Y's being hit. Pescara was visited by 45 Liberators on 31 August; there was a heavy concentration of hits on the H/Y's and direct hits on the station, engine sheds, and railway bridge.

Smaller-scale attacks were delivered by heavies against Aversa and Orte H/Y's, Taranto shipping and H/Y's, Bari and Foggia H/Y's, and the supply line through the Brenner Pass. The latter raid, 2 September, was effective out of all proportion to the number of planes involved. Twenty-four B-17's dropped their bombs on the bridge across the River Iscra, destroying the bridge and blocking all traffic from Germany to Trento, and on the only other line running south to Merano, cutting it. On the same day 19 other Fortresses cut the Trento highway bridge and the adjoining bridge over the Adige River.

During the period the night effort of Liberators and Halifaxes of

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RAF, Middle East were directed against the M/Y's at Crotona. These attacks were on a small scale but were effective in disrupting activity.

The more than 1,500 sorties flown during the period by mediums were, like those of the heavies, directed principally against M/Y's and industrial installations in their vicinity. The day attacks were delivered by SAAF B-25's and SAAF and RAF B-26's, and the night attacks by SAAF Wellingtons.

The heaviest of the attacks of the mediums against M/Y's was at Salerno, which was bombed on five different occasions by a total of 139 Wellingtons and 112 U. S. mediums. Torre Annunziata's M/Y's and steel works finished the period in second place, receiving three attacks by a total of 126 Wellingtons and 51 U. S. mediums. The Battipaglia M/Y's took the third hardest pounding, from 54 Wellingtons and 107 B-25's and B-26's. Other M/Y's which were hit by more than 100 effective medium bomber sorties were Aversa, Bagnoli, Cancelli, Caserta, and Villa Literno, all in the Naples area; Benevento, northeast of Naples; Taranto; and Civitavecchia. The yards at Catanzaro and Sapri, in the Toe, also were hit hard, and the M/Y's at Foggia were bombed by 52 Wellingtons in a follow-up to the severe B-17 raid of 19 August.

There were no large-scale light bomber attacks on the Axis lines of communication during the period between the end of the Sicilian campaign and the opening of the Italian campaign. The heaviest effort against any one target was the bombing of Lamezia rail and road junction, in the Toe, by a total of 53 RAF and SAAF light bombers on 27 and 28 August.

The fighter-bomber effort for the period included bombing attacks by



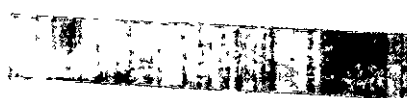
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U. S. A-36's on the rail and road junctions at Castrovillari, Catanzaro, Cosenza, Micastrò, Lamezia, and Sibari, the M/T's at Mellaro and Sapri, and the town of Cetraro (all in the Toe). After bombing, the A-36's usually strafed trains and transport vehicles. P-40's attacked bridges, motor transport (M/T's), and barracks in the Toe. At night, Malta-based Mosquitoes bombed and strafed trains, road traffic, and railway stations on a small but highly successful scale.

As a result of NAAF's attacks on the enemy's lines of communication, which between 17 August and 6 September involved 4,419 sorties flown and 6,203 tons of bombs dropped, Allied reconnaissance aircraft were able to report on the eve of the launching of BAYLONN that the lines were blocked and all railway movement had ceased at Pisa, Sulmona, Cancellò, Aversa, Benevento, Foggia, Salerno, Paola, and Catanzaro, and that at Rome's Littorio M/T's and Battipaglia there was limited activity with repairs still in progress. In addition, large quantities of rolling stock had been destroyed.⁹⁷

The constant and destructive attacks on the Axis rail communications forced the enemy to use more and more road transport into southern Italy. This not only withdrew transport vehicles from other spheres of activity and put an additional strain on fuel reserves, but the limitations of road transport as compared with rail made the enemy's problem of supply increasingly difficult.⁹⁸

A blitz on enemy airfields such as had preceded the Sicilian campaign was not necessary as a prelude to BAYLONN and AVALANCHES, for the back of the Axis air forces had already been broken. It was necessary only to



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give the group of fields around Foggia a thorough going over and to hit again such already damaged fields as showed signs of renewed activity. On 25 August the Foggia complex received a severe pounding. As a preliminary, 140 SAF P-38's came in on the deck and strafed grounded aircraft and road and rail transportation in the area. Then came 136 B-17's, escorted by other Lightnings, which dropped over 240 tons of 500-pound GP bombs and 20-pound fragmentation bombs in the space of 30 minutes on satellites Nos. 2, 4, 7, and 10. In addition to wreaking havoc among the airfield buildings, at least 47 aircraft were destroyed on the ground and 13 damaged.⁹⁹ The only other attacks by Fortresses on enemy airfields were against the fighter base at Casua, hit by 76 planes, and the bomber base at Viterbo, attacked by 35 aircraft. At both places a number of enemy planes were destroyed or damaged on the ground and at Viterbo buildings and facilities suffered new damage.

Heavies of the Ninth Air Force got in one attack against airfields, striking Sari A/D; and RAF Halifaxes from the Middle East flew a few sorties against Grottaglie A/D in the Heel. Mediums made only one large-scale attack on an airfield during the period, that being against the fighter base at Grazzanise by 73 U. S. B-26's and 32 U. S. B-25's. Eight enemy aircraft were destroyed and two damaged. Mediums made a lesser attack on 2 September when 12 B-25's bombed Crotone airfield with good results.

In addition to the two major objectives, lines of communication and airfields, LAAF's planes paid some attention to enemy shipping. Successes were far fewer than during the Tunisian and Sicilian campaigns, as the

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enemy was no longer engaged in reinforcing outlying positions with the exception of Corsica and Sardinia. Only one vessel was claimed as sunk (on 18 August, by B-25's), but seven other vessels, ranging from tugs to a destroyer, were reported damaged. One attack was made on a U-boat and several night attacks were carried out against convoys, but without positive results.

The Allied air attacks described above had been delivered as a preliminary to two separate and distinct invasions of the mainland, but, because of the location of the areas to be assaulted, the greater portion of the attacks served to prepare the way simultaneously for both invasions. Thus the smashing of communication lines in and around Naples and the battering of the airfields at Foggia were as valuable to ~~SAYTOM~~ as to ~~AVANCEE~~. However, it was necessary in the week immediately preceding ~~SAYTOM~~ to initiate a special series of attacks against enemy positions in the vicinity of Reggio in order to reduce to a minimum the ability of the Axis to interfere with the landings in that area. These attacks were in accord with the provisions of the air outline plan for ~~SAYTOM~~ for the period D minus 6 to D minus 1, which called for the preventing of organized movement within the area, the breaking up and disorganizing of such military formations as might be discovered, and the systematic reduction of fortified positions and gun emplacements.¹⁰⁰

This phase of the air effort was handled by escorted light bombers of EAF supplemented on occasions by U. S. B-25's. Typical examples of the effort between 26 August and 3 September were: the bombing of gun positions, particularly at Reggio, by 36 U. S. A-20's and 27 EAF Bostons

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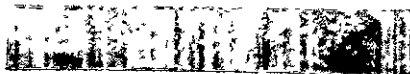
on 26, 27, and 27/28 August; an attack on fortified positions at San Giovanni by 12 RAF Baltimores on the 26th; and attacks on troop concentrations in the Toe on 1 September by 24 SAAF Bostons and Baltimores, 24 EAF Baltimores, and 24 U. S. Mitchells.¹⁰¹ On 2 September the scale of attack was stepped up. The most successful attacks were carried out by 45 U. S. B-26's, 24 SAAF Bostons, and 33 RAF Baltimores on enemy Army Headquarters at Rosarno and Orti (both in the Toe); by 45 U. S. A-20's and 35 RAF and SAAF Bostons and Baltimores on gun positions east of Reggio; and by 24 U. S. and SAAF Bostons on troops at Zova Larina.¹⁰²

The attacks against objectives within the immediate vicinity of the DAYTON assault area were on a small scale; certainly there was no attempt at saturating the area. There were two reasons for this: first, a more concentrated attack would have given away the exact spot at which the landings were to be made; second, reconnaissance and small-scale commando raids had disclosed that the area within which the Eighth Army would land was weakly defended and had a minimum of fortifications and gun positions.¹⁰³ It was better for the Allies to keep their landing zone a matter for Axis speculation than it was to knock out the limited enemy defenses.

GAF Activity, 18 August-2 September

During the period from 18 August through 2 September the German Air Force had not been consistently active. Its fighters had offered some strong opposition to the bombers and fighters of Strategic and Tactical as they swept over mainland targets, and its bombers had unloaded over

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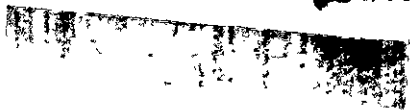
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several Allied targets. However, the German fighter reaction was always spotty to the point of being unpredictable, except in the Naples and Foggia areas where it was generally strong and aggressive; and the bomber effort was sporadic and usually on a small scale.

From 17 August through 20 August aircraft of TAF saw very few enemy planes, and those that were seen avoided contact. Wellingtons, operating at night, encountered no opposition. Heavies and mediums on day missions met little opposition except on the 19th and 20th. On the former date, during the attack on Foggia, the first wave of heavies was attacked by 70 to 75 very aggressive He-109's, Fw-190's, Me-110's and 210's, and Me-202's, of which number 34 were destroyed and nine probably destroyed. Five B-17's and three B-33's were lost or missing. One of the B-17's was destroyed by air-to-air bombing. The second wave over the target an hour later was intercepted by only three enemy aircraft. On the 20th one heavy and one medium attack on Caserta each met 15 to 20 enemy planes which were only mildly aggressive against the bombers but were very aggressive against the fighter escort. Losses on both sides were small and about equal. An attack against Benevento on the same day encountered 15 to 20 enemy planes, with losses again balanced.

During this period the GAF bomber effort was directed against Sizerte, which was hit on 17 and 18 August. In each of these raids the enemy came over the target in two waves, the first containing some 40 planes and the second around 20. Most of the attackers were Ju-88's, apparently from the Foggia and Viterbo complexes; the remainder were Me-111's, apparently

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from Salon in southern France. In the two raids one LCI was sunk, one freighter severely damaged, two other small vessels damaged, some oil installations destroyed, and 22 military personnel were killed and 215 wounded. German losses totaled 14 planes, 4 to Allied aircraft and 10 to AA fire.¹⁰⁴

During the week of 21-27 August the principal enemy defensive fighter effort continued to be made in the Naples and Foggia areas, especially in the former where the Axis seemed to have concentrated the best pilots. Even in these two "hot" sectors, however, the defensive effort was peculiarly spotty, apparently because the enemy was not able to cope adequately with more than one bomber formation at a time. For example, when mediums attacked Villa Literno and near-by Aversa the first wave encountered only half-hearted opposition from 12 to 15 fighters, whereas the second wave was aggressively attacked by 40 to 50 planes; again, heavies over Capua were vigorously assaulted by some 45 aircraft over a period of 30 minutes, but mediums over near-by Grazzanise an hour later were engaged by only 10 to 15 unaggressive fighters. However, two attacks over the Naples area on 22 and 26 August, both in multiple waves, met with severe opposition, each wave being aggressively attacked by from 25 to 50 enemy planes. Similarly, four formations of bombers over Foggia on 25 August were attacked by 60 to 100 planes, with some air-to-air bombing. South of the Naples-Foggia areas Allied attacks met little or no opposition, except at Salerno on the 23d where mediums were heavily attacked by a large mixed formation of Axis planes.

In the course of these and other attacks between the 21st and 27th,

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AAF lost some 40 planes to all types of enemy opposition, while destroying 102 and probably destroying 34 enemy planes in the air.

During the week the effort of the Axis bombers was directed largely against Allied ports. Several raids were made on shipping and shipping facilities at Augusta by Me-109 fighter-bombers, usually four to eight planes participating, but except for the destruction of one tanker, damage was unimportant. On the 27th around 40 enemy planes raided Algiers but caused no damage. The only night raid of the period was against Palermo on 23 August by 20 Ju-88's and a few Do-217's; two submarines were sunk, a coaster was damaged, and military casualties were heavy.

In an effort to protect his installations against attacks and also-- apparently--because he foresaw an invasion, the enemy made strenuous efforts to prevent Allied photo reconnaissance, both his aircraft and his fleet being exceedingly aggressive against the planes of MAPH. 105

In the last week before DAYTON was launched, it was evident that the enemy had concentrated his greatest fighter strength, his best pilots, and his heaviest AA defenses in the Naples area. A part of this increase was at the expense of the Tose from which all but a few fighters and a handful of AA had been withdrawn by the 28th. 106 There was also a decline in German air strength in the Keel and in the Toggia area as both bombers and fighters were moved farther north.

Allied planes over the Naples area were generally attacked by from 20 to 75 aircraft, which were usually aggressive and determined. As a rule these attacks were directed mostly against fighter escorts. Bombers

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which went unescorted into central and northern Italy were attacked on some occasions and on others were left entirely alone. No attacks were made against Allied night bombers, and fighter-bombers ran into opposition on only about half their sorties. Reconnaissance planes, on the contrary, were constantly harassed. It seemed evident that the enemy was relatively unaggressive in the defense of his installations because his air arm had been depleted by heavy losses and because he was conserving his air strength for employment against an invasion.

During the period from 28 August through 2 September the enemy made only a single heavy bombing attack. This came on 29 August when more than 40 Ju-87's and Ju-88's hit the harbor at Augusta. Damage was slight. Augusta was also hit by fighter-bombers on four occasions, while Messina and Catania each were raided once. Little damage resulted from any of these attacks, and in all of them the Axis lost nine planes. Four things were responsible for the scarcity and weakness of these attacks: first, Allied bombing had driven the bulk of the Axis bombers from the heel and the Foggia complex to the safer fields in central and northern Italy; second, the Allied force's fighter and AA defenses of its key ports and installations were highly effective; third, the Axis had too few bombers available to afford to risk the heavy losses that might result from a large-scale attack; fourth, the German Air Force had never adopted the American system of concentration of attack for the purpose of saturating the objective.

During the last few days which preceded the launching of BAYTOL, the Axis sharply increased its employment of reconnaissance planes. More

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use was made of fast fighter aircraft for long-range reconnaissance than at any previous time in the theater. These planes were based mostly in Sardinia, where they were within range of Allied activities. Counting all types of air reconnaissance, the Axis sent out from seven to 14 planes each day. Special attention was paid to Bizerte; the Toe, Heel, and Sicily were well covered; and planes were noted as far west as Algiers.

In all types of aerial activity in the six days before BAYTOM the Allies lost 36 planes, while the Germans and Italians lost around 125 destroyed and 40 probably destroyed.¹⁰⁷

The entire period between the end of the Sicilian campaign and the launching of BAYTOM was notable for the weakness of the Axis' effort against Allied convoys. On a few occasions fighter-bombers, usually eight FW-190's, attacked shipping off the north and east coasts of Sicily, and there were a few other scattered raids over the western Mediterranean which were too weak and unaggressive to do much damage. But there was not a single large-scale raid against shipping between the end of the Sicilian campaign and the middle of October.¹⁰⁸

The inability of the Axis air arm to strike heavy blows against Allied shipping and its failure to put up an effective defense against Allied bombers and fighters as they battered Italian airdromes, ports, H/Q's, and other installations indicated a steadily growing weakness. The German and Italian air forces had lost heavily in the Tunisian and Sicilian campaigns. In the last two weeks of August Allied bombers and fighters had kept up the attrition rate by shooting down some 250 enemy planes, probably destroying around 90, and damaging more than 100 in air battles,

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while another 250 had been wrecked on the ground by Allied bombing and strafing of airdromes and landing grounds.¹⁰⁹ The enemy was further crippled by damaging blows to his sources of production, oil supplies, and lines of communication. The truth of the matter was that by 1 September 1943 the Axis air arm in the Mediterranean was no longer the powerful and aggressive force that it had been back in the winter, nor could it expect appreciable reinforcements from either the Eastern or Western fronts, where the Luftwaffe had its hands full respectively with the Russians and with the Allied bombers operating out of UK. As a matter of fact, the decline in the number of GAF planes in the Mediterranean from around 1,000 at the end of the Sicilian campaign to around 600 on 1 September was due in part to withdrawals from the Mediterranean to the Russian and Western fronts.¹¹⁰ With their air potential reduced to the extent of 50 to 100 sorties per day,¹¹¹ the best that the Germans in Italy could do was to conserve their strength in planes and crews, giving battle only at intervals and when the occasion seemed propitious, and thereby be at the maximum possible strength when the time came to defend against the Allied landings on the mainland, which were so evidently to be expected.

And the Axis air arm on the eve of D-Day was still a factor to be reckoned with. The enemy order of battle, as of 3 September, showed a total of 600 German and 900 Italian aircraft of all types (exclusive of training planes and nonoperational reserves), a grand total of 1,500 operational aircraft in Italy, Sardinia, Corsica, and southern France. The principal Axis strength was in Italy south of 42° where the Germans had

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340 planes, 100 of which were long-range bombers, and the Italians had 330, or 45 per cent of the total strength. Of these 670 planes, 380 were single-engine fighters. The planes in southern Italy were based mainly in the Naples and Foggia areas, the fighters and fighter-bombers being located in both complexes and the long-range bombers at Foggia. There was a small close-support force of single-engine fighters and fighter-bombers around Vibo Valentia and Crotona, but the Axis air potential in Apulia and Calabria had already been limited by Allied attacks on airfields. In northern Italy the Germans had 70 long-range bombers and 5 bomber-recces and the Italians 300 planes of all types, about half of which were single-engine fighters. In Sardinia the Germans had 60 single-engine fighters and 10 tac-recco planes, while the Italians had 100 planes of various types. In southern France the Germans had 90 long-range and torpedo bombers and 10 reconnaissance bombers; the Italians had no planes there. Conversely, the Italians had some 120 coastal-type planes based on Corsica, while the Germans had no planes on the island.

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To get a true picture of the Axis air strength it is necessary to remember that the Italian air force, at best, was a poor outfit. A large number of its planes were out of date, obsolescent if not obsolete. Its best pilots had been eliminated in the Desert campaign and after, and its present flyers were not of high quality, were not well trained, and, in many instances, were far from enthusiastic. The Germans could count on no more than a minimum of help from the Italian Air Force.

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On the evening of 2 September, then, the Allied forces in the Mediterranean were ready to launch the first assault against the Italian mainland. The days of planning were over. The preliminary tasks of softening up the enemy's defenses, neutralizing his air arm, interdicting

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his lines of communication, and isolating the battle area were done. In the eastern Sicilian harbors of Augusta, Catania, Taormina, and Teressa some 300 landing craft were ready, laden with troops, equipment, and supplies of the Eighth Army. In the Strait of Messina naval vessels turned more than 125 guns, ranging from four-inch to 15-inch, toward the Italian foe; and opposite Reggio 410 field guns and 120 medium guns of the Eighth Army were massed to give covering fire.¹¹⁴ Spitfires of Desert Air Force, tanks filled and guns loaded, stood ready to take off to cover the landing craft, the assault troops, and the beaches. The first Allied invasion of Hitler's Europe was about to begin.

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Chapter III

THE LAUNCHING OF BAYTOWN AND AVALANCHE

BAYTOWN, 3-6 September

Ground and Air Operations. In the early hours of 3 September, under cover of naval bombardment from the Strait and heavy artillery fire from the Sicilian coast, British and Canadian troops of the Eighth Army crossed the Strait of Messina to the Calabrian shore, arriving at 0430 hours. On the right a Canadian infantry division landed at Reggio, and on the left a British infantry division went ashore at Gallico and Catona. Enemy opposition was so weak as to be unimportant, a few Italian coastal troops putting up a token resistance, and no mines or demolitions were encountered. The beachheads were speedily secured.¹

Fighters and fighter-bombers of DAF covered the crossing and the landings, and at the same time gave protection over the Augusta-Catania area. A total of 253 sorties were flown. The enemy's air effort against the invasion forces was negligible, and Allied aircraft encountered very little opposition from fighters and saw no long-range bombers whatever. One He-109 and one reconnaissance Ju-38 were the total bag in the battle area.

During the day 51 P-40's bombed and strafed radar stations at Pula and Carbonara. When German fighter reinforcements appeared on the A/D at Camigliatello (east of Cosenza) the field was bombed by 69 B-25's; at the same time Baltimores attacked Crotone airfield. To hamper the enemy's

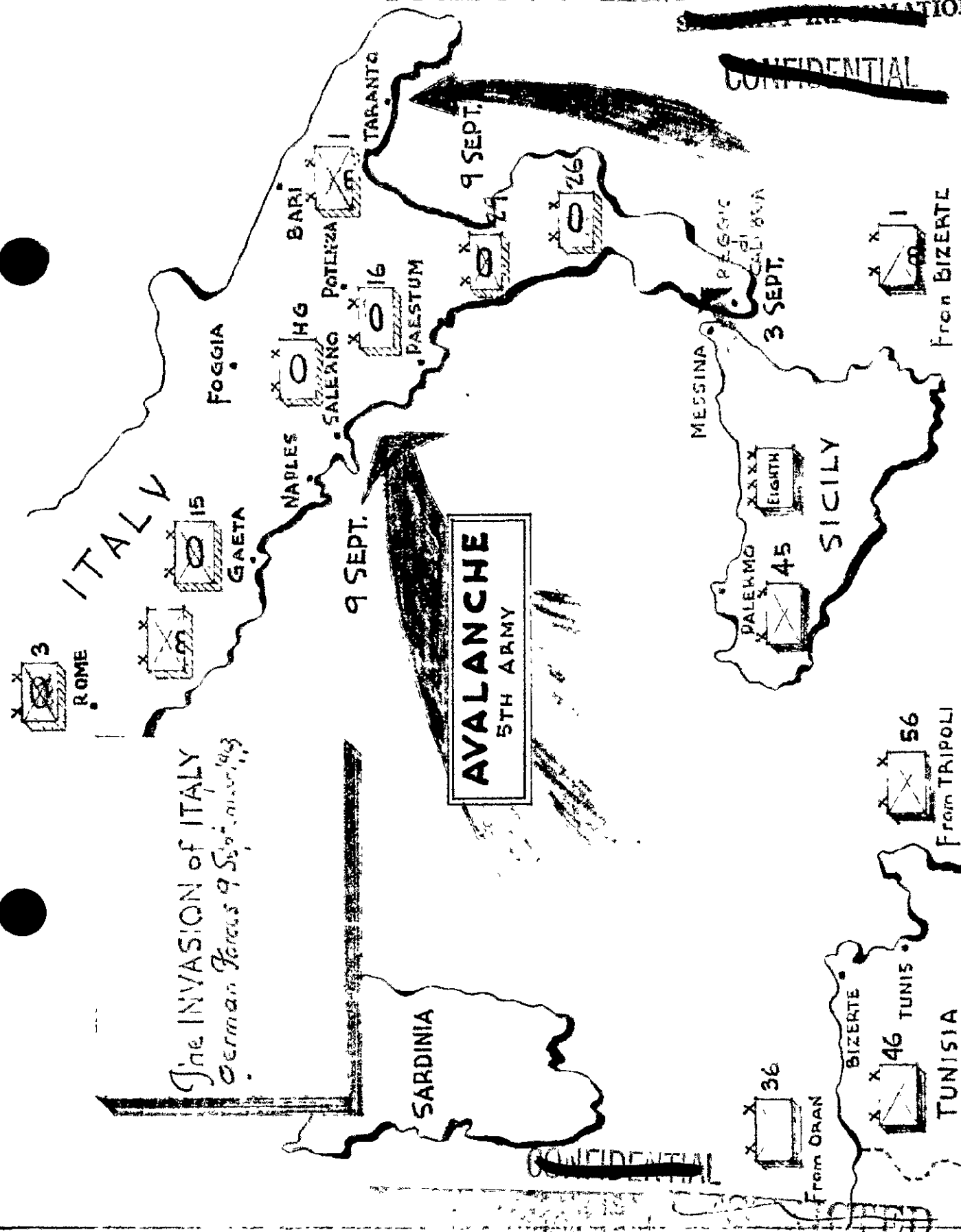
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*The INVASION of ITALY
German Forces 9 September 1943*

AVALANCHE
5TH ARMY

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efforts at bringing in reinforcements and at the same time to interfere with his retreat, light bombers and fighter-bombers swept over the lower part of the Toe, bombing and strafing gun positions, convoys, rail and road crossings, bridges, and troop concentrations, and went as far north as Camigliatello-Gipso to shoot up a large column of transport vehicles. Thirty-six BAEF Bostons and Baltimores bombed M/T's and bridges in and around Cosenza.²

By the afternoon of the 3d the Eighth had taken the high ground back of the beaches and during the day Reggio airdrome and the town of Gallico were overrun. The army was still encountering only slight opposition, the main German forces in the sector not having been contacted or located. It was evident that the German General Staff had realized that it could not dispose its forces in such a way as to prevent landings on the Toe, and that from the beginning the enemy's plan of campaign was to organize his forces in depth and, by the use of demolitions and rear-guard actions, to slow the Allied advance northwards as much as possible.³ Moreover--although the Allies were not aware of the fact on 3 September--the Germans apparently had anticipated that the Allies would invade the mainland in the Naples area and were conserving the bulk of their troops to throw against that operation.⁴

As far as the Allied air forces were concerned, the day's activities in the Toe came to an end with an armed-reconnaissance fighter mission which searched the roads on the enemy side of the bomo line and shot up several small groups of vehicles. That night BAEF heavy bombers flew 16 effective sorties against Grottaglie airfield.⁵

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On the 4th and 5th the Eighth Army made steady progress, being held up only by demolitions. Armed fighter reconnaissance flights revealed that there were still no land forces of enough size to resist the Allied advance. By the end of the 5th the Eighth had reached a line Bagnara-Bagaladi-Zova Marina, and 2,500 Italian prisoners had been taken; but the German forces still declined to be drawn into a genuine battle.

During these two days the Allied air forces, in spite of very limited enemy air activity and few targets, managed to stay busy. On the 4th intensive cover was maintained over convoys. Fighter patrols over the Strait engaged a mixed group of 30 FW-190's and Mc-200's and 202's attempting to attack the beaches; when the Spitfires approached, the enemy aircraft jettisoned their bombs and in the fight which ensued seven Mc-202's were destroyed. The action ended enemy air activity for the day. Allied offensive air operations were featured by a raid by 24 light bombers on a defended position near San Stefano, in coordination with a successful ground assault. Fifteen U. S. A-36's hindered enemy movements by bombing a road junction at Catanzaro with good results, and 14 more attacked the road net and railway station at Cosenza. Other than these two missions light and fighter bombers found so few good targets in the Toe that a number of TAF's planes, held in readiness for call, were not sent into action. On the night of 4/5 September a Commando party was landed at Bagnara without encountering any opposition. During the night Axis air effort remained negligible: a Dornier-217 was shot down over the Strait, but no enemy activity over Sicily was reported.

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On the 5th, 24 U. S. B-25's effectively bombed the roads and rail-ways at Briatico, but a bomber attack on Cosenza was abortive owing to low clouds. By the night of the 5th the weather had begun to deteriorate, with clouds over the Toe and rain over the Sicilian air bases. Few tar-gets were available for the light bombers, the only worth-while attacks being delivered by a small number of U. S. A-20's and CAAF Baltimorees against troop concentrations near Laureana and Gioiosa, respectively. During the two days CAAF's planes over the Toe saw practically no fighters, and reconnaissance showed that all airfields from which the enemy could effectively operate his fighters against Allied troops had been evacuated.⁶

During the 6th the ground forces advanced a little faster than on the three preceding days, capturing Palmi and Gioia on the west coast and thrusting eastward to Cittanova. (inland from Palmi). Air operations in the battle area, however, were on a considerably reduced scale. There were few good targets; low clouds prevented photographic reconnaissance of several airfields under consideration for attack and light and medium bombers were not called out; and there were no combats with enemy aircraft.

The 7th saw enough increase in Allied bomber activity over the Toe, however, to jump to 1,011 the total sorties by fighters, fighter-bombers, and light bombers for the first five days of BAYTOMI. Operations for the day were initiated by Kittyhawks, two squadrons of which toured the Toe; finding no suitable targets, they brought back their bombs and reported that the area on the enemy side of the line Palmi-Cittanova-Bovalino-Siderno appeared deserted. The next mission was flown by 48

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U. S. A-30's which attacked two gun positions near Rosarno, but a projected coordinated ground attack did not materialize. The remainder of the bomber effort during the day was directed against lines of communication to the north of the battle zone. Crotona M/Y's were attacked by 36 B-25's with excellent results; the north end of Catanzaro was bombed by 24 Baltimores, the object being to cause road blocks; and the Trebisacce area was bombed by 36 U. S. B-25's, the road and railway being cut and a bridge probably destroyed. Heavier attacks were made on the road and rail bridges at Saori which felt the weight of 153 tons dropped by 106 B-26's, and on the road net at Lauria which was bombed by 32 B-25's with 50 tons of explosives. During the night 15 Cyrenaica-based heavies of the Ninth Air Force attacked the landing grounds at Manduria and San Pancrazio.

Meanwhile, the ground troops continued to move rapidly north, the advance being accelerated during the early morning of the 8th when a British brigade was landed just north of Pizzo, on the west coast. The landing met with no immediate ground opposition but provoked an enemy air reaction on a small scale. The standing Spitfire patrol over the beaches engaged two formations of FM-190 fighter-bombers without results. Later in the morning, as ground operations developed, air support was requested to deal with heavy mortar and gun positions which were snelling the new bridgehead; two squadrons of Kittyhawks dealt roughly and effectively with these centers at resistance. As the day advanced, reconnaissance found signs that the enemy was evacuating the Catanzaro area. Two squadrons of Kittyhawks carried out bombing attacks on retreating vehicles, and intensive strafing, particularly by U. S. P-40's, was continued until nightfall.

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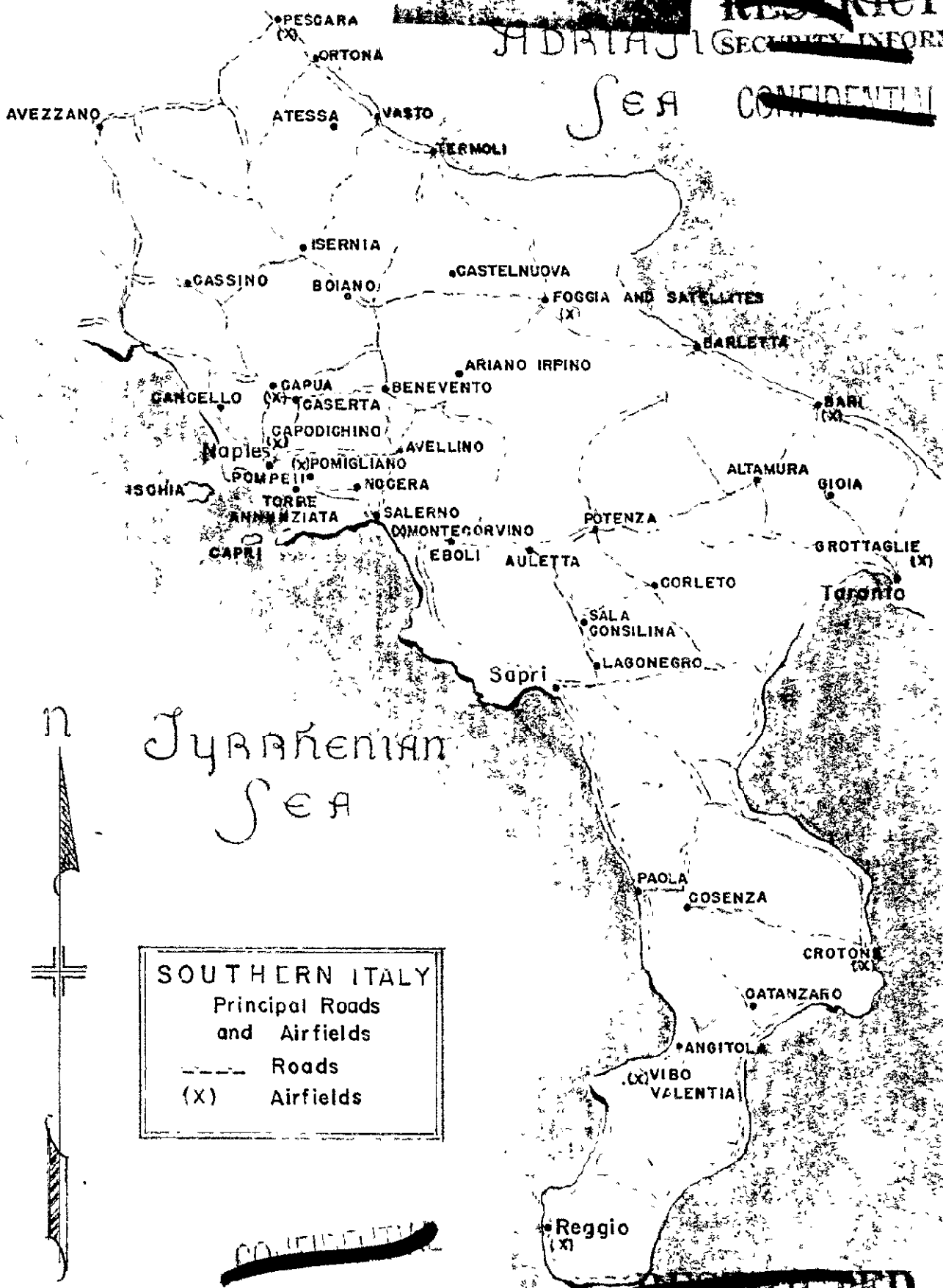
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During the day (the 8th) mediums delivered several sharp attacks on lines of communications on the Toe and Ball. These had a dual purpose: to interfere with the movement of the enemy's ground troops which were pulling out of the Toe and the Catanzaro area, and to prevent reinforcements from moving in to oppose the rapidly advancing Eighth Army. Thirty-six B-26's unloaded 54 tons of bombs on the Trebisacce bridges, cutting or damaging three of them. Mitchells also went for the Lauria road net, as they had done on the preceding day, 53 of them dropping 46 tons. The heaviest attack of the day was against the road and rail bridges at Saori where 105 B-26's unloaded 154 tons of demolitions, half destroying one bridge and cutting rail lines and roads. These attacks, while basically in support of the Eighth Army, were indirectly in support of AVIATION, as they were directed against a transportation bottleneck on the west coast between the Instep and the Salerno area through which enemy troops moving north would have to pass.⁸

By the end of 8 September, then, the Eighth Army was approaching Catanzaro, at which point it would leave the narrow Toe and move into the broader Ball where movement would be less restricted. The Eighth was ahead of schedule; that fact, plus the continued absence of any genuine opposition by German ground and air forces, made it apparent that the British would continue to move north at good speed, thus giving assurance that the Fifth Army--then en route to the Salerno beaches--could expect to link up with the forces on the Toe at an earlier date than had been hoped for when the two invasions had been planned.

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SOUTHERN ITALY
Principal Roads
and Airfields
--- Roads
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Operations by Strategic. While the operations on the toe were in progress, that is, between the early morning of the 3d and the night of the 8th of September, heavies and mediums of MAIF had continued to smash enemy airfields, lines of communication, and other military objectives, with by far the greater portion of the bombs being dropped on airdromes and landing grounds, particularly those in the Naples and Foggia areas. The attacks were primarily designed to neutralize the Axis air arm, in accordance with the Outline Air Plan for Operation AVALLANCE, which provided that from D minus 7 to D minus 1 day and night attacks on occupied airfields were to be intensified, particularly against the fields within range of the Salerno assault area, "the intention being not only to force the enemy air forces to evacuate the airfields, but to make the latter unusable for the period of the assault operations." Although these attacks were designed as a prelude to AVALLANCE, they also afforded strong support to AXTON, as they served to prevent any concentration of enemy aircraft within range of that operation.

For the greater part of the period from 3 to 8 September the heavies and mediums had to contend with bad weather, but in spite of this they carried out their assignments aggressively and with a high degree of success. This final pre-AVALLANCE blitz got under way on the night of 3/4 September when 71 Wellingtons dropped 136 tons of bombs on Capua and Camodichino airfields in the Naples area. Photographic reconnaissance showed that both fields were cratered and severe damage was done to hangars and other installations; at Capua eight aircraft were destroyed on the ground. On the 4th 19 B-17's dropped 45.6 tons on Terracina airfield (between Naples

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and Rome), and P-30's successfully strafed the No. 1 satellite of the Grazzanise fighter base and the Ventotene Island radar station, the latter located west of Naples and Ischia. During the night of 4/5 September Grazzanise was again visited, this time by 79 Wellingtons which dropped 138.5 tons. Results were excellent, the damage inflicted including the destruction of an ammunition dump. On the 5th the weather worsened, but in spite of it Grazzanise took a third beating when 103 B-26's and 50 B-25's unloaded 180 tons of GP and fragmentation bombs, destroying at least seven planes and damaging 13 and rendering the satellite--according to reconnaissance--unserviceable. The railroad bridge, tracks, and roads at Minturno (northwest of Naples) were hit by 54 B-25's. The day efforts on the 5th were completed when 133 B-17's plastered Viterbo A/D with 160 tons, destroying or damaging 13 aircraft on the ground and leaving the field completely unserviceable. That night 48 Wellingtons attacked Villa Literno W/Y's with 85 tons, this being the first of three occasions between 2 and 9 September when MASAF's Wellingtons deviated from their program of hitting the enemy's airfields.⁹

On the 6th the main fighter fields around Naples again absorbed a severe hammering. Grazzanise was hit by 65 B-26's, the No. 1 landing ground being the chief target; Capua was slugged by 112 B-25's; and Capodichino took 40 tons, dropped by 18 B-17's. Bad weather kept 41 Fortresses from hitting Fondigliano.

As a result of the series of air attacks on fields in the Naples area there were only small, barely usable strips available to the enemy at

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Grazzanise and Capodichino on the eve of the launching of AVALANCHE, while the field at Capua was completely useless. The only important field in the Salerno sector, Montecorvino, was not attacked, the omission being in accordance with the Air Plan which wished the field left unscathed so that it could be occupied and utilized by the Allies at the earliest possible moment after the landings at Salerno.

The 6th also witnessed several small attacks on enemy supply lines. Nine E-17's visited Villa Literno M/Y's, dropping their bombs through holes in the clouds. Eleven Fortresses attacked the harbor at Gaeta, while a lesser effort was directed against the Minturno M/Y's. That night 48 Wellingtons dropped 92 tons on the M/Y's at Battipaglia, the principal communications center back of the Salerno beaches. The somewhat scattered nature of these attacks along the west coast was prescribed not only for the purpose of hitting a variety of supply points but also to keep the Germans in the dark as to the exact spot at which the coming invasion would take place.

The full daylight effort of NASAF on the 7th (exclusive of a series of attacks on objectives below Salerno, which have been discussed above), was directed against the important fighter and Ju-88 bases in the Foggia complex. Three attacks were carried out, all by B-17's: 28 against the Tortorella landing ground, 65 against Foggia No. 1, and 31 against Foggia No. 2. The 124 bombers dropped more than 180 tons of explosives, inflicting considerable damage on the fields and destroying 10 enemy aircraft on the ground. However, dispersal facilities were apparently so good that losses were relatively small, and the Axis bomber force in

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the complex was still strong enough to operate on a fairly extensive scale.¹⁰ On the night of 7/8 Viterbo airrome was attacked by 48 of USAF's Wellingtons, these mediums dropping 62 tons of bombs, and the Metaconto M/Y's and targets in the Scanzanza area (both on the Instep) were bombed by 13 U. S. B-25's.

Air attacks during the day of the 8th (again exclusive of the large-scale attacks by mediums south of Salerno) were limited to two. One was by 41 B-24's of the Ninth Air Force on the airfield at Foggia No. 2. The other was a smashing blow by 130 B-17's against the town of Frascati, 15 miles southeast of Rome, where the headquarters of the German High Command was understood to be located. In the raid 64 x 2,000-lb., 64 x 1,000-lb., and 1,172 x 500-lb. bombs were dropped. The 389 tons destroyed many buildings and did extensive damage throughout the town; it was reported by the Axis radio that Field Marshal Kesselring himself narrowly escaped death.¹¹

On the night of 8/9, as the convoys carrying the Fifth Army's invasion forces neared the beaches below Salerno, USAF and RAF mediums carried out a series of moderately large attacks against three groups of objectives. One of these, bases and roads handling enemy supplies and reinforcements in the interior, was attacked by 49 B-35's, the specific objectives being in and around Auletta, Avellino, and Potenza. The second group of targets was at Formia and Gaeta, both located along the Gulf of Gaeta where an Allied invasion was a strong possibility, and at Forio on Ischia Island, west of Naples. These targets were attacked in part

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because they were enemy shipping bases, but primarily as a "cover" to the real landings. Five Wellingtons dropped 10 tons on Formia, six dropped 12 tons on Frosio, and four dropped 8 tons on Gaeta. The third group of targets consisted of the two principal centers of enemy transportation in the AVALANCHE area, Battipaglia and Eboli. The M/Y's at the former were attacked by 37 Wellingtons which dropped 36 tons of bombs; the railroad junction at the latter by 42 Wellingtons which unloaded an equal tonnage. Damage to rail lines, roads, and rolling stock was severe. These were the final NASAF efforts on the mainland in preparation for AVALANCHE.

In addition to the heavy and medium attacks described above, EAF and SAAF light bombers of EAF were active between the nights of 4/5 and 8/9 September, flying 58 effective sorties against the M/Y's at Altamura, Battipaglia, Benevento, and Metaponto, and an equal number of sorties in attacks on rail and road junctions and transport vehicles at Auletta, Avellino, Battipaglia, Benevento, Capua, Metaponto and Potenza. Of these attacks the ones on Battipaglia and Capua were directly in preparation for AVALANCHE; those against Metaponto and Altamura served as diversionary attacks for AVALANCHE although they were on behalf of the Eighth Army and were in preparation for a projected landing of British forces at Taranto, on the Heel (Operation GIBBOI), which was a follow-up to LAYTON; and those at Auletta, Avellino, Benevento, and Potenza--because of the inland position of those places--were of value to operations on the toe as well as to the coring operations at Salerno and at Taranto.¹⁹

The Air Plan had envisioned a possible need for attacks on the enemy's Campanian airfields in order to protect the left flank of the Salerno-

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ound convoys. The need failed to materialize. By 27 August photo reconnaissance had revealed that the landing grounds at Almas, Capoterra, and Monserrato, all in the southern half of the island, had been rendered unserviceable by the enemy, and that the main German fighter bases apparently were at Alghero/Portofino and Ozieri/Cuilivani in the north and were being used mainly to protect Axis shipping in that sector. Further indication of the decline in importance of Sardinia as a base of operations for the enemy's air forces was found in Allied reports on the number of planes stationed on the island. These reports showed a steady decrease which, beginning before the end of the Sicilian campaign (during which Allied bombers had given Sardinian ports and airfields a number of hard soundings), was accelerated during the three weeks before AVALANCHE. Thus, on 13 August there were an indicated 115 IAF and 80 GAF planes on the island (total 195); on 27 August there were 35 IAF and 75 GAF aircraft (total 160); and on 10 September there were 70 GAF planes on Sardinia and Corsica and an undetermined number of IAF planes which had been seized by the Germans after Italy's surrender had been announced on the 8th.

As a result of the reduction of the enemy's strength on Sardinia and his removal to the north of what planes were left, AAAF found it necessary to bomb only one area on the island, Pabillonis landing ground, north of Villiciadro (northwest of Cagliari), which was attacked on the 5th, 7th, and 8th of September by a total of around 112 P-40 fighter-bombers. The planes dropped 50-pound bombs and strafed aircraft and targets of opportunity. ¹³

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Another LAAF activity during the period involved "nickelling." Every night Wellingtons carried out such operations, dropping over 5,000,000 leaflets and 40,000 posters over cities in Corsica, Sardinia, and Northern Italy.

Enemy Air Activity. Between 5 and 8 September inclusive the enemy's air effort was on a reduced scale from what it had been in preceding weeks. Taking into consideration the fact that approximately 50 missions of Allied heavies and mediums were flown during the period, mostly over central Italy, the Axis air defense appears extraordinarily weak, for 24 of the 50 missions saw no enemy fighters whatsoever, 10 saw fighters which although in a position to attack did not engage the bombers, and only 16 were engaged by the enemy. Against the 16 missions which were attacked the GAF flew some 300 defensive sorties, but the attacks on all except three of the missions were weak, unaggressive, and on a small scale. The missions which encountered heavy and aggressive opposition were the two attacks on the Foggia installations on 7 and 8 September and the attack on Frascati on the 8th. The first formation over Foggia on the 7th was not attacked but the second formation was assailed before, during, and after the bomb run by some 45 fighters of mixed types in a determined attack which lasted for 35 minutes. The third formation encountered 15 fighters, some of which fired rocket-type shells. In spite of these enemy efforts, however, the Allied planes claimed 40 enemy aircraft destroyed to the loss of one Fortress. The attack on Foggia on the 8th by B-24's called up some 30 to 40 enemy fighters, but again the Axis suffered

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heavily--losing 13 aircraft without shooting down a single Liberator. Over Frascati the unescorted E-17's were jumped by around 50 aircraft which attacked aggressively; but 23 hostiles were shot down to the loss of one Fortress to flak.¹⁵

Offensively, the enemy carried out only one attack of importance, against Elicerte and Ferryville harbors on the late evening of the 6th. Three waves of Ju-88's and He-111's, each wave consisting of about 15 aircraft, came over the targets. Five of the raiders were destroyed by Allied nightfighters and four by flak. The chief damage inflicted was the firing of a petrol dump.

A few small-scale fighter-bomber attacks were carried out in the Messina area, but these did no damage.¹⁶

It was evident that the enemy was continuing his policy of conserving his air strength which, although badly depleted, was still capable of rendering valuable service in the critical days ahead. But in the process he suffered heavily, both on the ground and in the air. In the week which preceded the landings at Salerno the Axis lost some 90 planes destroyed, 15 probably destroyed, and 25 damaged in aerial combat. To these 140 planes must be added another 40 which were destroyed or damaged on the ground by Allied bombers and fighters. Against the total Axis loss of approximately 180 aircraft, the Allies lost (destroyed, missing, and damaged) around 70 planes. On the ground the enemy's installations were hit by almost 4,000 tons of bombs which cratered landing strips and taxiways and smashed and burned out hangars and shops at the airfields in the Naples and Foggia areas, severely damaged H/Y's, railway stations,

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rail lines, road junctions, and bridges essential to the enemy's operations, and disrupted the lines of communication leading to the Salerno area and the Eighth Army sector.

The 4,000 tons dropped by Allied planes were only the final and intensive effort, for between 1 April and 8 September 1943 LAAF's planes dumped 13,864 tons of bombs on targets on the mainland of Italy: 10,566 tons on railroads, bridges, and highways; 5,177 tons on airdromes and landing grounds; 1,670 tons on ports and bases; 1,060 tons on troops and gun positions; and 191 tons on industrial targets. Since the end of the Sicilian campaign alone some 10,000 tons of bombs had been dropped on Italy, and the Axis had lost (destroyed, probably destroyed, and damaged) on the ground and in the air more than 600 aircraft.¹⁷ Even on the sea the Axis could not hold its own against the Allies, despite the fact that Allied shipping was on a large scale and was operating on the open sea whereas Axis shipping was on a small scale and was largely coastal. Between the middle of August and 9 September the enemy had 4 of his ships sunk, 4 probably sunk, and 27 damaged by Allied planes, while the Allies had only 6 ships sunk by enemy aircraft and submarines, although its vessels traveled 843,000 ship miles during the period.¹⁸

The situation on the evening of 8 September, then, was this: SAVONNI had been successfully launched and the Eighth Army had reached the Ball and was continuing to move steadily north; LAAF's planes had not only covered the SAVONNI landings and the operations which followed, but had smashed or pinned down the greater part of the Axis air forces which

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were within reach of Salerno and had seriously disrupted the lines of communication leading from central Italy and the Toe into the Salerno area; and the AVALANCHE convoys, under the protection of MAAF's Coastal Air Force, were approaching the beaches between Salerno and Paestum.

AVALANCHE, 9-11 September

D-Day. The more than 600 men-of-war, transports, and landing craft allotted to AVALANCHE sailed in 16 different convoys from six terminal ports at varying times from D minus 6 to D minus 1. The majority of the ships of the Southern Attack Force sailed from Oran and Algiers and of the Northern Attack Force from Bizerte and Tripoli; both forces were joined on D minus 1 by landing ships and craft which sortied from Palermo and Terrini. The various elements of the invasion fleet came together north of Palermo, Sicily, on D minus 1.

During the trip there were no evasion tactics, the convoys running a straight course under the watchful eyes of aircraft of MAAF and American and British warships. LHW of Palermo a navigational fix was made on the island of Ustica. By dusk of D minus 1 (8 September) the convoys were in position, had deployed, and had started their approaches at a point some 50 miles west of the beaches.

Up to 2300 hours of D minus 2 the convoys had enjoyed smooth sailing, the weather being good, and had not been subjected to a single raid by enemy aircraft. But on the night of D minus 2 and the afternoon of D minus 1 they were attacked five times. All of the attacks were on a small scale. The first came at 2230 hours on D minus 2 when enemy torpedo bombers made



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four runs but without damaging the convoy. The bombers apparently came from southern France. The other four raids were during the afternoon of D minus 1, the first two (by five and eight FV-190's) damaging an LCI and sinking a British LCT, and the last two (by six and three bombers) doing no damage despite the employment of rocket bombs. One enemy aircraft was shot down.¹⁹

Just at the end of this series of Axis annoyances the Allied forces were electrified by an announcement by General Eisenhower at 1830 hours on 8 September that an armistice had been signed between the Allies and the Italian government. Marshal Badoglio had wanted to postpone the announcement but General Eisenhower had refused, and at 1945 hours Badoglio carried out his part of the agreement by proclaiming the cessation of hostilities.²⁰ The news in no way changed the AVALANCHE plans. It may, however, have had a slightly adverse effect on the troops who went ashore in the first waves inasmuch as many of them quite logically expected a virtually unopposed promenade and were not psychologically ready for the strong German reaction which they encountered. Certainly the news did not upset the Germans, who obviously had been anticipating a defection on the part of their weak-kneed partner and were prepared to oppose the Allies without assistance from the Italians. The principal effect of the announcement seems to have been to increase the already heavy burden being borne by MAF. Allied planes were ordered to treat Italian planes as friendly unless they took or threatened to take hostile action--a procedure that might easily have given an initial advantage to German or Fascist pilots flying Italian aircraft. This potential danger was made

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greater by the fact that the IAF was ordered to fly its aircraft to Allied bases in Sicily and North Africa and to give movement priority to German-type planes.²¹ Coastal Air Force, moreover, acquired an extra duty: that of helping to escort the dozens of Italian warships which already were en route from their stations to Allied ports.²²

Between 2000 and 2400 hours on the evening of D minus 1 the convoys, as they moved toward the offshore points where the troops would embark, were subjected to a new series of air raids. From 2015 to 2205 ships of the Northern Attack Force were repeatedly attacked by small groups of torpedo bombers. One LSI was hit, but the bomb failed to explode. Several ships suffered near misses. Five of six Ju-88's were shot down by AI fire. During the attacks radio silence was broken so that the Ancon could take over control of the night fighters, and at 2205 planes of MACAS appeared and the raids ceased. From 2100 to 2400 the southern convoys were on the receiving end of two heavy and five light attacks. One LSI was hit and there were some casualties. Five enemy planes were believed shot down by night fighters.²³

A navigational fix on Capri and a bright moon aided the ships as they moved into their final positions, but mine fields and the reported presence of coastal batteries and railway artillery, inland about a mile from the beaches forced the troopships to drop anchor some 12 miles offshore. Mine sweepers immediately began to open gaps for entrance to the bay. By 0330 (H-hour) all assault troops and necessary vehicles were en route to the beaches.²⁴

Between 2400 and 0330 there were no attacks by enemy planes. In

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fact, the entire area from Salerno to Paestum was suspiciously quiet, the silence being broken only in the north where British naval units were firing in preparation for the landing of 10 Corps. But the quiet was soon dispelled, for as the troops approached the beaches the Germans greeted them in English over a public address system with the words: "Come on in and give up. We have you covered!"²⁵ Immediately, the enemy opened with artillery, machine guns, and mortars, his fire striking all the way from the beaches to the transport lowering points and causing some damage and considerable confusion among the landing craft. Nevertheless, the troops hit the beaches, spilled ashore, and began working inland.

By daylight the assault forces of VI Corps were approaching their scheduled objectives but were still short of them. The 10 Corps, on the north, was also moving inland but was meeting bitter resistance. On the left flank the Rangers had landed unopposed at Maiori, secured the beach-head, and moved north toward the mountain passes between Salerno and Forzeii. Between Maiori and Salerno the Commandos ran into minor opposition at Vietri but soon eliminated it.

During D-day the ground troops made limited but steady progress inland. VI Corps met its principal opposition from at least four groups of tanks which attacked the beaches, one group winning down the 141st Infantry during most of the day. Artillery and small arms fire--with help from the USS Savannah on one occasion--finally blunted these attacks and by nightfall the two assault regiments of the 36th Division had reached their objectives, being inland as much as four to six miles except in the extreme south around Agropoli. The 10 Corps encountered

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even more determined resistance but with the help of naval fire was inland an average of 3,000 yards by the end of the day and was attacking Montecorvino airfield, one of its major objectives. Patrols had entered Battipaglia but had been forced out; other patrols were approaching Salerno from the east. The Rangers were in the Nocera and Pagani passes, and the Commandos were moving east to Salerno.²⁶

Meanwhile, two naval diversion groups had carried out their assignments in the Naples area. One group landed forces on Ventotene Island, and after some resistance the small enemy garrison surrendered. Important enemy radar facilities were taken over. Another group demonstrated in the Gulf of Gaeta, calling out limited enemy air reaction--and allowing the Axis press to report the reculse of an Allied landing in the area.²⁷ The diversion in the Gulf of Gaeta was a follow-up to the several small attacks on targets in that area by Wellingtons on the night of D-1/D-day.

During D-day XII Air Support Command provided continuous air cover over shipping in the assault area and over the beaches, in accordance with the Outline Air Plan for AVALANCH. Protection was furnished by two squadrons of P-38's from first to last light, one squadron of A-30's from as early as possible to as late as possible, one squadron of Spitfires from 0800 to 1800 hours, and one squadron of Seafires from as early as possible to 0800 hours and from 1800 hours to as late as possible. Carrier-borne aircraft also maintained standing patrols over the northern flank of the assault areas. In general, the Fleet Air Arm was responsible for patrolling the northern end of the Gulf of Salerno and as far north as Caserta,²⁸ while the Sicily-based planes of the USAAF and the RAF

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covered the center and south side with A-36's flying low cover, P-38's medium cover, and Spitfires top cover. The A-36's and P-38's flew from bases on the Catania Plain, the Spitfires from fields in the Messina area, and the Seafires from carriers of the Western Naval Task Force's Carrier Force.²⁹

Seafires flew their first sortie in support of the invasion at 0615, D-day.³⁰ Sicily-based fighters did not arrive until almost an hour after light.³¹ Thereafter, both groups put in a busy day, the former flying more than 300 sorties and the latter almost 700.³² After dark, Beau-fighters took over, keeping two planes over the area at all times.³³ During the entire day NAZAF's aircraft limited their operations to protecting the beaches and the offshore shipping, and gave no direct support to the ground troops as they consolidated the beachheads and moved slowly inland.³⁴

A distinct difference of opinion exists as to the amount and severity of enemy air reaction which was provoked by the landings. The Western Naval Task Force has recorded in its history of *AVANGUARD* that the enemy air activity was "second only to severe enemy gunfire . . . in preventing the rapid unloading of transports and particularly of boats at the beaches." Beginning at approximately first light "regular and persistent bombing and strafing attacks effectively interrupted unloading activities." These attacks, said the naval history, not only forced personnel on the beaches to take cover but were also effective in driving certain of the unloading personnel from the beaches. "The scale of these attacks has never before and has never since been equalled in this theater."³⁵ On the other hand, a study of *AVANGUARD* prepared by NAZAF states that "very

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little enemy action in the air was encountered on the first day"; MAAG's daily Operational and Intelligence Summary of 9 September shows only moderate enemy activity; its Operations Bulletin for the period notes that there was little Axis action on D-day, and says that the enemy engaged very seldom and come in only in small numbers which were effectively dealt with; its Weekly Air Intelligence Summary says that "it is apparent that the enemy did not make an extreme air effort against [the] landings"; and in a meeting held in the Admiralty on 20 October 1943 it was stated that the CAF's air effort over the beaches "was not severe, being confined to small tip and run raids."³⁶

In spite of these differences it is not too difficult to assess the scale of the enemy's air activity on D-day. What happened was that he flew enough small missions over the beaches and shipping, and flew them regularly enough, to keep the Allied forces constantly on the alert and to cause considerable annoyance to troops engaged in unloading supplies; but the sum total of his sorties was small, his attacks were not very aggressive, and the damage and casualties which he caused were slight, especially if they are considered in relation to the size and importance of the landings. The Navy's chronology of the day's operations contains 20 references to enemy air activity, but some of them obviously are duplications; on the other hand it cannot be assumed that every German attack over the beaches and the beachhead was reported to the Navy. Probably the Commanding General of XII ASS was close to a correct figure when he reported that about 30 enemy aircraft, in small groups, were seen over the beaches during the morning; according to MAAG, about an

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equal number appeared during the afternoon and early evening, and a small number were in action around 2300 hours.³⁷ The Navy's report at 2400 hours on D-day that "there were continual small scale attacks throughout the day" seems to be an accurate statement of the nature and extent of the German reaction.³⁸

Most of the German raids were by fighter-bombers--He-109's and FW-190's--which appear to have come largely from Benevento, northeast of Naples. Ju-88's also participated, especially over the beaches, and a few Ju-87's, He-111's, and Do-317's were reported. The origin of the bombers is uncertain; their principal base, Foggia, showed no sign of activity during the day.³⁹

The enemy took every advantage of speed, cloud cover, and the mountains back of the bridgehead so as to hit sharply and then run for it. He fought only when he had to, ignoring Allied offensive missions and staying on the edge of the battle area where the Spitfires could not pursue him because of lack of gasoline. When he did attack he came in fast and left fast. He operated almost entirely in small groups of from one to six planes, and sometimes hit the northern and the southern areas simultaneously in order to confuse Allied fighters.⁴⁰

The 60 to 75 enemy sorties were met by standing patrols of USAAF, RAF, and Navy fighters, in accordance with the Air Plan of keeping around 36 planes over the assault areas at all times, and a large proportion of the raids were broken up or turned back before the attacking planes could either bomb or strafe. For example, a report by the Commanding General of XII AFG at 0900 hours stated: "At 0515 on 9 September 2 JU-88 destroyed;

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at 0650 low bombing attack, 6 B/A turned back by Spitfires; at 0730 one JU-88 over beach, two bombs dropped; at 0750 Spitfires engaged Do-217 which was driven off; at 0740 Spitfires drove back 8 enemy aircraft. Patrol situation satisfactory." In these actions the fighters received very little assistance from the fighter control center on the Ancon for the simple reason that the Ancon was not getting the information it was supposed to get. However, the night fighters found the seaborne GCI (Ground Control Interceptor) accurate and helpful. Both day fighters and night fighters were handicapped by the restrictions which the mountains placed upon ground and sea-level radar.⁴¹

In spite of having to operate against scattered attacks, hit and run tactics, and late warnings, the Allied fighters managed to destroy four enemy aircraft and damage one, to the loss of two P-39's in combat and one Spitfire in noncombat. The effectiveness of the fighter cover, supplemented by naval AA fire and smoke screens, in protecting shipping is indicated by the fact that during the day only one ship (an AT) was sunk and one (an LST) damaged. It is not possible to estimate damage to personnel and equipment on shore, but there is no evidence to show that it was anything except small.⁴²

There was, of course, no way by which the Allies could have accurately foreseen that the German Air Force would not put up a much stronger effort on D-day; but the lack of prescience was unfortunate, because the full commitment of available fighters to cover the shipping and beaches meant that none were available for direct support, and it is probable that had there been some form of dive bombing; or other attack aviation employed by the Allies soon after daylight, the harassing fire which the

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 Germans placed on the beach might have been eliminated.⁴³ Certainly plans had been made for direct air support, the arrangement being that requests could be initiated by an unit commander and be transmitted back to the headquarters to which an air support party was attached (normally a division headquarters); then the request, after being approved by the ground force commander, would be transmitted direct to Air Support Control.⁴⁴ However, "owing to the complete commitment of fighters to the protection of beachheads and the assault convoy, no close day support bombing was available" until D plus 4, as no fighter escort was available.⁴⁵ Even so, such an operation might have been possible without using fighter cover, inasmuch as General Eisenhower informed the CGS during the day that "some elements of TAF bombing formations are standing by to help Fifth Army as favorable targets develop."⁴⁶

The activities of Strategic Air Force⁴⁷ on D-day were primarily for the purpose of isolating the battle zone. Specifically, AAF's heavies and mediums went for roads, railway junctions, and bridges, particularly in the Naples-Avellino area but also to the southwest toward Potenza and Sapri, in order to hinder the enemy's movement of reinforcements into the Salerno sector. The Allies had launched AVIATION with two major fears: one, that TAF's fighters might be unable to handle the German air force over the assault area because of the distance of the beaches from the fighter bases; the other that the Germans might throw in such heavy ground reinforcements that VI and X Corps might not be able to hold and extend the 25-mile-long beachhead. The first of these fears had largely been dispelled by the events of D-day, as TAF's fighters met the menace

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of German bombing and strafing to a minimum. The second fear was one which would not reach a crisis until two or three days after the landings; it was IAAF's responsibility to reduce or eliminate that fear, for IAAF was the only Allied element which could reach out and interdict the lines over which the enemy's reinforcements had to pass in order to reach the battle area.

During D-day IAAF's bombers hit three key places along the German reinforcement routes. Sixty-one B-17's dropped 172 tons on the bridges over the Volturno River at Casua, and photographic coverage showed that both road bridges were almost completely destroyed, the railway bridge severely damaged, and several roads cut. This raid was of particular interest and importance as it was in the nature of a "replacement" for the major part of the paratrooper operation which had been canceled in order to set up the abortive GIANT II. Sixty Fortresses further hammered communications above Naples by dropping 180 tons on the Cancellio bridges between Casua and the coast, damaging the approaches to the bridges but not hitting the structures. One hundred and thirteen B-25's unloaded 170 tons of explosives on the M/Y's, roads, and bridges in the Potenza area, east of the bridgehead.

Two attacks on enemy airfields were carried out during the day. Forty-one B-24's of the Ninth Air Force bombed the Foggia complex; and a landing ground at Scanzano (on the Inster), which had been discovered by photo reconnaissance on the 8th, was attacked by 67 U. S. B-25's which dropped 97 tons of bombs. Results were good and, in addition, over Foggia the Liberators shot down nine enemy planes and at Scanzano the

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Marauders destroyed at least four on the ground.

Attack bombers and fighter-bombers also were active. Twelve A-20's attacked H/T near Ajello (west of Catanzaro) without success; but another 12 came over five minutes later and destroyed several vehicles. One hundred and twenty-three Kittyhawks and 107 Warhawks on 13 missions dropped 677 x 40-15. bombs on H/T in the Licastro, Catanzaro, Soveria, Cosenza, and Fogliano areas in the Ball.

To these D-day operations the German defensive fighter force offered virtually no opposition, the E-24 mission over Foggia being the only one attacked, and even there the 40 enemy aircraft were not aggressive.⁴⁸

The total activities of MAAF's planes for the period from 1800 hours on D minus 1--when the assault convoys began deploying for the approach to the debarkation points--to nightfall of D-day--when the beachheads had been established and all of MAAF's planes except its night fighters and night bombers had called it a day--were as follows: heavy bombers, 121 sorties; medium bombers, 348; light bombers, 75; fighter bombers, 230; night bombers, 26; day fighters, 773; Coastal, 33; photo reconnaissance, 32; night fighters, 36; total sorties, 1,649. Total victories were: 14 enemy planes destroyed, 3 damaged, 4 destroyed on the ground. Losses were: 4 destroyed, 5 missing.⁴⁹ As General Eisenhower put it, Allied air power was "flatout in support of 5th Army positions."⁵⁰

Operations on D plus 1 and D plus 2 (10-11 September). On 10 and 11 September the Fifth Army consolidated the positions which it had won on D-day and continued to move slowly inland. VI Corps met almost no enemy

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opposition on D plus 1 while its troops were getting into position to continue the advance, the German strength being concentrated on the left flank of the Allied line against 10 Corps. By the end of D plus 2, VI Corps' line formed an irregular semicircle which reached from just below Persano, on the Sele River, to Altavilla, Albanella, and Roccasvide (the latter in enemy hands), and which then curved southwest and west to reach the coast below Agropoli. Around Altavilla and Roccasvide the troops were inland to a depth of 11 miles. On 10 Corps' front, where the mountains were closer to the shore and the German opposition was tougher, progress was slower and the deepest penetration was only five miles. Mattipaglia remained in enemy hands after two days of indecisive struggle. Montecorvino airfield had been overrun but the field was not available for Allied planes, as it was under artillery fire from the nearby hills.⁵¹ Further to the west, troops of 10 Corps continued to clean up Salerno, the Commandos moved north of Vietri astride the coast road, and the Rangers advanced 10 miles west to Positano while holding their positions in the Mount di Caiunzi and Nocera-Pagani passes against German counterattacks.⁵²

Meanwhile, reinforcements in men and guns had been pouring ashore and hundreds of tons of supplies and equipment had been landed over the beaches; the enemy had been denied the access roads on both flanks; and the continuing good weather gave hope to the Allies that their rate of build-up would be sufficiently rapid to offset the flow of German reinforcements which were racing up from the south and rolling down from the north, where Allied bombings had not offset the cancellation of the

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proposed drop of the 82d Airborne Division at the Volturno crossings around Genoa. In spite of the generally satisfactory situation the Allied leaders were concerned over two matters: one, with Montecorvino still untenable, fighter cover would have to continue to be furnished largely on the old long-range basis, with possibly some assistance from temporary fighter strips which were being hastily constructed inside the beachhead, especially near Paestum; the other, the Germans were massing their strength for a heavy counterattack along the Sele River and it was problematical whether the Fifth Army was in sufficient strength to hold the attacks.

On the 10th and 11th AAAF's planes continued to cover the beachhead, the beaches, and shipping, to strike at enemy transportation routes and land convoys, and to pin down the German air arm by attacks on air-dromes. On the 9th, Mediterranean Air Command informed Strategic and Tactical that during the next few days the function of the air forces would be to isolate the battle area and to destroy enemy personnel and equipment. Effective at 1000 hours on the 9th, Strategic would be responsible for the area north of the line Battipaglia-Potenza-Sari, exclusive, and Tactical for all points south of that line, inclusive. In both areas the emphasis of the air attack was to be placed on road communications used by the enemy to reinforce the battle area. ^{E3}

On D plus 1 and D plus 2 the reaction of the enemy's air arm was definitely stronger than it had been on D-day. The raids over the assault area were still mostly small in number of planes per mission and continued to be of the "hit and run" variety, but there were more missions than

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there had been on the 9th. The attacks began at 0100 on the 10th and continued steadily throughout the day until almost midnight; were renewed at 0200 on the 11th and during the day were as numerous as they had been on the 10th; and before the end of D plus 2 many of the raids were on a larger scale than they had been earlier, containing from 10 to 20 planes. The planes appeared to be coming in from Viterbo, Frosinone, and the Foggia bases, with a few bombers apparently flying down from southern France. The enemy bombed and strafed, sometimes hitting the beaches and sometimes ^{the} shipping. Most of the attacks were delivered by fighter-bombers but there was some dive bombing and some high-level bombing. In all, the enemy flew more than 100 sorties on each of the two days. Even so, his reaction continued to be smaller and less severe than had been expected.

NATAF's fighters met these attacks with the same system of patrols which had been used on the 9th, but found the going tougher in the face of larger and more frequent raids. During the 10th day-fighters broke up or turned away more than 40 raids, about one-fourth of which were major attacks involving more than 10 planes, and one of which was a fighter-bomber attack from 1005 to 1120 which very nearly "saturated [Allied] defenses."⁵⁴ On the nights of 9/10 and 10/11 Beaufighters were in action and performed well, despite the fact that the high ground to the east interfered with radar coverage and reduced the amount of help which Ancon could give. On the 11th the enemy made a special effort against the Allied men-of-war, and with some success. The USS Savannah suffered a damaging hit from a glider bomb or a rocket bomb⁵⁵ which smashed into the No. 3 turret and exploded below decks, HMS Flores was damaged by a

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near miss, and the USS Philadelphia was damaged by an enemy plane which crashed 15 feet away. The attack on the Savannah came at 1000 hours, at a time when the fighter cover had been somewhat reduced, partly because it was desired to disorganize and delay enemy M/T movement toward the assault area by employing some fighters as fighter-bombers against the movement (this appeared feasible in view of the unexpectedly small enemy air reaction), and partly in an effort to hold down pilot fatigue. After the Savannah was hit, normal cover was promptly restored and continued throughout the rest of the day.

On the 10th Allied fighters flew 70 patrols totaling around 750 sorties over the Salerno area, and on the 11th they flew some 500 sorties. To this total of 1,250 sorties the valuable Seafires added another 400. For the two days the fighters destroyed and probably destroyed 21 enemy aircraft, while losing seven.⁵⁶

During the first three days of the invasion the air cover over Salerno, according to an observer, had been "excellent," the attack force in the northern area maintaining "about 98% control of the air during all day-light hours and a possible 90% control during the hours of darkness," so that "very few German planes broke through this cover."⁵⁷ The same condition appears to have existed over the southern sector. But the situation at the end of the 11th was not one to cause rejoicing at NAAF. Land-based fighter pilots were beginning to show signs of fatigue--brought on by frequent and long flights in cramped cockpits--and accidents were increasing rapidly. The number of operational Seafires had been reduced, mostly as a result of mishaps not connected with combat, "for a sustained

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air effort could not be kept up from carriers alone for more than 48 to 72 hours," and the planes had begun to suffer heavily from landing accidents.⁵⁸ The German air force was making a stronger effort than on D-day to inflict heavy damage on personnel and equipment while the Allied planes were still having to fly cover from far-off Sicilian bases. All of these unhappy conditions were due, in part, to the fact that the Allies had not been able to clear Montecorvino airfield for use.⁵⁹

The D-day and D plus 1 convoys had been scheduled to bring in some 1,500 personnel and 250 vehicles of XII ASG, 800 personnel and 150 vehicles of RAF, and 650 personnel and 130 vehicles of XII Air Force Service Command. Although some of these bodies and vehicles were delayed until D plus 3, most of them came in on schedule. This personnel had two principal jobs to do; one was to move air force supplies and equipment from the beaches to dumps and from dumps to airfields; the other was to repair any damage which might have been done to Montecorvino airfield and to prepare temporary landing fields along the beachhead for fighter planes. Allied planners had recognized the possibility that Montecorvino might not be immediately available to Allied planes and had planned that, if necessary, up to six landing strips would be constructed close to the beaches.⁶⁰

At about 1700 hours, 9 September, a detachment of the 817th Engineer Aviation Battalion went ashore from an LST, found a bivouac area, and began searching for possible air-strip sites. The first field was selected at 2100 but was abandoned an hour later because it was under

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fire. A second site was then chosen and before morning the engineers, working by moonlight, had chopped rail fences into slabs and laid out an emergency runway. During the night heavy equipment was brought ashore and at 0715 on the morning of the 10th work was begun on the construction of an airfield at Paestum. Drainage ditches were filled, trees cut down to clear the approach, a 3,800-foot runway scraped, and a taxiway and enough hardstandings constructed to take care of one fighter squadron--and by 0600 on the 11th the field was operational. Before the day was over four P-38's had made emergency landings. By the end of the 11th the finishing touches had been put on the field and additional hardstandings had been built. ⁶¹

Leaving a part of its personnel to keep the Paestum field in operation, the remainder of the 817th began work on the morning of the 11th on a second field, naming it "Sele." That night they were forced by pressure from the German ground forces to evacuate the site and to move back to Paestum, but on the morning of the 12th they returned to Sele and by working all day and through the night they completed the field early on the 13th. The following day they began constructing a third field, known as "Capaccio," which was operational on the 16th. ⁶²

The fields at Paestum, Sele, and Capaccio all were within the Sele River- Agropoli sector behind VI Corps. In the Salerno-Sele River area, back of 10 Corps, British engineers of 10 Corps Airfield Construction Group were at work on at least two fields, one of which, Tusciano, was ready for use on the 11th and another, Asa, on the 13th. ⁶³

In spite of these strenuous efforts it was still true that on the night of the 11th there were only two fields (and one emergency landing strip) on the mainland which could be used by Allied fighters, and that the fighters would have to continue to meet the German air threat by long patrols from Sicily and from the Western Naval Task Force carriers.⁶⁴

On the 10th and 11th NAAF's bombers had continued to hit the enemy's lines of communication and airfields. On the night of 9/10, 52 Wellingtons attacked the Grosseto H/Y's, causing fires which could be seen by the returning planes for 100 miles, and U. S. B-25's and PAF and SAAF light bombers hit the road junctions at Auletta, airfields at Frosinone and Grazzanise, and road transport in the Auletta, Avellino, Cosenza, and Sapri areas. The attack on Frosinone was especially important because photo reconnaissance on the 9th had revealed the presence of more than 100 enemy planes on the field.

On the 10th 34 B-17's dropped 96 tons on the road junction at Isernia, 16 unloaded 45 tons on the roads and built-up areas at Boiano, and 33 dropped 100 tons on roads and bridges around Villanova in the Ariano Irpino area. For the third straight day B-24's of the Ninth Air Force hit the Foggia installations, flying 24 effective sorties. Mediums also were active, 35 B-26's, bombing the Formia road junction, and two formations of B-25's, each of 36 aircraft, attacking the road nets at Castelnuova and Cassino. In all, the mediums dropped nearly 160 tons of bombs during the day.

Fighter-bombers likewise were busy, U. S. A-36's and P-38's flying 76 effective sorties against the main roads leading to the battle area.

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Pilots claimed the destruction of more than 100 motor transports. Owing to Allied air superiority it was possible to send some fighters on patrol carrying bombs, the pilots being given their targets while in flight; having bombed their targets they would then carry out their normal patrol duty. This type of operation was used particularly by planes operating over 10 Corps, whose channels back to XII ASC (Adv) and thence to XII ASC (Rear), on Sicily, were slow and uncertain. Through this system it was possible to obtain air support within 10 to 30 minutes after the ground troops had sent in the initial request.⁶⁵

On the night of 10/11 the round-the-clock assault on the enemy's lines of communications continued. Wellingtons, Mitchells, and light bombers attacked the Formia road junction, the towns and road junctions at Auletta and Corleto, and road traffic in the Avellino, Brienza, and Cosenza areas. Such night attacks were particularly important at this stage of the campaign, for the enemy's main movements were of necessity made at night; and the bombers' value in disorganizing transport schedules and in inflicting material damage made their attacks of importance out of all proportion to the scale of their efforts.

On the 11th, SAF's heavies hit Benevento, damaging the M/Y's, roads, and a highway bridge. Its mediums, in 167 sorties, pounded the road junctions at Ariano Irpino, Castelnuova, Isernia, and Mignano. A small RAF Baltimore force bombed Sapri. During the day fighter-bombers flew 141 sorties against roads and road transport.

That night (11/12 September) 96 Wellingtons dropped 187 tons on the airfield at Irosinone from which many enemy planes had been taking off

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for raids against the bridgehead. This attack was followed on the 12th by a B-17 mission, 68 aircraft dropping 128 tons of frag and 300-pound GP bombs on the landing ground and installations. The two raids left Grosinone unserviceable, the field having 150 craters. No other attacks on airfields were made by NAAF's bombers during the next several days, partly because the GAF was not posing much of a threat and partly because NAAF found itself wholly committed to close support of the ground troops.

Other missions on the night of 11/12 were flown by 46 B-25's (with Boston pathfinders) which bombed the roads at Auletta and Corleto, and by light bombers which continued their nuisance raids with 42 sorties against roads leading to the battle zone.

Other operations of NAAF on the 10th and 11th included fighter sweeps by P-40's over southern Sardinia, nightly nickelling operations by Wellingtons, patrols by planes of Coastal over the convoys which were moving from North African ports to Sicily and the beaches, air-sea rescues, and photo recon missions.

During the two days the enemy made no effort to intercept NAAF's heavies and mediums, but employed his entire available fighter strength offensively against Allied ground forces and shipping. His bombers were similarly employed, so that there were no attacks against Allied ports and installations outside of the battle area.⁶⁶

On the 10th and 11th NAAF's aircraft of all types flew more than 2,700 sorties, with day fighters accounting for almost 1,600 of them. In comparing activities for the two days it is interesting to note that

the day fighters flew 895 sorties on the 10th but only 682 on the 11th, whereas fighter-bombers which had flown only 76 sorties on the 10th flew 141 on the 11th.⁶⁷ NATAF was beginning to shift some of its fighters from defensive to offensive operations. On all of these sorties the Allies lost 15 planes (destroyed or missing) and had 3 damaged. On the credit side of the ledger Allied aircraft listed 30 enemy planes destroyed in the air, 4 probably destroyed, and 6 damaged, plus an undetermined number destroyed or damaged on the ground.⁶⁸

On the Eighth Army front, on 9, 10, and 11 September, the British had continued to push steadily northward, occupying Catanzaro and advancing to the area of Petillia and to just above Nicastro.⁶⁹ Their progress was not rapid but the slowness of the advance was due more to extensive demolitions and German rear-guard actions than to any real attempt on the part of the enemy to put up a strong defense. The bulk of the enemy continued to retreat north toward the AVALANCHE area,⁷⁰ the German High Command evidently believing that if the Allied troops in the Salerno area could be smashed it would be no problem subsequently to handle the BAYCUT operation.

During the three days Desert Air Force continued to cooperate with the Eighth Army by smashing at the enemy as he moved out of the Catanzaro area and headed toward Salerno. Throughout the day of the 9th, German columns hurrying through the narrow bottleneck below Paola were attacked by light bombers and fighter-bombers, the planes being guided to their targets by the black smoke which rose from burning vehicles. By the end of the day more than 90 vehicles had been destroyed and 130 damaged, and

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considerable casualties had been inflicted on personnel. There was no opposition by the enemy's fighters to these attacks.

For the next few days DAF's cooperation with the Eighth Army was curtailed owing to the diversion of supplies to the Salerno area, and most of its fighters, operating from around Milazzo in northeastern Sicily, were used for escorting Allied bombers attacking lines of communication leading to the Salerno sector. The Eighth was not neglected, however, for it was aided by mediums which attacked Sapri, Corleto, and other junctions which lay between the Toe and Salerno.⁷¹

Meanwhile, by the end of D-day General Eisenhower saw no reason to believe that the enemy could force the Allied troops from their Salerno bridgehead, and he also saw the advantage of supporting both AVALANCHE and the fast-moving BAYTOWN by a drive up the west coast of the mainland. Consequently, on the 9th he set in motion the already-planned Operation GILBON by starting a part of the British 1st Airborne Division into Taranto, and followed them on the 10th with ground troops of V Corps. Where there was no opposition as the troops went in, the Germans having evacuated the entire Heel. Italians actually assisted the invading forces in establishing themselves ashore. The naval units which transported the troops of V Corps were escorted by fighters of DAF to the extreme limit of their range, but there were no incidents.⁷²

The taking of Taranto was a valuable operation. It gave the Allies a very necessary port through which the Eighth Army could be supplied, which, with the opening of the port at Salerno on the 11th,⁷³ considerably reduced the Allies' great problem of maintaining its forces ashore; it

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further dispersed German air and ground forces and efforts; and it initiated a drive against two highly important German-held centers: Bari, the best port on the Adriatic, and Foggia, the center of the largest and most useful complex of airfields in southern Italy.

From Taranto the British forces moved rapidly north and northwest, meeting no opposition for several days except around Gioia (between Taranto and Bari).⁷⁴

The Critical Period in AVALANCHE, 12-15 September

The German Counterattack. By 12 September, in spite of serious disruption of his lines of communication by constant bombing and strafing, the enemy had been able to bring reinforcements into the Salerno area, elements of two Panzer divisions having come up from the south and units of two other Panzer divisions having arrived from beyond Naples. The two divisions from the south deployed against VI Corps and those from the north against 10 Corps. Moreover, despite the advances which had been made by the Fifth Army, the Germans still held a number of interior roads and many important heights behind the battle lines and so were able to concentrate against almost any desired spot. The weakest place in the Allied line was along the Sele River where, except for one armored brigade (reconnaissance), there was a gap of five miles between VI and 10 Corps; on the 12th the enemy launched a counterattack in this sector with the object of cutting the Fifth Army in two.

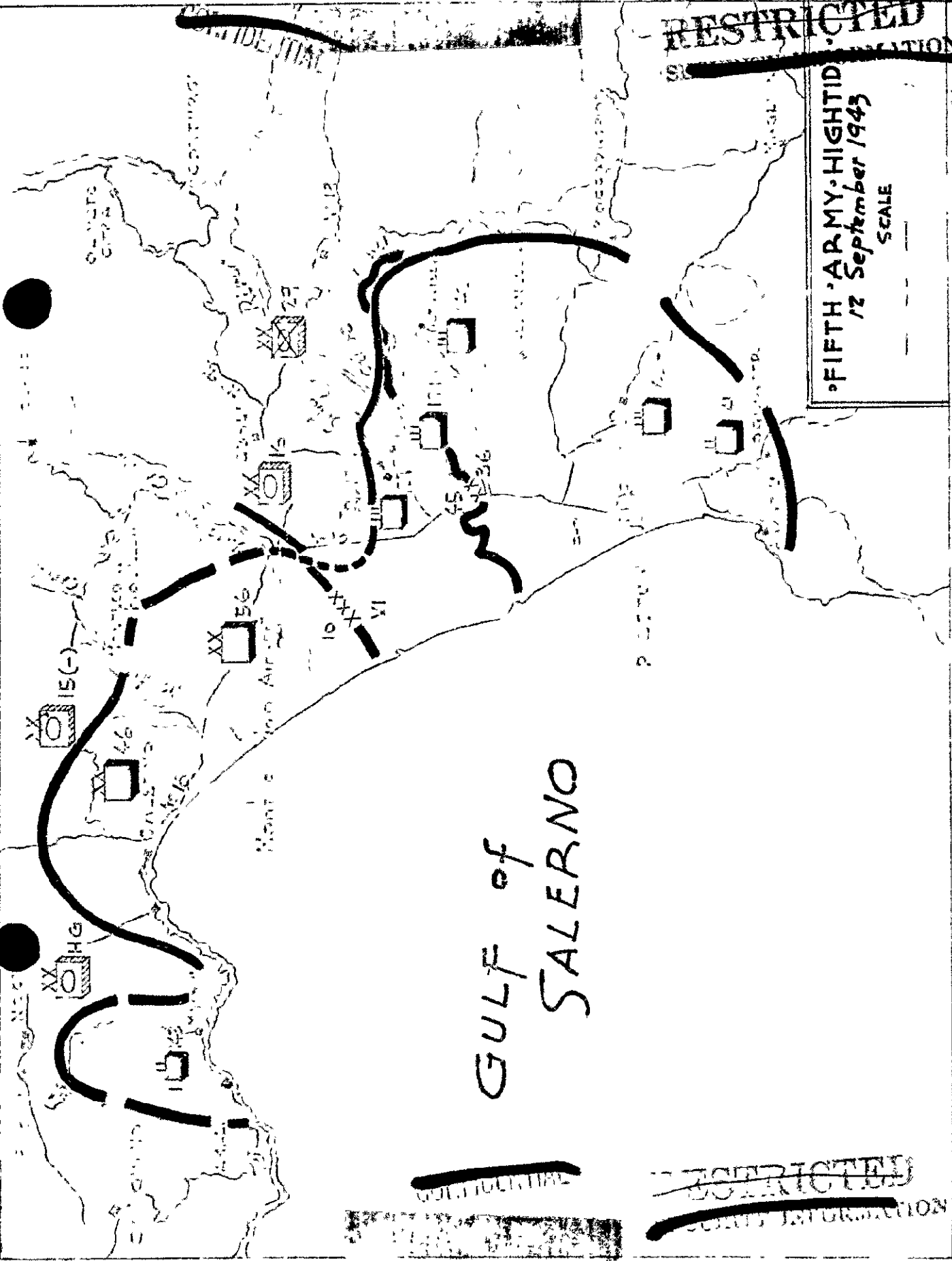
During daylight on the 12th the Germans knocked elements of VI Corps out of Altavilla and took it and Hill 424, a key terrain feature directly

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FIFTH ARMY HIGHTIDE
12 September 1945
SCALE



GULF of SALERNO

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behind the town. At the same time they drove 10 Corps out of Battipaglia with heavy losses. On the 13th VI Corps attempted to retake Hill 424 but failed and was forced to organize a defensive line along La Cosa Creek, about three miles east of Altavilla. On the left flank of VI Corps an enemy infantry-tank attack pushed the Americans back beyond the Sele River crossing at Persano. On the right of 10 Corps' front the Germans drove past Battipaglia and down the right bank of the Sele River to Bivio Gioffi where elements of VI Corps gathered together every available man, stopped the advance, and organized a defensive line. In two days, along a two-mile front, the enemy had driven a deep and dangerous salient into the Fifth Army lines; at one point he was within three miles of the sea.

In order to hold the German thrusts, virtually all of the available forces of VI Corps were shifted into the Sele River-Battipaglia area, and only a few companies of beach engineers, some air service and fighter group ground crews, and other noncombat troops were left to hold the various passes through the hills which led to the southernmost part of the beachhead.⁷⁵ An enemy attack on the right flank of VI Corps could easily have penetrated to the coast and caught VI Corps in a pincer movement; at the same time, any further advance by the enemy down the Sele River would split VI and 10 Corps, and might result in the elimination of the entire beachhead. The situation was critical. And it took the combined efforts of the ground troops, the air forces, and the naval forces to save the day.

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On the ground 10 Corps held firm against enemy assaults on 13 and 14 September, while VI Corps by extensive shifting of troops was able to strengthen the weakest positions in its line sufficiently to throw back German thrusts which came late on the afternoon of the 13th and on the 14th.⁷⁶ By the 15th the German attacks were lessening and by the 16th the threat had passed. It is doubtful, however, if the ground forces could have held the enemy⁷⁷ if they had not received heavy assistance from sea and air. The naval forces entered the fray in the early morning hours of the 14th when the Philadelphia fired 355 rounds against tanks and machine-gun nests; during the afternoon the same ship fired 900 rounds against roads from Eboli to seven miles south. On the 15th the British battleships Warspite and Valiant, up from Malta, hurled tons of projectiles against enemy troops and positions, with the Philadelphia, Boise, and Lavo adding hundreds of rounds to the total. The naval forces continued their bombardment on the 16th, but by the night of the 15th the German penetration already had been sealed off and rendered an immobile target for heavy strikes by NAAF's planes, and the surviving enemy elements had begun to withdraw.⁷⁸

During this engagement--as well as in the entire period from D-day to D plus 10, during which naval gunfire was used against land targets--fire was controlled by cruiser planes, shore fire-control parties, Royal Artillery Grasshopper planes, and USAAF P-51's. The latter displayed such skill and good judgment that the commanding officer of the Philadelphia reported that their spotting "gave excellent results" and was "by far, the most successful method of spotting so far tried."⁷⁹

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Air Operations During the Critical Period. The part played by the air forces in breaking up the German counteroffensive was vital. Like the naval forces, however, it did not begin to throw its weight directly against the enemy's ground forces until the 14th when the Fifth Army's position became critical, its operations on the 12th and 13th largely having been a continuation of the program which it had followed on the 9th, 10th, and 11th, that is, cover by NATAF for the beaches and the shipping and attacks by NASAF on lines of communication.

On the 12th NATAF's fighters flew 650 sorties over the beachhead; the enemy flew about 100 fighter, fighter-bomber, and bomber sorties over the area, but he was less aggressive than he had been on the 11th. On the 13th NATAF flew more than 500 fighter patrols and armed reconnaissance missions over the bridgehead; the GAF flew approximately 120 day sorties and 40 night sorties over the entire battle area. During the two days Allied fighters either destroyed or probably destroyed between 15 and 20 enemy planes and damaged 6, while losing 5 destroyed and 4 damaged.⁸⁰

During these two days U. S. A-36's began to be re-employed in fighter-bomber raids against enemy transportation. On the 12th some 70 A-36's made attacks on roads in the Sepri, Potenza, and Auletta areas; 86 vehicles were claimed as destroyed and 59 damaged. On the 13th similar attacks claimed the destruction of 25 vehicles and the damaging of 40.⁸¹ Such operations had been contemplated from the beginning of the invasion. On the 9th MAC had informed NASAF and NATAF that, as soon as the enemy air situation permitted, P-38's and A-36's would be used in support of ground operations in the battle area; that such operations would be under

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the direction of NATAF; and that when the aircraft were flying in areas for which NASAF was responsible, operations would be coordinated between the two forces by NATAF.⁸² On the 11th some of NATAF's leaders had come to the conclusion that too many fighters were being used on defensive patrols in proportion to enemy air activity, that the P-38 pilots were beginning to feel that their efforts were "being wasted," and that "we must be particularly careful not to allow the German to make us keep our entire force on a defensive role when half of the force will serve the same purpose."⁸³ The belief that a portion of the defensive force could now be shifted to offensive missions no doubt was strengthened by the fact that it had been found that the Spitfires could extend their patrols to 30-35 minutes over the beachhead.⁸⁴

The possibility of employing a number of the fighters in this new role was further enhanced by the fact that some of them were now based within the beachhead. The first contingent to arrive consisted of 26 Seafires which landed on the 3,000-foot Paestum strip early in the afternoon of the 12th. The Fleet Carrier Force from which the Seafires had operated--and from which they had flown a total of 713 sorties since the morning of D-day--had withdrawn from the assault area at 1000 hours that morning, taking with it the bulk of its planes but leaving all that were serviceable. The Seafires operated from Paestum for only two days, departing for Sicily on the 14th. On the 13th and 14th the U. S. 33d Fighter Group moved from Sicily to Paestum and promptly began jumping enemy bombers as they came off their bomb run over the beaches. On the 13th two squadrons of RAF Spitfires arrived; these, supplemented by a

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third squadron, apparently moved from Paestum on the luta and set up on the Tusciano strip. Thereafter, as engineers completed more strips, the fighters moved in rapidly--so that by the end of D plus 7 (16 September) six squadrons of U. S. A-36's, six of RAF Spitfires, three of U. S. P-40's and one of tac/recce P-51's were established in the AVALANCHE area on the fields at Paestun, Tusciano, Sele, Capaccio, and Asa.⁸⁵ These fields were most useful, although their value was somewhat reduced by the fact that they were so extremely dusty that daylight take-offs and landings often had to be made on instruments, and accidents were frequent.⁸⁶

On D plus 3 General House, Commanding General of XII ASC, went ashore from the Ancon and set up his headquarters near Pontecagnano (between Battipaglia and Salerno), but the following day he moved to a point close to General Clark's headquarters near the mouth of the Sele River. From this spot he directed NATAF's fighters and fighter-bombers as they operated over the beachhead and on close-support and intruder missions.⁸⁷ The 64th Wing was left in 10 Corps sector as a lower directing echelon.⁸⁸

Tactical reconnaissance missions, which were essential to close-support, artillery-fire, and intruder missions in the battle zone, were carried out by the British 225 Squadron (Spitfires) and the U. S. 111th Squadron (P-51's). In the beginning tactical reconnaissance was performed on a prearranged basis with a set number of missions, the P-51's working in the northern sector and the Spitfires in the southern. After D plus 3 (12 September) RAF 225 Squadron was affiliated with 10 Corps and operated under instructions issued by it; the 111th Squadron similarly

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operated with VI Corps. Up to six two-plane missions a day were carried out by each squadron.⁸⁹

MAAF's bombers also put in a busy day on the 12th, flying 56 heavy, 147 medium, and 12 light bomber effective sorties against road communications, and dropping around 400 tons of bombs. B-17's hit the Iignano road junction and the Benevento road junction and bridge; B-26's bombed Isernia and the Formia road junction while B-25's attacked the roads at Ariano and Corleto and the road junction at Castelnuova, one-half (72) of all sorties by mediums for the day being against Ariano; and Baltimores hit traffic on the Lagonegro-Auletta road. During the night of 12/13, 65 Wellingtons hit the Castelnuova road net, 44 B-25's attacked roads at Auletta, Potenza, and Corleto, and 39 light bombers raided various roads east of the battle area. A total of 224 tons of bombs were dropped during these night operations.

The attacks on the 12th and the night of 12/13 completely destroyed the Castelnuova road junction, cut the road northeast of Formia in three places, blocked the southern entrance to the Benevento road bridge, and cratered the roads around Ariano.

On the 13th MAAF's heavies and mediums lowered their sights a bit and went for the roads immediately beyond the semicircle of mountains which lay back of the Salerno plain. Torre del Greco, Torre Annunziata, and Pompeii--all on the roads from Naples to Salerno--were hit: Torre del Greco by 33 B-17's with 99 tons, and Torre Annunziata and Pompeii by 36 B-25's and 35 B-26's respectively, a total of 74 tons being dropped on the two towns. On the main road south (which ran from Salerno through

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Eboli and Auletta to Cosenza) 39 B-17's dropped 1,060 x 100-lb. bombs on the Sala Consilina highway and the road junction and bridge at Atena Lucana, and 22 B-25's dropped an additional 51 tons on Sala Consilina while 24 light bombers attacked the Atena road junction.

During the night (13/14) 91 Wellingtons pounded the roads around Pompeii with 164 tons, and 23 B-25's (aided by Boston pathfinders) attacked the roads at Torre Annunziata. Farther south, a like force of B-25's and Bostons bombed the roads and railway at San Severino. Meanwhile, 34 light bombers carried out intruder missions over various roads north of the battle zone.⁹⁰

As the ground situation further deteriorated on the 13th, NAAF prepared to throw its full strength against the enemy in close support of the Fifth Army. Its first task was to bring in troops to strengthen VI Corps. The plan was to drop 800 troops of the 504th Regiment of the U. S. 82d Airborne Division on the night of 13/14 and 2,100 troops of the 505th Regiment on the night of 14/15, both drops to be immediately behind VI Corps. On the latter night a second force was to be dropped near Avellino; its job would be to disrupt the movement of German troops southward.

The first mission, known as GIANT I (Revised)⁹¹ was set up with only a few hours' notice, the 51st and 52d Troop Carrier Wings being notified of the mission at 1330 hours on the 13th, orders for the mission to be carried out being issued at 1830 hours, and the first planes taking off at 1930. Three pathfinder aircraft led the way. They took off from Agrigento, Sicily, shortly after dusk with 50 paratroopers and Eureka

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NAPLES AVERUNO
DZ (GIANT III)

SALERNO

DZ
(GIANT
I AND IV)

LIGOSA PT.

III FRESCHI PT.

ITALY

Tyrrhenian Sea

C. BONIFATI

TROOP CARRIER OPERATIONS
• AVALANCHE •
12/13, 14/15 SEPTEMBER 1943

C. VATICANO

C. ROSOCOLMO

MESSINA

PALERMO

SICILY

CATANIA

52ND ASSEMBLY
AREA

51ST ASSEMBLY
AREA

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beacons, Krypton lamps, and Handie-Talkies (SCR-536's), and dropped the paratroopers and equipment squarely on the Drop Zone 3.5 miles south of the Sele River. Within three minutes the Rebecca-Eurekas were in operation. Fifteen minutes later 82 C-47's and C-53's of the 61st, 313th, and 314th Troop Carrier Groups began coming in from Comiso and Milotrapani,⁹² most of them homing on the Eurekas, and the paratroopers poured out. The bulk of them hit within 200 yards of the DZ and all were within one mile except B Company of the 1st Battalion, which was dropped 8 to 10 miles southeast. Not a plane nor a man was lost on the mission and only one man was injured, although more than 600 men were dropped. The paratroopers were taken by truck to a point near Albanella. After helping to stop the German advance the regiment went over to the offensive on the 17th and took Altavilla.

On the following night (14/15) Troop Carrier carried out the second mission, GIANT IV, when 125 planes of the 61st, 313th, and 314th groups dropped 1,900 men with their equipment. The same DZ and same general set-up that had been used the previous night in GIANT I (Revised) were used, and the drop was equally successful. The bulk of the troops landed within 200 yards of the DZ, and all came down within a mile and a half except some 40 men who were dropped 20 miles north. Sixty waiting trucks took the troops from the DZ to battle stations, one battalion being placed in front of Agropoli, one at Ogliastro, and one by Capaccio. The men relieved the beach engineers and service troops who had been pressed into service for a last-ditch stand in case the Germans attacked on VI Corps' right wing (and who by now were three days behind in their job of

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unloading over the beaches) and the tired and battered 45th Division which had been in the line since the landings.⁹³

The third of the missions, known as GIANT III or AVALANCHE Drop, which was carried out on the night of 14/15 in the vicinity of Avellino, was not as successful as the two drops near Paestum. Forty aircraft of the 64th Troop Carrier Group hauled 600 paratroopers of the 509th Airborne Regiment to a DZ 2.5 miles south of Avellino and 25 miles due north of Salerno. Fifteen of the planes dropped their men in the vicinity of the DZ but the remainder of the troops landed anywhere from 8 to 25 miles away. The average distance from the DZ for all of the 40 planes was seven miles. The men landed in scattered and small groups. Most of them came down in woodlands and vineyards which made it difficult for them to assemble. In addition, most of their equipment bundles were lost, no mortars or bazookas ever being found. As a result only a small force succeeded in reaching Avellino. This force blew a hole in the main highway bridge and then took to the hills, as did the other groups. After waiting several days for the arrival of the Fifth Army the scattered elements moved south and bit by bit made contact with the advancing Allied forces. By 8 October only 118 men out of the 600 who had been dropped were still listed as killed, captured, or missing.

The lack of success which attended the Avellino drop resulted from a combination of circumstances. The limited range of the 5G transmitter and the Aldis lamps which the pathfinder force set up prevented all but a few of the aircraft from receiving the necessary homing indications;

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high hills about the DZ probably further shortened the range of these instruments. The planes found it difficult to pick out the DZ area because of a similarity in topography among several valleys and ranges of hills in the vicinity. It was not possible to use visual ground signs as had been done in the two Salerno drops where--because the area was in friendly territory--a large lighted "T" had pointed down-wind to the DZ. Most important of all, perhaps, was the fact that the mountains around Avellino forced the troops to drop from heights ranging from 3,000 to 5,000 feet (whereas the Salerno drops had been made from 600 feet), which naturally made pin-pointing impossible.⁹⁴

No enemy air opposition to these three missions showed up, although during GIANT I (Revised) an enemy plane was over the area of the DZ for 30 minutes. Nor was any flak encountered, and no small-arms fire except on the Avellino drop where a few planes were noled. More important was the fact that there was no fire from friendly guns as there had been during the paratrooper and glider operations at the opening of the Sicilian campaign.⁹⁵

The results of these several drops caused General Marshall to express the feeling that the Allies were not sufficiently developing the airborne facilities available to them. "The Sicilian and the present campaign," he said, "might have developed very differently if we had been in a position to handle simultaneously more than one airborne division." He felt--and General Arnold agreed--that the Germans were particularly afraid of Allied airborne operations and that such operations

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would help immensely with OVERLORD. As a result of General Marshall's statements the CCS instructed the Combined Staff Planners to reconsider the Anglo-American program and policies for the organization and employment of airborne troops and their supply by air.⁹⁶

On the 14th, as the ground situation entered its most critical stage, NAAF went all-out in direct aid to the Fifth Army. Its bombers, fighter-bombers, and fighters flew more than 1,900 sorties. NATAF's fighters and fighter-bombers flew more than 1,000 sorties on patrols over the bridge-head and the offshore shipping and on bombing and strafing attacks against targets of opportunity in the battle area. In the latter attacks the U. S. A-36's destroyed 69 vehicles and damaged 35, mainly around Battipaglia and Torre Annunziata; P-38's, some of them operating as dive bombers,⁹⁷ attacked vehicles, roads, bridges and yards in the same localities and at Auletta, Eboli, and Avellino; P-40's bombed the docks and railway at Torre Annunziata; and fighters of DAF, sweeping north from new bases at Reggio, strafed transport around Eboli. In all, the fighter-bombers dropped 159 tons of bombs during the day.

Heavies and mediums—with most of the heavies flying two missions—divided their attention on the 14th between roads leading into the Salerno area and German concentrations of troops and supplies in the Battipaglia-Eboli sector. Thirty-four B-17's dropped 102 tons on Pompeii and 37 more dropped 108 tons on Torre Annunziata. More than 100 U. S. mediums pounded the roads leading northwards to Avellino and southeastwards to Auletta with approximately 140 tons. Ninety-nine B-17's, 154 B-25's, 98 B-26's, and 36 RAF Baltimores blasted the area around Battipaglia and Eboli with 497 tons of explosives. In all, NAAF's bombers flew more

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than 700 sorties during the day, exclusive of night missions.

During this stage of the operations--and through the 15th--Strategic Air Force was a tactical air force, for its heavies and mediums operated directly in cooperation with the ground forces and its attacks were purely tactical in nature. Some of its planes bombed so close to the Fifth Army that "a miss would have been disastrous."⁹⁸

Outside of the battle area, along the Adriatic coast, 19 B-24's, formerly of the Ninth Air Force--whose heavies had been transferred on the 13th to the Twelfth Air Force⁹⁹--hit the Pescara M/Y's.

On the night of 14/15 NAAF's Wellingtons launched their heaviest attack to date in the central Mediterranean when 126 aircraft continued the relentless assault on Battipaglia and Eboli by dropping 240 tons of bombs. B-25's also hit Eboli and bombed roads around Auletta and Crotona, while light bombers continued their intruder missions over roads leading to the battle area.

The attacks of the 14th and the night of 14/15 were highly successful. The railroad lines from Torre Annunziata to Castellamare, Salerno, Naples, and Cancellio all were cut by direct hits. The highway to Naples northwest of Torre Annunziata was blocked, and roads to Castellamare and Naples were severely damaged. At Battipaglia the Naples, Metaponto, and Reggio rail lines were cut, the roads to Naples and Rutino were cut and the bridge destroyed, and the road to Metaponto was severely damaged.¹⁰⁰

The bomber missions on the 14th--as well on the 12th and 13th--met almost no enemy opposition. B-25's over Battipaglia on the 14th encountered from 10 to 15 Me-109's and shot down two of them without loss, and a Wellington over Pompeii on the night of 13/14 tangled with a night

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fighter Ju-88 without results. Otherwise the Allied bombers went their way unmolested. The enemy was using all the strength he could muster in offensive missions against the Fifth Army and its shipping, leaving his own troops completely exposed (except for defense by some flak) to NAAF's round-the-clock assault.

On the 15th NAAF flew about 1,400 sorties, fewer than on the previous day, but in the battle zone it "threw the book" at the enemy. The combined fighter and fighter-bomber sorties over the battle area totaled around 850 of which only about 300 were beach patrols. These patrols met about 75 enemy sorties, and in a series of scattered combats shot down seven FW-190's, probably destroyed three, and damaged two, while losing one Spitfire and one P-40.

The 549 fighter-bomber sorties were flown by 317 P-38's, 175 A-36's, and 57 RAF Kittyhawks, the latter operating from the recently occupied field at Grottaglie, in the Heel. In all, the fighter-bombers dropped 171 tons of bombs, and they hit just about every square mile in the Salerno area, with special emphasis on the Eboli, Battipaglia, Avellino, and Auletta sectors. Vehicles, troops, gun positions, and roads were bombed and strafed. More than 300 vehicles were destroyed, and on the side the A-36's shot down one enemy plane, probably destroyed another, and damaged two more without loss to themselves.

Bombers of NASAF and NATAF flew 92 heavy, 250 medium, and 88 light bomber sorties during the day, dropping 483 tons of bombs on battlefield targets and lines of communication. The B-17's worked on the Battipaglia-Eboli road and the roads at Torre del Greco; the B-25's attacked the Torre Annunziata road junction and troop concentrations at Roccadaspide;

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the B-26's hit targets on the Battipaglia-Eboli, Serre-Eboli, and Auletta-Folla roads; and the light bombers attacked troop concentrations at Eboli and in the areas east of Altavilla and north of Roccadaspide. On the side, 26 Liberators attacked the M/Y's and highway at Potenza. Strategic on the 15th, as on the 14th, was a tactical air force, operating in direct cooperation with ground troops.¹⁰¹

On the night of 15/16, 123 Wellingtons kept up the terrific pressure on the enemy by dropping 240 tons of bombs on the roads at Torre Annunziata and Pompeii, and 43 U. S. mediums and 49 PAF and SAAF light bombers struck roads in the battle area.¹⁰²

The results of the intense and concentrated bombings from the 13th through the 18th were profound. They could hardly have been otherwise with both Strategic and Tactical throwing their full weight against the enemy troops, transport, and supply bases in the limited area around the Salerno battlefield and against lines of communication close to the battle zone, with more than 3,000 tons of bombs being dropped by over 2,400 planes, with most of Strategic's bombers flying two sorties a day at the height of the air offensive, and with NAAF's aircraft pouring onto the actual target areas an average bomb density of 760 tons per square mile. Whole towns were destroyed, roads and railroads obliterated, and troop and motor transport concentrations severely damaged or--in many instances--wiped out. The heavies even attacked repeatedly enemy forces immediately opposite the Fifth Army. "Never before," said Headquarters, MAC, "have bombs been employed on a battlefield in such quantities or with such telling effect."¹⁰³

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The Germans in the Sele River salient could not stand up under the combination of bombing,¹⁰⁴ naval shelling, and ground fire; and by the end of the 15th their dangerous attack had been blunted. Their troop and vehicle concentrations, particularly in the Battipaglia-Eboli area, were so battered that it was not possible for them to continue their drive against the Fifth Army. How many enemy troops were knocked out of the fighting by MAAF's planes cannot be determined, but reports indicate that over 300 vehicles were destroyed and almost 200 damaged by fighter-bombers alone. In general, the lines of communication leading into the battle zone were so thoroughly interdicted that by the end of the 15th the flood of German reinforcements which had been coming down from the north and up from the south had been reduced to a trickle. Specifically--to use a few examples--the Naples-Salerno roads and railroads were virtually closed to traffic as the result of severe damage in and around Pompeii, Torre Annunziata, and Torre del Greco; the main Rome-Naples railroad tracks were cut and the coast road was blocked; at Potenza all through-lines were blocked and the town itself--not easily by-passed--was badly smashed; every road out of Castelnuova was wrecked; the Capua road bridges were broken, the railroad bridge damaged and the rail lines cut; the Auletta-Lagonegro road was no longer usable; while within the battle area around Battipaglia and Eboli there was the severest damage to roads, railroads, and bridges--most of the lines being completely unserviceable--as well as to military installations, rolling stock, M/Y's, barracks, and the towns themselves.¹⁰⁵

By the morning of the 16th the enemy was pulling back and the situation

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was so generally improved that the Fifth Army was preparing to go over to the offensive.¹⁰⁶ The beachhead was secure and the Americans and British were on the mainland to stay. But it had been a close call. The Allies had been as near to a serious defeat as they would ever be during the long Italian campaign, and at a time when a setback would have had the most unfortunate consequences. It had taken the combined efforts of the ground, naval, and air forces to turn the tide. The air forces had played their part well, General Spaatz feeling that the operations had demonstrated "to a greater extent than ever before the importance of Air Force flexibility in organization and operations and the decisive effect which air power has in combined operations."¹⁰⁷ The value of NAAF's contribution in this most critical period was expressed by General Alexander, who wrote on 17 September that General Clark had asked him to convey to NAAF the sincere thanks and appreciation of the Fifth Army for the "magnificent air support" which had been given to the ground troops. It had, said General Clark, "contributed much to the success" of the ground operations, and "all were most enthusiastic in their acclaim of the close and continuous support which has been given them by the Air Forces." Gen. Sir Harold Alexander added words of praise of his own:¹⁰⁸

The tremendous air attacks added greatly to the morale of the ground and naval forces and, in addition, have inflicted on the enemy heavy losses in men and equipment. They have seriously interfered with his movements, interrupted his communications, and prevented his concentration of the necessary forces to launch large-scale attacks. You have contributed immeasurably to the success of our operations.

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Of this message General Spaatz wrote: "Never before have the Air Forces been given such sincere recognition by an Army Commander."¹⁰⁹

So entirely were the air forces committed to direct support of the ground forces that none were left for trips into northern and central Italy, with the result that General Eisenhower cabled the CCS to suggest that it would help matters if bombers from the UK could strike a blow against the German lines of communication into northern Italy; and so great was the need for the all-out effort of the air forces on behalf of the ground troops that he informed the CCS that the situation would be helped if the CCS would return to the Mediterranean the three B-24 groups which had formerly operated there, as they would be very useful for hitting lines of communication close to the rear of the battle area during the coming two weeks. Both suggestions were approved by the CCS and were carried out promptly by the Eighth Air Force and the RAF in the UK. On the night of 16 September 340 RAF planes and 5 B-17's bombed the M/T's at Modane in southern France in an effort to close the northern end of the Mont Cenis Tunnel. At the same time the Eighth dispatched 80 aircraft, 98 combat crews, and 446 noncombat personnel of the 44th, 93d, and 389th Bomb Groups (E) to the Mediterranean to assist in the Italian campaign. These planes began operations on the 21st and continued to fly missions for NAF through 1 October.¹¹⁰

The Allied Commander-in-Chief was also concerned that his air force might not be able to continue its operations on the scale which he felt was necessary to the success of Allied arms. On the 14th he cabled General Marshall that air operations in BAYTOWN and AVALANCHE had

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seriously taxed his resources in crews and equipment, the actual employment of the air forces having greatly exceeded the planned employment. To reduce the scale of the present air effort might be disastrous, he felt; yet the air force "is being depleted by attrition losses and will be further depleted by losses through completion of combat tours." By 1 October, 28 per cent of the B-17, 29 per cent of the B-26, 56 per cent of the B-25, and 72 per cent of the P-38 crews would have completed their tours. Such crews would still be used, but obviously their efficiency would be lowered and their losses in equipment would be heavy.¹¹¹

Completion of combat tours was especially rapid in the Mediterranean as a result of a combination of excellent flying weather during the summer months and the large number of sorties in support of land campaigns. Air crews finished their 50 missions in four to six months; so, despite low casualty rates, the normal 15 per cent replacement rate seemed to the theater commanders to be too low. General Doolittle felt that his XII Bomber Command faced a critical shortage of combat personnel due to rotation of war-weary crews.¹¹²

NAAF received no immediate reinforcements as a result of General Eisenhower's deposition. The Assistant Chief of Air Staff, Operations, Commitments, and Requirements noted that on 1 October, after making a 15 per cent allowance for attrition during September, the Twelfth Air Force would have on hand 230 B-17's (an overage of 38), 265 B-25's (an overage of 137), 236 B-26's (an overage of 65), and 381 P-38's (an overage of 156); he further noted that the only way by which the theater could return a large percentage of crews during September and October

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would be for the AAF to send September crew graduates to North Africa instead of to UK as presently planned.¹¹³ On 22 September, General Marshall informed General Eisenhower that no P-38's over the number already allotted to the MTO would be available. He noted that the USAAF's air forces in other theaters were even shorter on replacements than was the Mediterranean, and he was hopeful, now that AVALANCHE was secure, that the pressure on NAAF's fighter planes would be greatly reduced.¹¹⁴ However, it was planned to increase the replacement rate from 15 per cent to 20 per cent (troop carrier crews from 7.5 per cent to 10 per cent), effective in January 1944. This was to be the minimum figure, and a larger percentage of replacements would be sent whenever possible.¹¹⁵

Secondary Air Operations, 9-15 September

While NAAF's planes had been helping to establish and then to save the Salerno bridgehead, its aircraft also had been busily engaged in carrying out the several secondary tasks with which the air forces were charged.

Every night Wellingtons dropped hundreds of thousands of "nicks" over central and northern Italy, Corsica, and Sardinia.¹¹⁶ Regularly, P-40's swept over southern Sardinia looking for signs of enemy air activity-- and finding none.¹¹⁷ Daily, PRW sent its planes over enemy territory in search of targets and concentrations and shifts of troops and aircraft, and on damage assessment missions. A typical PRW day between the 9th and the 15th was the 13th: one plane covered Foggia A/D and satellites; a second covered Termoli and Auletta; a third examined airfields in the Rome area; a fourth photographed A/D's at Frosinone, Aquino, and Spoleto;

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a fifth covered A/D's and M/Y's in the Naples area; a sixth examined Venice, Verona, and other northern cities; and a seventh took a look at cities in western Yugoslavia. At the same time eight PRW planes covered roads in central Italy; one covered all ports on the west coast north of Rome, plus the island of Elba; another obtained 36-inch cover of bombed areas for damage assessment; two flew extensive cover of the ports and A/D's in Corsica and Sardinia; and three Malta-based planes covered the cities, ports, and A/D's of southern Italy. These missions were flown by Spitfires, F-5A's, and Mosquitoes. The enemy made strenuous efforts to interfere with PRW's missions by sending up both planes and flak, but the fast, high-flying photo planes always got home with no more damage than an occasional flak hole.¹¹⁸

KAPRW's work might have been more valuable had the wing headquarters not remained in North Africa during September. This caused delays of up to 48 hours in delivery of the important vertical photos to units in the field in Italy. This unsatisfactory situation was partly alleviated by having a supporting tac/recce squadron make a number of pin-point photos. On one occasion such photos were requested by an infantry division, taken, developed, interpreted, and the target fired on by division artillery in the space of six hours.¹¹⁹

Coastal Air Force stuck steadily to its numerous and unspectacular but important tasks. The night of 11/12 and the day of 12 September may be taken as typical examples of CAF activities. One hundred and twenty of its fighters (including 56 planes of the French Air Force) successfully escorted four aircraft carriers, being assisted in the job by 18 Hudsons,

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Wellingtons, Swordfishes, and Walruses. One of its Hudsons sighted a surfaced submarine off Sardinia and attacked it with four depth charges, but without positive results. Eight fighters scrambled against plotted hostiles. Beaufighters and P-39's were on patrol from Dellys to Cherchel and over the harbors of Algiers, Bizerte, and Oran. Two Spitfires searched for a Wellington reported down at sea north of Bone, and four hours later a rescue launch picked up seven survivors. Several other air-sea rescue searches were conducted but without results. Fourteen fighters escorted an aircraft carrier without incident. Two U-boat hunts were conducted with no success, but a third hunt resulted in the bombing and destruction of a submarine. Wellingtons, Marauders, and Baltimores reconnoitered Sardinia and Corsica, the northern Mediterranean coast from Marseilles to Piombino, and the approaches to Toulon, Genoa, Spezia, and the northern Tyrrhenian and Ligurian seas.¹²⁰

Summary of the Air Effort

The extent of NAAF's operations during the four critical days from the 12th through the 15th is indicated by the fact that its planes flew more than 6,000 sorties and dropped over 3,500 tons of bombs. Three-quarters of all the sorties were flown by pilots of the Twelfth Air Force. Of the total sorties, fighters flew around 2,700 and fighter-bombers 800, with probably 300 of the fighter sorties actually being fighter-bomber in nature. Mediums flew close to 1,100 sorties, heavies around 550, light bombers some 400 and night bombers about 300 for a total of more than 2,300 bomber sorties, not including fighter-bombers. Planes of FEW put

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in almost 100 sorties. Aircraft of Coastal, which did not operate over the mainland during the period, flew an average of around 100 sorties per day.¹²¹

The scope and value of the operations of the fighters and fighter-bombers during the first 10 days of AVALANCHE (8-17 September) is well illustrated by the activities of three groups of P-38's, the 1st, 14th, and 82d Fighter Groups. The groups' planes were based around Gerbini, Sicily, 215 miles from Salerno, so that each flight, exclusive of the distance traveled while patrolling or of the extra miles flown while bombing beyond the bridgehead, was 430 miles. The total time required for a round-trip and a one-hour patrol was three and one-half hours. A mission of such length and duration in a fighter plane was a grueling affair. Nevertheless, the three groups flew 2,771 sorties, with an average of 228 aircraft in commission (or more than 12 missions per plane), and kept 24 planes over the beaches at all times during daylight hours, 12 planes taking off every 30 minutes. The groups dropped 1,331 bombs, shot down 11 enemy planes, destroyed 35, and damaged 41 on the ground by strafing. They lost 25 planes but had only 1 pilot killed in action and 10 missing.¹²²

No less worthy of recognition was the work done by the groups' ground crews. There were only 300 men per group but they cared for all maintenance and servicing, handled all bombs, ammunition, gasoline, etc., and took care of housekeeping, guard duties, and other services.¹²³

In the period from 1 through 15 September in support of BAYTOWN and AVALANCHE, NAAF's aircraft flew approximately 17,500 sorties. Planes of

the USAAF accounted for almost exactly two-thirds of this number. U. S. fighters (not including A-36's which, as fighter-bombers, are counted in the bomber totals) flew some 6,200 sorties and RAF fighters flew around 4,750, a total of 10,950. Bombers of all types flew 6,450 sorties, with U. S. bombers accounting for around 5,350 and RAF Wellingtons for 1,100. During the period a total of approximately 10,000 tons of bombs were dropped, around 7,400 by U. S. bombers and fighter-bombers, and 2,500 by the RAF. NAAF's aircraft shot down 221 enemy planes, while losing 89. Of the victories 80 per cent were credited to the USAAF, whose bombers accounted for 100 enemy planes and whose fighters knocked down 67; the remaining 54 planes were destroyed by the RAF, 50 being knocked down by bombers and 4 by fighters. Of the 89 planes lost, the USAAF lost 59 (22 bombers and 37 fighters), while the RAF lost 30 (8 bombers and 22 fighters). Figures on Coastal's operations for the period are not available, but during the period from 1 through 8 September its planes flew a total of 2,269 sorties, of which number 1,344 were convoy escort.¹²⁴

From the end of the Sicilian campaign on 17 August through the checking of the German counterattacks on 15 September the several elements of NAAF flew a total of 18,193 fighter sorties and 2,259 fighter-bomber sorties. Most of them were cover for the assault beaches of BAYTOWN and AVALANCHES; the remainder were air support missions, in the course of which fighter-bombers dropped 1,060 tons of bombs. During the same period Coastal's planes flew 3,571 sorties on defensive missions, convoy cover, air-sea rescue, U-boat hunts, etc. Fighter cover was given by Coastal to 357 convoys without a single shipping loss. Interceptions

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by Coastal totaled 547 and resulted in the destruction of 37 enemy aircraft, the sinking of three enemy ships, and the damaging of 16. Twenty-two air-sea rescues were accomplished. During the period bombers flew more than 8,000 sorties and dropped over 14,000 tons of bombs. All elements of NAAF destroyed in combat 324 enemy fighters and 68 bombers, and destroyed on the ground 404 enemy fighters and 107 bombers. Against these impressive figures NAAF lost 130 fighters (26 of them to flak), 19 heavy bombers (8 to flak), and 56 mediums (41 to flak).¹²⁵

During the critical days at Salerno the two other Allied ground operations on the mainland had continued to move steadily forward. On the Calabrian front Eighth Army reconnaissance units had reached Sapri, 75 road miles below Paestum, and advance patrols were still further north. To the east, troops were moving northwards from the Spezzano area. Enemy demolitions continued to be the chief obstacle to the advance. On the Apulian front the Allies, now reinforced, controlled everything south of a line Mottola-Castellaneta-Ginosa and all of the Heel except a small area around Brindisi; they had patrols extending north and northeast from Mottola to the Adriatic, including Bari. Only around Gioia were the Germans putting up any resistance.¹²⁶

Things also were going well for the Allies in and across the Tyrrhenian Sea. The island of Capri had been occupied on the night of 12/13, without opposition, and radar facilities and a motor boat station had immediately been set up by the Navy. In Sardinia the Germans were pulling out rapidly, apparently going to Corsica from La Maddalena, after having destroyed their installations and airfields on the northern half

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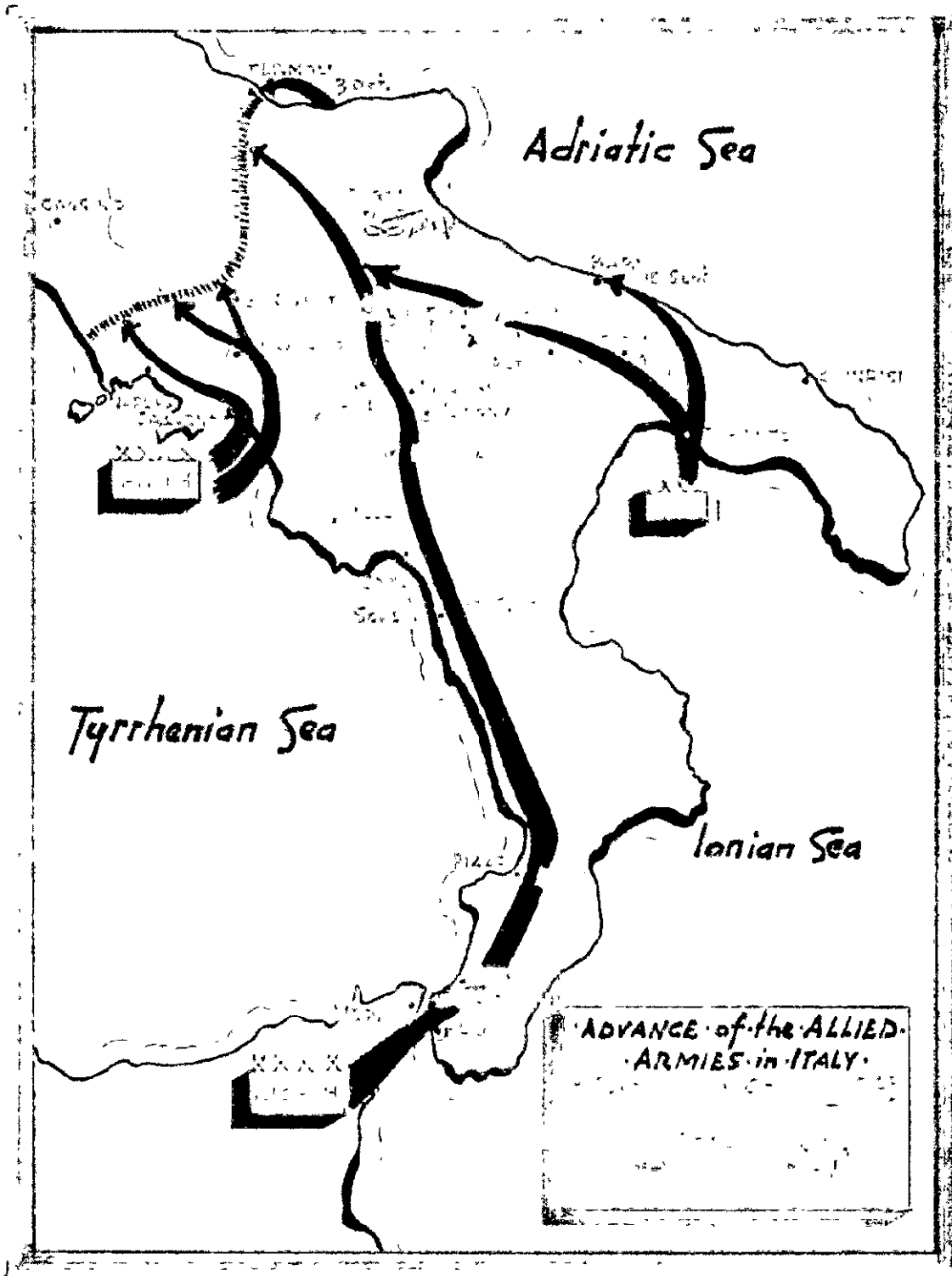
of the island. On Corsica, patriots and Italian troops were harassing the Germans at all points, but the latter were in sufficient strength to hold those places on the island (notably Bastia) essential to a complete evacuation--which would not come for another two weeks. ¹²⁷

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Chapter IV

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AIR OPERATIONS DURING THE LAST HALF OF SEPTEMBER

From the 16th to the 27th of September when the Eighth Army entered Foggia and to the 1st of October when the Fifth Army moved into Naples, the story of the Italian campaign is one of steady Allied gains across rugged terrain and against a tough and skillful foe. The period properly should be analyzed in two phases. Phase one, from the 16th through the 19th, saw the German forces in front of the Fifth Army pass from the offensive to the defensive and begin to withdraw from the Salerno Plain, the Fifth Army take over all of the Salerno area from the beaches to the mountains, the Fifth join with the Eighth, and the Eighth advance past Potenza, Gioia, and Bari. Phase two, from ^{the} 20th through the 30th, was featured by hard fighting on the Fifth Army front among the hills and mountains between Salerno and Naples-Avellino, the debouching of the Fifth Army onto the Naples Plain on the 28th, the capture of Naples and Avellino, and--in the Eighth Army sector--the seizure of Cerignola, Foggia, and the whole of the Gargano Peninsula.¹

With the capture of the port of Naples by the Fifth Army and the overrunning of the Foggia airfields by the Eighth, the primary missions of AVALANCHE and BAYTOWN had been accomplished. In no small part these successes were made possible by the air forces.

First Phase: 16-19 September

During the first phase of the action of the last two weeks of September, that is, from the 16th through the 19th, the air forces were

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engaged in carrying out four major missions in furtherance of the Fifth Army's advance: (1) interrupting the German withdrawal; (2) forcing concentrations of men and material by limiting and restricting the enemy's movements, and then destroying personnel and equipment by light and fighter-bomber attacks on the concentrated targets; (3) hitting critical communications objectives north of the battle area with heavy and medium bombers for the purpose of preventing the movement of reinforcements as well as for cutting lines of escape which the enemy might use in the event of an Allied break-through; and (4) taking counter-air-force measures in order that the German air force might not be able to hinder the advance of the army or interfere too seriously with the three air force missions noted above.² The return of Strategic to strikes against communications and to counter-air-force operations after almost a week of tactical and quasi-tactical activities was made possible by the improved ground situation.³

"Our air force," General Eisenhower cabled to the CCS on the 16th, "continues to be superb."⁴ NAAF's activities on that day merited the words of praise. Heavies flew 106 sorties and mediums 234. The more than 400 tons of bombs which they dropped were directed against the outer ring of communications targets, the main attacks being delivered against the Capua and Benevento bridges and roads and the Mignano, Isernia, and Caserta roads. In addition, 20 B-24's formerly of IX Bomber Command hit the Potenza road junctions with 42 tons. That night Wellingtons flew 123 sorties over the roads and bridges at Torre Annunziata and Pompeii, dropping 240 tons of bombs. Fighters and fighter-bombers flew close to

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500 sorties against enemy troops and positions and in defense of the beach area. In all, NAAF's planes flew more than 1,200 sorties and dropped slightly more than 1,000 tons of bombs.

The enemy's activity during the day was up a bit from the 15th, 120 sorties being flown, all of them against shipping and the beachhead. His principal success was the damaging of HMS Warspite.⁵

Beginning on the night of 16/17 September, the Allied air forces' heavies and mediums shifted their attacks to enemy airdromes which, since the night of 11/12, had enjoyed five days of respite from demolition and fragmentation bombs (while Strategic and Tactical had been directing their full efforts toward reducing enemy pressure on the bridgehead) and which now were beginning to show signs of increased activity. In particular it was important that the Foggia installations, Viterbo, and the fields near Rome be smashed, reports from "Y" service and photo reconnaissance having indicated that the Foggia bases held four Gruppen of Ju-88's and many fighters, Viterbo two Gruppen of Ju-88's, and the Rome fields a large number of fighters and fighter-bombers. It was not necessary to attack the Naples fields or Capua, none of which were serviceable, or any fields south of 41° N (Naples-Barl line), all of which were either in Allied hands or too badly damaged to be used by the GAF.⁶

The airdrome blitz was opened on the night of 16/17 by 89 Wellingtons which dropped 150 tons of bombs on the fighter base at Cisterna/Littoria, near Rome, leaving the field "a mass of fire." On the 17th 55 B-17's pounded Ciampino North and South (the Rome fields) with 106 tons of high explosives, and 72 B-26's and 60 B-25's cracked down on Practica di Mare airfield (on the coast, southwest of Rome) with 136 tons. Strike photos

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showed that 80 planes and 18 gliders were destroyed or damaged in these raids. That night 64 Wellingtons went for the fighter base at Cerveteri (on the Via Aurelia, west of Rome) with 119 tons which smashed hangars, destroyed many aircraft on the ground, and left large fires burning. On the 18th follow-up raids were made on Ciampino South by 36 B-25's and on Pratica di Mare by 86 B-26's, with heavy damage to grounded planes and installations. A very successful strafing attack was carried out by 91 P-38's over the four most active of the Foggia bases; 32 enemy planes were claimed as destroyed and 43 as damaged. The bomber field at Viterbo was visited by 71 B-17's and 125 tons; that night (18/19) 55 Wellingtons followed up the attack with 98 tons.⁷

As an immediate result of this series of attacks on enemy airfields more than 200 GAF planes (including gliders) were destroyed or damaged on the ground, and the fields were so badly battered that they were of little service to the enemy. A further result was to force the GAF to withdraw to fields farther north, with a concurrent reduction in its ability to operate against the Fifth and Eighth Armies. By the 21st the Foggia installations and all fields west of Foggia to above Capua had been evacuated,⁸ and the enemy had been reduced (as early as the 17th) to an average of about 30 offensive sorties per day over the battle area as compared with an average of approximately 100 during the first 10 days of AVALANCHE. Only in the matter of reconnaissance was the enemy's air effort normal, his planes flying some 25 reconnaissance sorties daily.

Even the GAF fields farther north were not entirely safe, however,

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as the enemy learned on the 20th when 15 B-24's attacked the Pescara airdrome which was located well up the Adriatic coast.

NAAF's attacks on airfields did not prevent its planes from also hitting the enemy's lines of communication and troop and equipment concentrations, from the 16th through the 20th. Heavies made a small-scale attack on roads and rails between Salerno and Avellino, mediums and light bombers went for roads in the battle area generally, B-24's dropped a total of 153 tons of bombs on Pescara's rail and road junctions, and fighter-bombers bombed and strafed transport throughout the battle zone and on its perimeter as far as Avellino and Pesopagano.⁹

For the period from the night of 16/17 through 19 September NAAF's bombers dropped more than 1,500 tons of explosives.¹⁰ An unusually large percentage of this tonnage was delivered by fighter-bombers. This was due to four conditions. One was a brief period of bad weather around the 19th which limited the operations of the heavies and mediums. Another was the decrease in the enemy's air effort over the bridgehead which allowed TAF to reduce its patrols to between 200 and 300 per day and thereby freed many fighter planes for fighter-bomber missions. This reduction in the number of planes on patrol did not change the original system of patrols but merely cut down the number of aircraft over the area from first to last light to one squadron each of Spitfires, P-38's, and P-40's. High, medium, and low-altitude patrols continued to be used. The high patrols, particularly concerned with checking enemy bombers carrying rocket and glider bombs, were aided by smoke screens put up by

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Allied vessels, although by the 19th these screens had to be confined to the transport area because the heavy smoke over the bridgehead airfields was causing excessive accidents and casualties to landing aircraft.¹¹

The third condition explaining the amount of bombing conducted by fighter-bombers was the removal of an increasingly large number of fighters and fighter-bombers from Sicily to bases on the mainland. Up to 16 September it had not been possible for XII ASC to accept targets of opportunity because no fighter-bombers had been established in the Fifth Army area, but on the 16th one squadron of these planes began to use Paestum by day (returning to Sicily at night) and by the 21st three squadrons of the 86th Fighter-Bomber Group were operating from the field.¹²

A final condition which improved the work of the fighter-bombers (and the fighters) was the establishment ashore of signal communications. The Ancon had handled all air force wireless and telecommunications channels until the night of 12 September when it left for Algiers; the Hilary had then acted as standby fighter control for the 64th Fighter Wing and as wireless telecommunications (W/T) standby for XII ASC until the 16th. By that time five landing strips were being used by two RAF Spitfire wings (each less one squadron), one P-40 group, one A-36 group, one-half of an RAF tac/recece squadron, and one-half of a USAAF observation squadron; two ground-control interceptors (GCI) and four light warning sets (LWS) had been established ashore, in addition to a seaborne GCI on an LST in Salerno Bay and a very poor GCI on Capri; and four wireless units (WU) had been set up on the beachhead. By 19 September (D plus 10) a forward fighter control and a WU post had been put on Capri; the 64th

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Fighter Wing (back of 10 Corps) had been connected by land lines to the landing strips, the GCI's, and Headquarters, XII ASC, which was in the rear of VI Corps; and standby W/T channels had been provided wherever needed. This combination of developments greatly improved fighter and fighter-bomber operations.¹³

During this period the Navy intermittently shelled enemy positions and tank and troop concentrations in support of the ground troops. A P-51, placed on call by XII ASC, assisted by spotting.¹⁴

On the Eighth Army front HAAF's activity was on a limited scale, partly because of the necessity for employing the bulk of the air effort in the Fifth Army area and partly because comparatively little support was needed by the Eighth, whose main difficulty in pursuing the enemy was that caused by demolitions. DAF Spitfires patrolled the central and eastern parts of the battle area but saw few enemy planes, the GAF's dwindling effort being almost altogether against the Fifth Army.¹⁵

Second Phase: 20-30 September

HAAF's smashing attacks on airfields had rendered the enemy air units in the vicinity of the battle area impotent, and by the 20th the Allies were ready to return to their plan of using bombardment to interrupt the German retreat and to force concentrations so that light bombers and fighter-bombers could destroy personnel and equipment. The period from 20 September to 1 October was given over almost entirely to operations of that type, and with a high degree of success in spite of limitations imposed by intermittently bad weather and an increasing shortage of fighter-bomber targets as the Germans shifted the bulk of their transport

operations from daytime to nighttime, moving their troops after dark and generally on secondary roads.¹⁶

Road Blocks and Close Cooperation, 20-24 September. From 20 to 24 September Strategic's main effort was concentrated on road junctions, bridges, and other bottlenecks north and east of Naples, toward which the Fifth Army was slowly moving amid the mountains above Salerno. The purpose of these attacks was to destroy all bridges over the lower reaches of the Volturno River and to batter the roads immediately above Naples, thereby creating a series of blocks which would interfere with reinforcements from without the Naples area, hinder escape from within, and produce good targets for tactical aircraft.

The first set of blocks was established along the line of the Volturno. B-26's flew 72 sorties (dropping 107 tons of bombs) against rail and road bridges at Cancellor/Arnone, 42 sorties (64 tons) against the Amorosi bridge, and 18 sorties (27 tons) against the Ponte bridge. B-25's went for the San Martino bridge with 36 sorties and 51 tons and the Grottaminarda bridges with 54 sorties and 77 tons. B-25's and B-26's--36 of each--collaborated in pounding the bridges near Capua with 93 tons. Benevento and the bridges near the town were blitzed by 290 tons, dropped by 89 Wellingtons, 33 B-17's, and 34 B-25's. A second series of blocks, along the Formia-Mignano line, were made more impenetrable--the region had been bombed frequently during the earlier part of the month--by two attacks, the first at Formia when 36 B-26's and 46 Wellingtons dropped 154 tons, and the second at Mignano which was hit by 79 tons from 54 B-26's. The Formia-Mignano line was of particular interest to the Allies because its western and eastern ends rested respectively on

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Highways 7 and 6 and because the Garigliano River ran between the two towns.¹⁷

In addition to these attacks Strategic's bombers flew a number of missions against objectives directly ahead of the advancing armies, dropping a total of 166 tons on Castelnuova, Torre Annunziata, Sarno, Maddaloni and Avellino.

The results of these raids were excellent. Formidable blocks were created at Formia, Caserta, Benevento, and Castelnuova; road bridges were down at Lagonegro, Avellino, Capua and north of Capua, and other bridges were blocked by craters at their approaches; railway bridges were impassable at Formia and Pescara, and other bridges in both areas were unusable.¹⁸

Meanwhile, light bombers, fighter-bombers, and B-26's of TAF delivered small-scale but consistent attacks by day and night on battlefield targets and on troop and transport concentrations near-by. The targets were seldom the same from one day to the next because of the constantly shifting ground situation. Immediately beyond the battlefield, missions were flown over Caserta, Benevento, Torre Annunziata, Sarno, Avellino, Castelnuova, Nocera, and a number of smaller towns. Fighter-bomber assaults were made on the enemy's positions and concentrations at Nocera, Pagani, Camerelle, San Lucia, Sarno, and Avellino. These softened resistance and aided the Fifth Army as it pushed its way across the mountains towards the Naples Plain,¹⁹ although the rugged, wooded terrain and the skeleton-type of rear-guard resistance employed by the Germans made it difficult for the bombers--and difficult even for the

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tac/recce planes--to locate good targets.²⁰ One feature of these operations was the carrying out of nightly armed reconnaissance missions by light bombers over roads leading into the Salerno area.

As had been the case during the previous two weeks, the Eighth Army required far less air activity on its behalf during the period from the 20th through the 24th than did the Fifth Army. The Eighth continued to meet little opposition except in the form of demolitions, for nowhere along its entire front, from above Potenza eastward to the Adriatic, did the Germans put up a real battle. Nevertheless, the air forces were busy in the central and eastern sectors, DAF Spitfires patrolling over the front and fighter-bombers being especially active in the Foggia area. Fighter-bomber attacks of particular importance were delivered around Nelfi, in the center, and Barletta and Foggia, to the east.²¹

Operations Against the Corsica-Leghorn Evacuation Route. A special operation by NAAF during the period was concerned with the enemy's Corsica-Leghorn evacuation route. It has already been noted that during the first three weeks of September SAF P-40's and cannon-firing B-25's were busy over Sardinia prior to the evacuation of the island by the Germans during the third week of the month. To facilitate the withdrawal of their troops and equipment from Sardinia the Germans after wrecking the airfields and destroying many aircraft which were stationed on them, used Corsica as a steppingstone to the Italian mainland. This alone would have made Corsica of interest to Strategic's bombers, but the fact that French troops and Corsican patriots were fighting their way north through

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the mountainous island in a campaign designed to drive out the Germans (who were already in process of evacuating the island)²² and could use help from the air, gave the bombers an extra reason for attacking key places on the island and on the mainland end of the German escape route.

On the 21st the B-24's which had been sent down from UK in response to General Eisenhower's appeal of the 15th²³ carried out their first missions under the direction of SAF, 32 of the heavies dropping 92 tons of bombs on Leghorn and hitting several small evacuation craft and damaging harbor and industrial installations, and 20 attacking the harbor at Bastia, Corsica, and scoring strikes on a number of small vessels. That night 75 Wellingtons poured 125 tons on Bastia. On the night of 23/24 the Wellingtons went for the Pisa area, 39 planes dropping 55 tons on I/Y's in the city, and 41 unloading 46 tons on the Pisa/San Giusto airfield, a center of transport aircraft activity. On the 24th the attack on Pisa was continued, 54 B-24's hitting several bridges and cutting every through railway line.²⁴ That night 80 Wellingtons dropped 107 tons on small craft and medium-sized merchant vessels in the harbor at Leghorn, and the following day 36 B-25's attacked the Bastia/Borgo airfield in order to interfere with the activities of transport planes.²⁵

The air forces did not confine their attacks to Corsican and mainland evacuation points. During the week ending 24 September B-25G's flew 14 sorties against shipping targets between Corsica and Elba. A total of thirty-six 75-mm. shells were fired, and hits were scored on a destroyer and many small craft. At the same time CAF Beaufighters and B-26's went

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for enemy transport aircraft flying between Corsica and the mainland. The Ju-52's were flying around 25 sorties and evacuating 1,500 personnel per day. On 24 September Seauntfighters of 242 Group shot down 19 Ju-52's. This attack, plus the advent of a period of bad flying weather, curtailed further GAF transport activity, but by that time the enemy's air evacuation was practically complete. Therefore, NACAF actually accomplished little beyond the destruction of 30 enemy aircraft.

Meanwhile, French Air Force Spitfires of CAF, operating from Ajaccio, Corsica, afforded protection for the ground forces against enemy raiders over the island, with pilots of the French 2/7 and 1/3 Squadrons shooting down nine German planes. Their most notable success occurred on the 24th when the Luftwaffe made one of its two September attacks on Allied ports. The attack was made against Ajaccio by 10 Do-217's and 1 Ju-88, and of this force the French Spitfires shot down five.²⁶ A feature of the raid was the use by the enemy of the new-type glider bomb, this apparently being the first time the bomb had been employed against an Allied installation,²⁷ although it had been used earlier on a few occasions against shipping.²⁸

Enemy Air Activity, 20-24 September. During the period from the 20th through the 24th the enemy's air arm was still flying no more than an average of 30 offensive sorties per day. His activities were divided between the snipping, the beaches, and NAAF's airfields below Salerno. Among the latter, Montecorvino and Tusciarno received particular attention. The raids did little damage, being on a small scale (4 to 6 planes) and being attacked with the same success²⁹ as in previous weeks by the fighter patrols which the Allies were continuing to operate over the

bridghead.³⁰ These patrols were most essential over the beaches where virtually all of the supplies for the mainland operations were being brought in. The port of Salerno was not free from enemy shelling until the 23d, and even then it could handle only a part of the shipping. The extent of unloading activities on the beaches is indicated by the fact that from the 9th to the 20th of September 147,527 personnel, 21,332 vehicles, and 72,402 tons of supplies were landed.³¹

The special attention paid by the bridgehead patrols to the enemy's high-level bombers which had been employing rocket and glider bombs (to the great concern of the naval units operating offshore) was paying dividends, as no ships were damaged by such attacks during the period from the 18th to the 25th. Unquestionably, the firm establishment of fighters ashore helped to provide a greater guarantee for the safety of the ships than at any previous time in the operation.³² By the end of the 24th the enemy's planes were still calling forth a few alerts, but none of the attacks were pressed home, and after that date his raids on the Salerno area were too few, small, and unaggressive to bother the Allies. Sporadic attacks at night were capably handled by IAF and CAF Beaufighters.³³

During the week of 18-25 September only six attacks were made on Allied bombers by enemy defensive fighters, and none was on a scale large enough to cause concern. The enemy's only normal effort was against PRW and IAF reconnaissance planes, 25 attempts at interception being made, notably over Salerno and Frosinone.³⁴

It was evident that the GAF was following the same procedure as in Tunisia and Sicily, that is, the fighters were shifted from defensive

work against Allied aircraft attacking installations to offensive operations against Allied troops and shipping; after a period of intense offensive activity operations began to fall off to a few sorties per day--a sure sign that the GAF not only had suffered losses which it could no longer afford but was in process of withdrawing to new airfields. In fact, by the 24th the GAF had moved almost all of its bombers to bases in northern Italy, and its main fighter strength was located in the Rome area and at Viterbo. The Foggia complex and Sardinia had been abandoned, Corsica nearly so, and the Naples complex was inactive.³⁵

Allied Bomber Operations, 24-30 September. From the 24th to the 28th the Fifth Army slowly pushed its way through the mountains between Salerno and Naples-Avellino. On the 28th 10 Corps broke through the Pagani Pass and debouched onto the Naples Plain, advancing to Castellamare and taking Nocera; meanwhile, VI Corps drove north and northeast, took Avellino and joined its right flank to the Eighth Army's left flank. The 10 Corps then swept through Popoli and Torre Annunziata; it was held up briefly at Torre del Greco but on the 30th was past Vesuvius; and on 1 October its advance units moved into Naples.³⁶ On the Eighth Army front Foggia was taken on the 28th, and the next day the Gargano Peninsula was overrun. The battle line on 1 October stretched in a rough and fluid arc which ran from Naples to a point about halfway between Avellino and Benevento and then swung almost due north to a line from San Bartolemeo in Galdo through Castelnuova and Serracapriola to the coast below Tercoli.³⁷

During the last week of September NAAF's planes had more trouble with the weather than with enemy aircraft. Rains and wind interfered with

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airfield activities and, together with heavy clouds, obscured targets. Nevertheless, the air forces put in a busy week, although the total sorties flown and tons of bombs dropped were much less than during the previous week and far below the peak of 11-17 September.

Strategic opened the air offensive with three long-distance smashes on the 25th against targets in northern Italy. Bologna was hit by 269 tons dropped by 32 B-17's, the target being the 'Y's; 14 Fortresses hit the Bolzano railroad bridge with 35 tons, and 6 bombed the Verona 'Y's with 15 tons when they were unable to find Bolzano because of heavy cloud cover. Nearer home, 91 B-26's attacked the railway bridge at Cancellor-Annone (at the mouth of the Volturno River) and road bridges along the line of the Volturno at Ponto, Maddaloni, and Calazzo; 17 B-26's bombed the road at Mignano; and during the night of 25/26, 49 Wellingtons hit the Formia coast road.

Planes making the long trip into northern Italy found the Allied airfields on Sardinia of value, a number of aircraft landing on the return trip at fields around Decimomannu.³⁸ The island was already adequately protected, P-40's of the 325th Group having moved in at Decimomannu on the 23d;³⁹ and the establishment of servicing facilities for setting up P-38's and mediums for operations from the island was progressing.⁴⁰

Tactical Air Force also was busy on the 25th, attacking fortified positions at Nocera and Serino and troop concentrations at Sarno. The B-25's and Baltimores flew almost 100 missions and dropped close to 175 tons of bombs.

On the 26th, 27th, and 28th virtually all of the bombers were pinned

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down to bad weather, the only operations of importance being a continuation of the attacks on concentrations at Sarno and Nocera by 48 of TAF's B-25's on the 26th. These attacks were designed to soften up the enemy for the Fifth Army's impending break-through into the Avellino sector.

On the 29th and 30th weather continued to ground SAAF's heavies, but mediums carried on the assault on the Volturno bridges. The bridges at Cancellate and northeast of Capua were attacked by 51 B-26's, 73 tons of bombs being dropped; and 135 B-25's smashed at the bridges south of Piano, southeast of Castelvenere, and south of Amorosi, dropping 194 tons. In these raids bombing accuracy was far below normal, the bridges receiving no more than negligible damage, although roads and railway lines in the vicinity were hit.

When NAAF's Wellingtons failed to record even one sortie on the 29th, it marked the first night during the month that they had been unable to operate. Between the 26th of June and the 29th of September these astonishing mediums had operated on 88 out of 92 nights, averaging 65 sorties per night with only 130 available and serviceable planes. It was General Spaatz' opinion that this record was made possible in part because the Wellingtons always had two crews assigned to each plane and had all losses in crews and planes promptly replaced.⁴¹

TAF's main effort on the 29th and 30th was made by 94 B-25's against the road junction and bridges at Benevento, the object of the attack being to restrict enemy movements in the area, now threatened by the advance of VI Corps. P-38 fighter-bombers, meanwhile, flew 67 effective sorties against the Ausonia defile, dropping 30 tons; and on the night of the

30th, 37 Wellingtons returned to their old target at Fonia, unloading 60 tons.

Fighters and Fighter-Bombers, 24-30 September. The activities of fighters and fighter-bombers, like those of the heavies and mediums, were on a decidedly reduced scale during the last week of September. Fighters found little to do as enemy air operations over the battle area were practically nonexistent. Bad weather, heavy losses, and the snift of many squadrons to fields farther north combined to cause a temporary cessation of offensive activity by the GAF. NATAF's planes continued to fly defensive patrols, but the daily average of sorties was below 100 and on most days no enemy aircraft were encountered. On the Fifth Army front, patrols were extended as far north as Naples; behind the Eighth Army, defensive patrols were flown by DAF over the Bari-Brindisi-Taranto triangle. Fighter-bombers managed to put in a number of good licks, attacking troop concentrations, defended hills, gun positions, bivouac areas, transport, roads, bridges, and airdromes ahead of the moving battle line and in the areas around Benevento, Viterbo, Rocera, Sarno, and Camerelle in the Fifth Army sector and Castelnuova and Isernia on the Eighth Army front.⁴²

Construction of Airfields

The work of the fighters and fighter-bombers in the face of poor weather and against targets constantly farther north was made possible by the fact that the greater part of the USAAF and RAF fighter units--all except one of the short-range F-40 groups,⁴³ for example--were operating from mainland airfields by the 25th. On that date there were two RAF Spitfire

wings, one U. S. Spitfire group, two U. S. A-36 groups and one U. S. P-40 group using fields back of the Fifth Army, and one RAF Baltimore wing, one U. S. A-30 group, two RAF and SAAF Spitfire wings, two U. S. P-40 groups, and one RAF, SAAF, and RAAF P-40 wing in the Eighth Army area. There were also U. S., RAF and SAAF reconnaissance squadrons and several squadrons of Beaufighters located at various points in the two sectors.⁴⁴

The task of keeping the fields operational devolved upon Northwest African Air Service Command, a combination of XII Air Force Service Command and RAF supply and maintenance units. In the Fifth Army area, elements of XII AFSC had constructed three landing strips--Paestum, Sele, and Capaccio--between the 11th and the 16th, and as early as the 9th its Quartermaster truck-company troops had come ashore to handle the task of unloading gasoline, bombs, ammunition, and other air force supplies from the beaches and hauling them to the airfields. Beginning on the 14th, service groups and squadrons came in and took over the job of maintaining the airfields and servicing the combat units which were beginning to use them. Montecorvino, as soon as it was free from enemy artillery fire (on the 20th), quickly became the principal airfield in the Salerno area. By the 25th, it was supporting the U. S. 31st Fighter Group, two squadrons of RAF Spitfires, and a squadron of Beaufighters, and was being used by planes of Troop Carrier and MATS flying special missions into the area. The field was serviced by the 306th Service Squadron of the 41st Service Group.⁴⁵

Another important field was Paestum, also serviced by the 306th Service Squadron, and home of the 33d Fighter Group. On 16 September, 13 planes of the 64th Group of 51st Troop Carrier Wing landed there; three of the

planes brought in nurses, litters, and blankets, and the other 10 carried P-38 belly tanks; on the return flight the planes evacuated litter and ambulatory patients. The following day 46 C-47's from the 51st TCG flew in supplies and 180,000 rounds of ammunition.⁴⁶ Thereafter, Paestum, Montecorvino, and the other fields were not only bases for tactical aircraft but were terminals for airborne supplies and equipment and take-off points for air evacuation.⁴⁷

Not all of XII AFSC's units entered Italy by way of the Salerno beaches. Some went in at the Toe or the Instep and moved north behind the British Eighth Army. This was particularly true of Quartermaster units which serviced all types of planes in the area, hauled gasoline, bombs, rations, and other supplies to captured airfields, maintained fighter pools, operated control towers, repaired or salvaged damaged aircraft, and maintained the fields and their facilities.⁴⁸

No less important to the activities of the land-based planes of NAAF were the jobs done by Weather, Signal, and Ordnance units. Mobile Unit No. 2 of the 12th Weather Squadron landed at Salerno on the 12th of September and Mobile Unit No. 7 at Paestum on the 13th. By the end of the month five detachments were on the mainland, analyzing for NAAF the latest developments in the uncertain Italian weather. Signal units began coming ashore on the 10th. Some handled air warning facilities; others laid cables and open wire circuits between headquarters and fields. Ordnance companies handled ammunition dumps and serviced vehicles.⁴⁹

During the final week of September the limited activities of Allied aircraft and the far more limited operations of the enemy's air arm naturally resulted in few planes being destroyed on either side. Around 36 enemy planes were destroyed and 17 probably destroyed or damaged; the Allies lost 15 planes destroyed, 13 missing, and 29 damaged. Most of the destroyed and damaged Allied planes were victims of flak.⁵⁰

Summary of Allied Air Activity, September 1943

During the month of September the Allies had come a long way. Two major invasions, BAYTOWN and AVALLANCHE, and one minor operation, GIBSON, had been launched and preserved--AVALLANCHE having been carried out in the face of heavy German attacks. Italy had been eliminated from the war; thousands of first-class German troops had been 'mopped out of the fighting, and quantities of equipment had been destroyed or captured; the German Air Force had been seriously crippled; three of the best ports in Italy (Naples, Bari, and Taranto) had been seized; two excellent complexes of airfields, around Naples and Foggia, were in Allied hands; and the Fifth and Eighth Armies had joined and were pushing northwards toward the Volturno and Trigno rivers.

To the accomplishment of all these things the air forces had contributed heavily. They, as much as any other single agent, had been responsible for Italy's capitulation. They had afforded protection for the invasion convoys, protected the troops from enemy air attacks as they went ashore, and safeguarded them as they established their beachheads. They had given air cover while more than 100,000 tons of supplies, 30,000

motor vehicles, and almost 200,000 troops had been brought in over the beaches.⁵¹ They had contributed mightily to stopping the enemy's offensive of 12-15 September and had helped to swing the Allied ground troops back to the offensive. As the Fifth and Eighth Armies moved north they had smashed enemy strong points, troop concentrations and gun positions. They had interdicted the German's lines of communications, blocking off possible reinforcements and interfering with his withdrawal. They had seriously injured the dangerous German Air Force. They had destroyed tons of equipment and supplies which the enemy needed for his further defense of the peninsula and which he could ill afford to lose.

The extent of NAAF's operations during the month of September are best shown by statistics covering sorties, tons of bombs dropped, victories, losses, etc.⁵²

The USAAF flew almost 22,000 sorties and the RAF close to 11,000, a total of between 32,000 and 33,000. Of these sorties NASAF's planes flew slightly more than 10,000, NATAF's flew nearly 18,000, and Coastal flew around 4,500.⁵³

A breakdown of sorties by NATAF's planes gives the following figures:⁵⁴

XII ASS--10,664
 Fighters, 5,544; fighter-bombers, 4,598; tac/recce, 314; night bombers, 208
 DAF--4,938
 Fighters, 2,604; fighter-bombers, 1,954; tac/recce, 380
 TBF--2,045
 Day bombers, 1,069; night bombers, 976
 Total--17,647

Sorties by MACAF's XII Fighter Command were as follows:⁵⁵

Day fighter, convoy escort	3,482
Recon., convoy escort	382
U-boat hunts	430
Reconnaissance	<u>347</u>
TOTAL	4,591

The total of bombs dropped--including between 2,000 and 3,000 tons dropped by planes of Middle East, much of which was expended in support of the Italian campaign--was 18,700 tons, of which the USAAF dropped 13,950 and the RAF 4,750.⁵⁶ Aircraft of MACAF accounted for 16,000 tons of the total: lines of communication received 10,500 tons, airdromes were credited with 3,000 tons, and direct air support accounted for the remaining 2,500.⁵⁷ The areas most frequently bombed were the Auletta roads, attacked 24 times; troop and gun positions on the foe, 22 attacks; roads in the Salerno battle area, 21; Eboli town, roads, and barracks, 20; and Benevento roads and bridges, 20.⁵⁸

The number of enemy aircraft shot down in aerial combat was somewhere in the neighborhood of 310. USAAF planes were credited with shooting down two-thirds of that number. Planes of MACAF accounted for around 160, MACAF for about 90, and Coastal for the remaining 60. About half of Coastal's victories came in the last 10 days of the month in operations over Corsica. In addition to the planes destroyed, some 50 were listed as probables and 110 as damaged.⁵⁹ The number of planes destroyed on the ground cannot be determined accurately but the figure apparently was in the neighborhood of 200.⁶⁰ Between 1,100 and 1,200 enemy motor transports were destroyed.⁶¹ Two ships were sunk, two severely damaged and nineteen damaged.⁶²

Against these victories the Allies lost in aerial combat around 153 planes, the USAAF suffering 83 destroyed and 13 missing and the RAF 47 destroyed and 5 missing. Of the total WAAF losses 83 were bombers and 70 were fighters. In addition to losses the USAAF had 78 planes damaged and the RAF had 21, a total of 99.⁶³

The GAF also took a small toll of Allied ships, particularly through the use of the controlled-type bomb. The enemy had used this type previously, but the attacks at Salerno appear to have been the first extensive use against sea forces.⁶⁴ The U. S. Navy lost three ships to air attacks, one being the Mauset (AT), and had eight damaged by hits and near misses, among which were the light cruisers Savanna and Philadelphia. The Royal Navy lost four ships, one the hospital ship Newfoundland, and had 12 ships damaged, the more important being the Warspite and the Usanda. Two Dutch ships were damaged by near misses.⁶⁵ The losses must be considered as very reasonable in terms of the volume of naval operations, and when it is remembered that because of the distance which the Allied cover-fighters had to fly the air forces did not enjoy overwhelming air superiority at Salerno and found it impossible to maintain continuous fighter cover on a scale large enough to deny the assault area to enemy planes.

No evidence is available from which to estimate the extent of the losses and damage inflicted by the Luftwaffe on ground troops, equipment and supplies on the bridgehead, and landing craft. But there is no question but that the damage was held to a minimum by WAAF's fighters.

The general excellence of the close support given by the planes of the AAF may be attributed in part to lessons learned during the Tunisian and Sicilian campaigns. Until the end of the latter the fighters and fighter-bombers had followed the old methods of close support as set forth in Field Manual 31-35, "Aviation in Support of Ground Forces," and had found them in practice to be unsound, primarily because they were not conducive to the best use of available aircraft, air strength being parceled out to support individual ground units rather than being used as an integrated and flexible force in support of the army as a whole. Confusion and lack of coordination inevitably resulted. At the end of the Sicilian campaign, XII AFG was convinced that successful close-support operations should be based on an over-all Air-Ground plan, and that the principles which must govern Air's effective execution of its part of the plan were: (1) independent employment of its forces, and (2) all decisions as to its use in joint operations to be made at the army and air command level. During the Salerno operations these principles were applied and as a result a very workable and effective method of close support was developed. The method included close liaison between the army and XII AFG, decision by the Air Commander as to the targets to be attacked, the use of forward controllers ("Rover Joes"), and meetings between Air and Ground to decide on targets for the following day. While local conditions frequently modified these practices during the first days of the Italian campaign, they continued to be employed and during the remainder of the year were a feature of air force operations. ⁶⁶

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How effectively the air forces contributed to the success of AVALANCHE--which Mr. Churchill classified as "the most daring ambitious operation we have yet launched or which I think has ever been launched on a similar scale"⁶⁷--through their coordination with the ground and naval forces is indicated by the contents of a message from General Eisenhower to the CCS on 21 September, after the German threat to the beachhead had been repulsed and the Allies had begun to drive Kesselring's men from the Salerno area. AVALANCHE taught, the General said, that during the critical stage of a landing operation every available force including land, sea, and air had to be wholly concentrated in support of the landing until the troops were in position to take care of themselves. That, he declared, "most emphatically includes the so-called Strategic Air Force," whose temporary diversion from its normal missions in order to accomplish the necessary concentration resulted in advantages which more than compensated for the diversion. During the critical days of the operation, General Eisenhower continued, even the night bombing force contributed markedly to holding the beaches; and he was "convinced" that "without the concentrated use of Naval and Air strength we could hardly have kept from being driven back into the sea."⁶⁸

Significance of the Italian Campaign as of 1 October 1943

The British Prime Minister said on 21 September that AVALANCHE was "an important and pregnant victory, one deserving a definite place in the records"⁶⁹ Subsequent to 1 October 1943 no one would have disputed the validity of Mr. Churchill's statement. After the fall

of Naples and Foggia, which had been completed by that date, the Allies could list the following advantages as accruing from the bloody beaches at Salerno and the slow, hard drive of the Americans and British toward the Volturno-Trigno line:

1. The elimination of Italian military resistance and the successful invasion of the mainland of Europe struck a heavy blow to German prestige and drove the first wedge into Hitler's Festung Europa. The wedge was as important psychologically as it was materially.

2. The acquisition of the Italian fleet without a battle meant that henceforth the Allies would not be required to maintain a large naval force in the Mediterranean, thus releasing many heavy units for transfer to the Pacific.

3. The Italian surrender eliminated from action almost 25 divisions of Italians in the Balkans, which would force Germany to draw on her reserves to keep the occupied countries under control. An increase in Yugoslav patriot activity was already noticeable which--coupled with operations by the British in the Dodecanese and bombing raids against Grecian airfields, both of which were ready to be initiated--would place a further strain on Germany's dwindling reserves.

4. The acquisition of airfields along the east coast of Italy greatly extended the range of Allied bombers, placing them some 400 miles closer to targets in the Balkans, Czechoslovakia, Hungary, Austria, and southern and eastern Germany. Direct bombing support for the Red Army moving into Rumania and Bulgaria was possible. The Floesti oil fields and the Danube supply route were now within easy bombing range.

The future air offensive from the Mediterranean henceforth could be coordinated with operations from the UK against German centers of heavy industry, aircraft production, munitions plants, shipyards, submarine pens, rail communications, and other installations vital to the enemy's war effort.

5. The acquisition of Sardinia and Corsica--the former already in Allied hands and the latter virtually so--was of great importance. Both islands occupied excellent positions geographically. From them, light naval forces could flank the Axis coastal trade and sea communications between Marseilles and Rome and from Marseilles to the west. Their air bases would enable bombers, with full fighter cover, to hit targets in northern Italy and southern France. Fighter cover from Corsica could now be given to any future amphibious operations which might be projected against Italy north of Rome or against the Eiviera from east of Marseilles to Genoa.

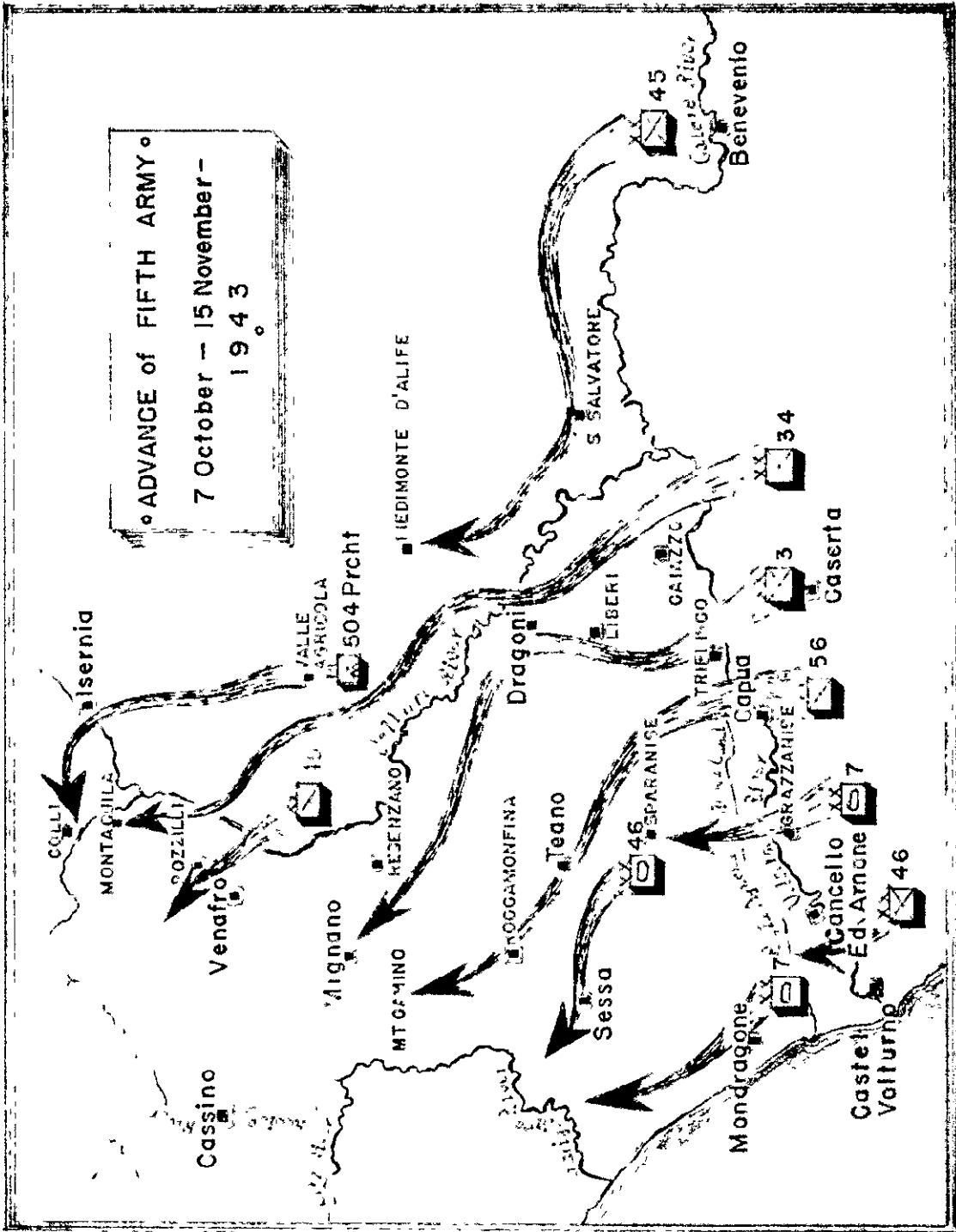
6. The Russian front was automatically strengthened, as the German reserves which must now be used in Italy and the Balkans would no longer be available for use on that front.

7. Further German forces and equipment henceforth had to be used for strengthening defenses all the way from the Vichy-Spanish border to the eastern shores of the Aegean, for the entire northern shore of the Mediterranean was now vulnerable to Allied bombings and Allied landings.

8. The Allied successes in the Mediterranean enhanced the prospects of an Allied cross-Channel operation:⁷⁰ first, because it made the Mediterranean virtually an American-British lake and thereby freed

men, ships, and planes for employment against the enemy on the Atlantic seaboard; second, because it offered a double bombing threat against France as well as against the German war potential; and, third, because it opened up the possibility of an invasion of southern France which, with the cross-Channel invasion, would throw a pincer movement against the German armies in France.

After 1 October it became the task of the Allied forces in Italy to exploit these advantages, the ground forces by continuing to drive northwards until at least Rome was in Allied hands, and the air forces by continuing to smash at the German war strength both within and beyond the battle area.



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Chapter V

AIR OPERATIONS DURING OCTOBER

After the Fifth and Eighth Armies had captured their two main objectives, Naples and Foggia, they continued to press slowly but steadily up the peninsula. By the end of the first week of October the Fifth Army lay along the left banks of the Volturno and Calore rivers to above Benevento; there it joined the Eighth Army whose line ran straight to the Adriatic immediately above Teroli, which had been seized on the 3d by an amphibious operation. In Allied hands were Caserta, Capua, Benevento, Volturara, Serracapriola, and Teroli. Between 12 and 14 October the Fifth Army drove across the Volturno, and by the 21st the Eighth had advanced to the lower reaches of the Trigno River above Teroli and a few days later had taken Boiano below the important German supply center at Isernia. On 1 November the battle line ran roughly from Mondragone, on the Gulf of Gaeta, to above Miano, Piedimonte, and Boiano, and thence straight across to the Adriatic at the mouth of the Trigno. The advance had been slow in the face of intelligent and stubborn German resistance and against the obstacles imposed by mountainous terrain, rivers, blown bridges, and inadequate roads.

First Phase: 1-8 October

During the first phase of the Fifth Army's October operations, that is, the drive to the Volturno, both Tactical and Strategic aided the advance, Tactical by giving close support and Strategic by continuing its program of creating blocks along the Volturno. The period was

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featured by bad weather--a mild introduction to the miserable weather of the next six months which would give Italy one of its worst winters and would both seriously retard the progress of the ground forces and handicap and limit the operations of the air forces.¹

Strategic Air Force. In spite of the weather Strategic had a most successful week between the night of the 1st and the night of the 8th. On the night of 1/3 October Wellingtons attacked the bridges at Grassanise and hit the Formia coast road, and on the 3d, B-26's pounded a converted rail bridge northeast of Capua and a reported pontoon bridge at Castel Volturno. After the 3d the bombing effort was concentrated farther north, along the enemy's second line from Formia to Isernia, the Fifth Army having reached the vicinity of the Volturno. Three main roads ran through this second line and into the battle area: the coast road through Terracina and Formia, the center road through Arce and Mignano, and the inland road through Isernia. SAF went for all three in an effort to cut the German supply lines. Formia was attacked on the night of 4/5 and on the 5th and 6th, a total of 177 tons of bombs being dropped. P-38's attacked the bridges at Arce and Isoletta on the 3d with 11 tons. B-26's hit Terracina with 55 tons. The road hook north of Mignano and two overpasses to the south were pounded on the 3d, 4th, 5th, and 6th with 206 tons, and on the same days the choke-point and roads at Isernia were hit by 144 tons. These attacks (all by mediums and fighter-bombers) stopped almost all traffic on the coast road, slowed up traffic on the other two, and so jammed enemy M/T's

that units of IAF were able to claim the destruction of more than 400 vehicles.

Attacks on lines of communication close to the battle zone were, however, only one of a number of varied operations carried out by IAAF during the week. Rail centers in northern Italy were raided, GAF airfields in Greece and several Aegean islands were blitzed, northern Corsica was pounded, and--for the first time--Twelfth Air Force heavies went all the way to central Austria to strike at the aircraft factories at Wiener Neustadt.

The rail centers in northern Italy which were hit were key spots in the movement of vital military supplies to the German army. The M/Y's at Civitavecchia, Pisa, Bologna, and Mestre and the rail bridge at Bolzano all were rendered inoperative when Wellingtons and B-17's pounded them with a total of 912 tons. These attacks brought out such an unusually strong GAF fighter reaction that on the night of 5/6 Wellingtons dropped 32 tons on Grosseto A/D, destroying 11 aircraft.

Photo reconnaissance had revealed well before 1 October that the GAF was building up its fighter and bomber strength in Greece. Most of the planes (around 250) were concentrated on fields in the eastern part of that country, the remainder (about 100) being to the west and around Salonika, and on Crete and the Dodecanese. The presence of these planes posed a double threat to the Allies: first, the fields were close enough to Italy to serve as bases for attacks against eastern Italy, especially against the airfields around Foggia and against the vital port of Bari; second, the increased number of aircraft endangered Allied

holdings in the Aegean (the islands of Cos, Leros, and Samos had recently been occupied by the British), and Allied sailing in the narrow part of the Mediterranean between the Cyrenaican bulge and Crete. Between the 4th and the 8th WAAF went for the larger fields "in a quick destruction effort,"² dropping thousands of frags and several hundred tons of GP bombs on Argos, Athens/Tatoi, Athens/Alousis, Herakleion, Salonika, Araxos, and other A/D's in Greece, Crete, and Rhodes. A number of enemy planes were destroyed or damaged; and hangars, runways, and other installations were well covered by the B-24's, B-25's, and P-38's making the attacks.

In order to counter the threat to Allied shipping presented by the CAW units based in Greece and the Aegean, and in order to be in a better position to strike at German airfields and other installations, two B-24 groups and one P-38 group were transferred temporarily to the Benghazi and Gambut areas during the first week of October. Shortly afterwards the 321st Bombardment Group's B-25's were turned over to the 379th Bombardment Squadron (310th Bombardment Group) and the squadron was sent to Gambut to strike at the enemy's Aegean shipping.³ The P-38 group operated for only four days, 6-9 October, before returning to Tunisia; in that time it flew 121 sorties, most of them as cover for British convoys, and shot down 17 enemy planes, all of them during one mission.⁴ The heavies and mediums continued to operate over the eastern Mediterranean throughout the month.

A final raid was made on Corsica on the 4th when B-25's hit Bastia harbor with 53 tons. No further attacks were necessary, for after the

4th the Allies held the entire island.

Probably the outstanding mission of the week was that flown against Wiener Neustadt southwest of Vienna, on 1 October. The original plan called for four groups of B-17's to attack fighter aircraft plants at Augsburg and five groups of B-24's to attack plants at Wiener Neustadt. The B-17's could not locate Augsburg because of a solid overcast; accordingly, many of them attacked alternative targets at Gundelfingen (Germany) and Irato and Bologna (Italy), and a few others bombed transports and barges between Corsica and Elba. The B-24's succeeded in locating Wiener Neustadt and dropped 137 tons of bombs in the target area, damaging a large assembly shop in the airframe works and scoring hits on one side of the Henschel and Steyr-Daimler works, storage areas, a hangar, and near-by railway lines. Both missions ran into vicious fighter opposition. The Fortressers were attacked over the Leghorn-Pontedera area by 50 to 60 aircraft, but with the help of escorting P-38's eight enemy planes were destroyed and five probably destroyed for the loss of two B-17's shot down and one missing. The B-24's ran into even fiercer opposition from about 60 fighters, some of which had 37-mm. cannon in their wings and others of which lobbed rocket-type shells into the bomber formation with considerable accuracy. Fourteen of the Liberators were shot down, and 52 were damaged by flak. Enemy losses were undetermined but apparently did not equal the Liberator losses.⁵

Tactical Air Force. Tactical Air Force also enjoyed a good week. Kittyhawks, Warhawks, and Spitfires bombed and strafed road movement on

all roads in front of the Eighth Army; A-36's and P-40's bombed and strafed bridges, towns, junctions, enemy positions, and M/T ahead of the Fifth Army; in both sectors rhubarb missions were flown against enemy troops, trains, and road transportation; and the usual defensive fighter patrols were flown over both armies, as well as the Salerno sector, the Naples area, and around Ternoli. Some 2,000 sorties were flown, around 400 motor transports were destroyed and 300 damaged, 8 trains were shot up, and 33 enemy planes were destroyed.⁶

DAF's most important job during the week was to assist the Eighth Army in holding a series of hard German counterattacks against the Ternoli bridgehead, which had been established on the 3d when the British Landed Commandos in the town. The two most critical days were the 5th and 6th. On the former day Spitfires and P-40's flew 450 sorties over the Eighth Army battle area, attacking enemy road movements above Isernia and destroying 89 vehicles and damaging 71, flying direct-support missions for the ground troops at Ternoli, and patrolling the bomb line and the Ternoli sector. On the 6th DAF flew almost 500 sorties. Enemy movement in the Ternoli area and from Isernia to Chieti was attacked and 84 vehicles were destroyed and 113 damaged. On the 7th and 8th, in spite of poor flying weather, the fighters and fighter-bombers continued to hit transport and to protect the Eighth from air raids. On the 8th, with the crisis past and the enemy withdrawing, P-40's bombed the German escape route through Palata and attacked gun positions.⁷

During the Ternoli episode the Luftwaffe made only a few attacks.

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One reason for this lack of activity was that on the 3d EAF P-40's had flown four missions against the Peccara landing ground, destroying 10 enemy aircraft and damaging 51.⁸ Actually, the GAF showed little signs of activity anywhere over the Italian front. Several things accounted for this condition. The entire German bomber force had been moved into the Po Valley because of a shortage of bombers and because of the serious losses sustained in Allied attacks on airfields. The greater part of the fighter force was located between Rome and Pistoia and in the Leghorn-Spezia area, but units in need of refitting--and there were many--had been shifted to northern Italy, completely out of range of the battle zone, so that only a few fighters were left to support Kesselring. In addition, the GAF was suffering from a shortage of crews, the standard of its crews was low, and a defeatist attitude existed among many of them. Finally, Allied bombings in northern Germany (by heavies from the UK) had forced the Germans to shift their industries to southern Germany and Austria; the move slowed production and cut down on supplies needed by the GAF in Italy. As a result, the Luftwaffe on the peninsula lacked tires, engines, and fuel; furthermore, Allied bombings had caused a shortage of ground equipment on airfields.⁹

The GAF's shortage of fighters showed up defensively as well as offensively. Allied heavies and mediums usually met no opposition, although a few missions were attacked aggressively over northern Italy and over Greece. This was due to the fact that the Luftwaffe did not have enough fighters to meet all attacks and so was picking its spots. Allied night fighters met no opposition, and reconnaissance planes

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encountered very little.¹⁰

In spite of the GAF's limited operations NAAF eliminated a large number of enemy planes during the first week of October. In the air 54 were destroyed, 9 probably destroyed, and 21 damaged; on the ground 22 were destroyed, 13 probably destroyed, and 15 damaged. Three of those destroyed in the air were shot down by FAF pilots near Oran when the Luftwaffe made its first major attack on an Allied convoy since August. A second raid on shipping was made during the week, this time off Cape Tenes (between Oran and Algiers). The bombers came from the Istres-Montpellier area in southern France. Neither raid did heavy damage, only one ship being sunk.¹¹

During the week the Allied occupation of Corsica was completed. The island had never been worth much to the Germans as an air base because Sardinia was closer to targets in North Africa and Sicily and to convoys moving through the central Mediterranean. Consequently, the GAF had used Corsica mostly as an intermediate landing ground for bombers en route from southern France to Italy or returning from the long flights to Sicily and North Africa.¹² But the ground work done by the GAF helped NAAF to set up bases along the east coast, and Corsica soon became extremely useful, the same geographic location which had made it of little value to the Germans making it of great value to the Allies for operations against southern France and northern Italy.

Soon after the island fell, the 320th Service Group arrived, set up Ajaccio, and began servicing two U. S. squadrons of the 350th Fighter Group, 63d Fighter Wing. Air activities from the island were limited.

however, until December when the 53d Fighter Group (U. S. Spitfires, CAF) began operating from Borgo and Calvi.¹³

Second Phase: 9-14 October

By the 9th the Fifth Army was well established along the left bank of the Volturno and the Eighth was ready to drive toward the Trigno. But from the 9th to the 12th heavy rains and extensive demolitions so hampered the Allies' advance that the projected crossing of the Volturno had to be postponed and but little progress could be made toward the Trigno.

The weather sharply limited air operations. Over the eastern battle area, however, DAF managed to get in some hits against enemy movements and gun positions. Fighter-bombers operated between Ternoli and Pescara, destroying several locomotives and railway trucks and a number of road vehicles and shooting up gun positions. Spitfires continued to patrol the bomb line and the Ternoli area. Small groups of Baltimores bombed gun positions in the battle zone and roads at Vasto. Enemy aircraft were still offering almost no opposition, only one combat occurring; each side lost one plane.

Strategic's operations against Italian targets were confined to two attacks on roads in the rear of the enemy forces facing the Fifth Army, Wellingtons hitting Fondic and Terracina with 117 tons. Tactical's bombers were more active, small groups of B-25's bombing roads and junctions at Tairano and Piedimonte and troop concentrations at Cassino and Mondragone at night, and hitting gun positions near Signataro, Pastorano, and Capua by day, while A-20's raided roads east of Rome. Defensive

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patrols were carried out as usual. The only combat took place when patrolling Spitfires intercepted 10 Me-109's north of Naples, probably destroying one without loss to themselves.

Strategic made up for its limited operations over Italy by hitting hard at airbases in Greece, Crete, and Rhodes. Larissa, Argos, Salonika/Sedes, and Athens/Eleusis in Greece; Maritza and Calato on Rhodes; and Heraklion on Crete were bombed on the 9th by B-17's, B-24's and B-25's. Around 410 tons of GP's and 2,500 frags were dropped, with good results. P-30's accompanied the mediums, but the heavies flew without escort. Enemy planes offered opposition only over Eleusis where five were destroyed, without loss to the Allies. On the 10th Athens/Tatoi was hit by 60 B-17's dropping 112 tons, and Araxos by 17 dropping 51 tons, while 16 P-30's bombed Antimachia. A 30-minute running fight featured the attack on Athens/Tatoi, four enemy planes out of 20 to 30 being shot down. It was beginning to appear that the GAF would put up a better defensive fighter effort over Greece than over Italy despite an increase of fighters in central Italy and German possession in northern Italy of many former IAF planes.

The series of Allied attacks on Grecian airfields resulted in extensive damage to fields and installations, and at Athens/Tatoi 21 planes were destroyed and 8 damaged out of the 65 planes present on the airbase.

On the 11th and 12th Strategic flew no missions except for one attack on the Corfu/Garitsa A/D carried out by 36 B-25's escorted by

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48 P-33's. The field was well covered by the 25 tons of frags which were unloaded. There were no encounters.¹⁴

On the night of 12/13 October the Fifth Army launched a full-scale attack along its entire front from the Tyrrhenian Sea to beyond the junction of the Volturno and Calore rivers with the object of crossing the Volturno in force and setting up a bridgehead on the right bank. American troops (VI Corps) on the right flank met limited resistance and made good progress, but in the Capua area the Germans repulsed the main British assault although the left flank of 10 Corps forced a crossing between Cancellò and the sea and an amphibious end-run around the mouth of the Volturno was successfully made. By the 15th all three of VI Corps' divisions were making good progress, the 3d and 34th being firmly established across the river and the 45th (which had jumped off from above the Calore) having driven well toward the Volturno Valley. Two of the three divisions of 10 Corps also were across the Volturno and the third (the 55th), which had been stopped above Capua, was ready to cross farther up the river. For the next week the Fifth Army slowly pushed back Kesselring's men despite bad weather, heavy demolitions, rugged terrain, and resistance of "unparalleled ferocity," and by the 23d the entire line of the Volturno and the land mass behind it were firmly held.¹⁵

It had been expected that NAAF's full strength would be thrown against the enemy in direct and semidirect cooperation with the ground assault, but the continuance of bad weather so limited operations that the superior Allied air strength could not be used decisively.

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N

ADRIATIC SEA

FERRARA

BOLOGNA

RAVENNA

RIMINI

PESARO

FLORENCE

URBINO

PISA

LEGNANO

AREZZO

IESI

ANCONA

LIVORNO

SIENA

CIVITANOVA

PERUGIA (X)

FOLIGNO

GROSSETO (X)

ORVIETO

GIULIANOVA

TERNI

VITERBO (X)

RICCI

PESCARA (X)

TARQUINIA (X)

CHIETI

ORTONA

CIVITAVECCHIA

ORSOGNA

LANCIANO

CERVETERI (X)

(X) SUIDONIA

AVEZZANO

SULMONA

PALENA

SANTA MARIA

ROME (X)

(X) GIAMPINO

ISERNIA

PRACTICA DI MARE (X)

(X) CISTERNA

FROSINONE

ATINA

ANZIO

ARCE

VENAFRO

GAGGIANO

MIGNANO

TERRACINA

FORMIA

VIKANO

AURUNGA

ALIFE

GAETA

SESSA

MINTURNO

CAPUA (X)

GRAZZANISE (X)

CASERTA (X)

NAPLES

SALERNO

Tyrrhenian SEA

CENTRAL ITALY
Principal Roads &
Airfields

Roads

(X)

Airfields

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During the critical part of the Fifth Army's advance, that is, from the night of 12/13 to the night of 14/15, NAAF's planes were almost completely stopped by the weather, but they managed to get in a few blows against communications in the rear of Kesselring's lines and against targets within the battle zone. Attacks--all on a small scale--were delivered against the Civitavecchia railway bridges, Alife¹⁶ (a German stronghold in the path of VI Corps' right flank), the Sessa Aurunca road junction (on Highway 7, above Capua), road junctions at Vairano and Carinola (ahead of VI Corps), railway tracks at San Fermo Romano (between Rome and Rieti), the railway and the seaplane base at Orbetello (between Rome and Grosseto), the bridge and railway south of Salomone (northwest of Rome), and the M/T's at Terni. The heaviest of these attacks was against Terni, where 34 B-17's dropped 103 tons and where Allied bombers over Italy met their first opposition in almost a week (and the only opposition during the period 12/13 to 14/15), 30 to 40 enemy fighters attacking and losing two planes while shooting down one Fortress. This series of attacks on lines of communication was delivered by B-17's, Wellingtons, B-25's, and D-26's of Strategic, and Baltimores of Tactical. In addition, RAF A-20's carried out armed reconnaissance over the roads in the Terracina and Fondi area, successfully hammering the enemy's extensive night movements.

Tactical missions against targets in the battle area were flown by A-26 and P-40 fighter-bombers. Tank and troop concentrations above Capua and vehicle concentrations north of Cancelllo and southeast of Formicola were bombed and strafed. These raids were, however, on a

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small scale, not more than 105 sorties being flown.

MAAF's activities were about as restricted by the weather in the Eighth Army sector as they were over the Fifth Army front. Strategic attacked the Guillanova south bridge with 33 tons and the railway and highway bridges near Porto San Giorgio and along the coast road north of Pescara with 111 tons. These attacks were designed to block the Ancona-Pescara-Foggia line of communication, this being the enemy's only primary line of supplies on the east coast. Warhawks and Kittyhawks bombed and strafed trains north of Pescara, destroying five locomotives and destroying or damaging several dozen trucks and a number of road vehicles. MAF's fighters patrolled from Termoli to Vasto and north of the bomb line without incident.

In addition to supporting the Fifth and Eighth Armies, MAAF carried out two attacks during the period against the GAF in Greece and the Aegean. Tirana and Argos airbases were hit, each by 36 B-25's. At Tirana 14 enemy planes were destroyed on the ground; at Argos the field was well covered and two fires were started. Over Argos the escorting F-38's encountered 10 to 15 enemy planes, with each side losing two aircraft.

During the two days the GAF mustered more offensive activity than usual. On the night of the 15th an estimated 20 Ju-88's and Io-317's raided Ajaccio airdrome and harbor but did no damage despite coming in at the unusually low altitude of 1,000 feet. On the 15th fighter-bombers were active over the Fifth Army front. This was preliminary to the heaviest GAF fighter-bomber operations since the first week of AVILAISHE, around 75 sorties being flown on the 15th and an equal number on the 16th. These raids were against bridges and other communications

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around Caiazzo, above Capua, and in the upper Volturno Valley. On the two days Spitfires destroyed 11 of the raiders and damaged 8, without loss to themselves. This rough reception, plus very bad weather beginning on the 17th, so reduced the enemy's efforts that for the next week practically none of his fighter-bombers were active.¹⁷

Third Phase: 15-31 October

Tactical Air Force. From the 15th through the 22d the weather continued to limit IAAF's activities. However, on the 15th and 16th, while the Fifth Army was consolidating its Volturno bridgeheads, the weather was more favorable for fighter and fighter-bomber operations than it had been on the previous two days and A-36's put in a total of almost 150 sorties, hitting the railway yards at Sparanise, buildings and vehicles at Vairano, and roads north of Cancello, west and southeast of Alife, north of Teano, and southwest of Sessa Aurunca. All of these targets were along the highways leading from Rome into the Volturno area. On the 16th, Cisterna airfield was strafed. On the same day EAF's mediums (whose missions all had been abortive on the 15th) successfully attacked Alife, Latina, and Sparanise, and its Balmores hit Venafro (east of Cassino) and the roads at Vairano, while A-20's also struck at the Vairano roads. In all, the mediums flew 30 sorties and the light bombers 96. Bostons added 16 sorties in night attacks on road and rail junctions between Rome and the Fifth Army bomb line.

From the 17th through the 20th EAF continued to batter roads, rail lines, and towns in the area immediately north of the Fifth Army. Many

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of the missions were abortive because of clouds over the targets, but B-25's, Baltimores, and A-20's hit targets in and around Alife, Aquino, Cassino, Mignano, Isernia, Boiano, Terracina, and Anzio; Bostons intruded at night over the roads from Rome to the bomb line; and A-36's and P-40's flew more than 300 sorties against Venafro, Vairano, Francolise, Fratello, Minturno, Fratella, Felice, Arce, Terracina, Pietravincino, Sessa Aurunca, and Palestrina. These targets were on or close to Highways 6, 7, and 85 which converged a few miles north of Capua.

On the 31st, with the weather better than it had been in 10 days, USAF's principal effort was directed against the Cassino area. Thirty-three B-25's hit Cassino town and its yards and bridges, 36 A-20's put 71 x 100-lb. bombs into a bivouac area between the railroad and the town, and 23 Baltimores hit the main road and started fires in the railway yards south of the town. P-40's and A-36's added to the day's effort against lines of communication by bombing railroad bridges south of Cassino, the bridge over the Garigliano below Minturno, a railroad and road junction northeast of Terracina, and road junctions and buildings at Vairano, Fratella, and Mignano.

On the 22d B-25's and A-20's pounded gun areas and troop concentrations south of San Salvo, a bivouac area at Cantaloupo (above Boiano), and the towns of Venafro and Teano; P-40's bombed and strafed Montenaro and roads and gun positions around Capriati, San Salvo, and Boiano and put 10 direct hits on a bridge near Cantaloupo; and A-36's bombed a bridge and gun position at Minturno and strafed M/T near Cerveteri.

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RAF also went farther afield between the 17th and 23d, hitting the A/D's at Tarquinia, Viterbo, and Lake Bracciano and landing grounds near-by. The A-36's which carried out these missions destroyed some 30 enemy planes on the ground and damaged many others. Kittyhawks bombed a tunnel southeast of Isernia which was suspected of harboring a railway gun.

RAF's fighters flew patrols over the battle area, carried out tactical reconnaissance, artillery spotting, and escort and fighter-sweep missions, and provided cover for shipping along the coast. A-20's combined bombing and nickolling in the Cassino and Aquino areas.

On the Eighth Army front, air force operations were very similar to those in the western sector. Bostons bombed railways, trains, bridges and H/E, strafed H/E, and dropped leaflets. Their operations were largely along the coast road, with particular emphasis being paid to areas around Pescara, Vasto, Galeti, and Castiglione, the object being to interrupt Kesselring's one good supply line into the easternmost part of the battle zone. Spitfires, Warhawks, and Kittyhawks also went for the supply routes, flying offensive sweeps up and down the east coast almost to Ancona and striking hard at locomotives and cars, railway lines, and H/E. Other Warhawks and Kittyhawks operated over the Adriatic,¹⁸ trying to interrupt German shipping to Italy, Greece, and Yugoslavia. As examples of their operations: Warhawks and P-38's swept the Yugoslavian coast, hitting merchant vessels near Split and in the Levkas Channel; and Kittyhawks attacked barges in the harbor at Benedetto.

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In more direct cooperation with the Eighth Army, Warhawks and Kittyhawks went for gun positions and troop concentrations and, with Spitfires, flew cover for planes of TBF and patrolled the battle area so effectively that few enemy planes were to be seen.¹⁹

One of the most interesting operations which originated from the east coast took place on the 16th when P-33's of the 82d Fighter Group went on a mission to dive-bomb merchant vessels in the Levkas Channel. The Lightnings were escorted by Italian pilots flying Macchi-205's. This was the first American flight to be escorted by members of the IAF. The Italians had been training for operations with NAAF since shortly after the surrender of Italy, but their actual participation in the air war against their former allies had had to await an Italian declaration of war on Germany (which came on 13 October) as well as action by AFHQ. Early in October plans for the employment of the IAF were worked out, AFHQ deciding that some five squadrons of fighters, one of bombers, one of torpedo bombers, two of seaplanes, and half a squadron of reconnaissance aircraft were to be used to the maximum, with most of their operations to be in support of the Italian armed forces and the Balkan patriot forces, as couriers, and for air-sea rescue. The servicing of planes of the IAF (and of some Allied aircraft) was to be done by IAF specialists.²⁰

After this initial mission with the USAAF the IAF continued to operate with NAAF (and later MAAF) until the end of the war. Its ground personnel, many of whom were specialists from the old Regia Aeronautica, proved to be especially valuable to MAF.

The activities of Tactical during the remaining part of October were essentially the same as they had been from the 15th through the

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22d. Bostons flew regular nightly armed reconnaissance missions, hitting at N/T beyond the Fifth and Eighth Army fronts, while Seafighters flew night patrols. During daylight hours P-35's created road blocks; A-30's and Baltimores attacked strong-points, bridges, N/T, stores, dumps, gun positions, troops, and roads, and set up road blocks; A-30's bombed and strafed highways, railways, bridges, radio and weather stations, gun emplacements, airdromes, and troop concentrations, and flew "rhubarbs"; P-33's escorted heavies and mediums and bombed enemy airfields; P-40's hit gun emplacements, railways, roads and road junctions, bridges, and traffic; Kittyhawks, Mustangs, and Spitfires attacked N/T, locomotives, shipping, radar stations, bridges, airfields, and gun positions, flew escort and defensive patrols and artillery and tactical reconnaissance, and covered naval vessels shelling the coast.

On some days the weather was so bad that EAF's planes were not able to fly many sorties, but there was never a day when they failed to record at least a few blows against the enemy. And at all times they were masters of the air over the battle zones.²¹

Tactical's operations against communications were restricted to targets in the area south of a line running approximately from Rome to the northeast. This was in accordance with the Commander-in-Chief's policy of dividing the operations of Tactical and Strategic along geographic lines so that Strategic normally would be relieved of attacking targets which could be hit by EAF, thus allowing EAF to fulfill its normal functions.²²

Strategic Air Force. Strategic's activities during the last two

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weeks of October fell into two time-divisions. From the 15th through the 22d it operated against lines of communication (almost altogether railway lines) in central Italy, against communications and airdromes in Greece and the Balkans, and against the GAF fighter force, principally in the Poee area. From the 23d through the end of the month it continued these three types of operations, but most of its missions were against communications in Italy. Throughout the entire period of 15-31 October IAF was more active than it had been during the first half of the month.²³

Operations against communications in central and northern Italy were principally against a group of bridges in the general area between Grosseto near the west coast and the area south of Ancona on the east coast. During the first month of the Italian campaign IAAF had followed the old and long-term policy of continually bombing key marshalling yards as a means of stopping the enemy's movement of supplies, equipment, and personnel by rail. Now, however, that method of interdiction did not appear to be the most logical system. It was estimated that the purely military needs of the enemy could be supplied by about 5 per cent of the normal rail traffic from central Italy and the Po Valley into the battle area; accordingly, to reduce drastically the enemy's flow of reinforcements and supplies it was essential to cut as many railway lines as possible, to cut them as nearly simultaneously as possible, and to cut them quickly. The most logical way to accomplish this was by knocking out bridges and vulnerable sections of track which were so located that it would be difficult to repair the lines.

Such a program was more feasible--and more logical--at this stage of the game than it had been a month earlier. For one thing, the rail

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lines from the Po Valley into central Italy ran through mountain passes or along a narrow strip of the coast, and in either case they ran through narrow defiles, crossed transverse streams on bridges, ran along the sides of steep inclines, and passed through tunnels. At each such point the lines were vulnerable to, and might easily be blocked by, accurate bombing. In many instances, in fact, a line might be missed by a bomb or salvo yet would be blocked by a landslide if the bombs hit above the track. For another thing, there were more marshalling yards in central and northern Italy than there had been in southern Italy, a fact which made it more difficult to interdict transportation in the north by hitting targets of that type. Finally, NAAF's planes now were much better located for trips to the regions above a Rome-Pescara line than they had been a month earlier. The B-17's and B-24's still were in Tunisia but were within easy range of the railway targets. The P-36's were in the Djedeida area, near Tunis, but were preparing to move to Decimomannu and Villacidro, Sardinia;²⁴ and they, too, were within range. The P-35's were scattered; but only one group was in North Africa (at Oudna), while two were in Sicily, and one was already on the mainland at Crottaglia. Of the two in Sicily one was already moving to San Pancrazio, Italy, and the other would move to Foggia Main during the first week of November. Light bombers and fighter-bombers already were established on the mainland. MASIF's three groups of P-38's and one group of P-49 fighter escorts were on the mainland (as were IAF's east-coast fighters, which could fly escort beyond their sector when necessary), all of them within range of the bombers' objectives. With the acquisition

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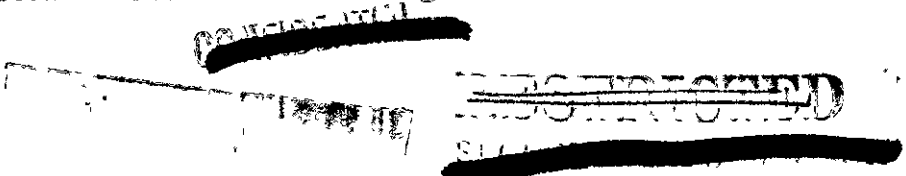
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of the airfields of the Naples and Foggia complexes and around Grottaglie and Lecce, there were ample accommodations for all of the planes which currently needed to be based on the mainland.²⁵

It would appear that IIAAF's decision to throw a large part of Strategic's operations into a campaign against the enemy's supply system-- and against bridges in particular--was in keeping with the thinking currently going on in the minds of higher authorities. Near the end of the month General Marshall cabled General Eisenhower some opinions relative to the employment of bombers in the Mediterranean. It appeared to General Marshall that much of the success of the armies in the Tunisian campaign had been due to the use of heavy bombers to disrupt the enemy's system of supply at long range while using medium bombers and short-range aircraft to destroy the enemy's fighter force, isolate the battle area, and then attack strong-points, and that a similar application of the air forces in Italy would achieve like results. He suggested that the use of IIAAF's heavies against German supply lines entering the Po Valley would prevent the enemy from building up and supplying his forces. "The difficulty of closing all 9 rail lines into the Po" was appreciated by General Marshall, so he suggested that "the simultaneous destruction of several adjacent bridges on each rail line will stop traffic for a long time." The advance of the ground troops could be sufficiently aided by "increased operations of your medium and short ranged bombers and fighter bombers."²⁶ By the time this message arrived in the theater IIAAF's program of bridge smashing already had been in operation for 10 days.

Strategic started the assault on the bridges on the 19th,²⁷ and for



five days these key links in the central Italian rail system took a hard beating. Bridges attacked along the west coast route included the one at Montalto di Castro, one near Grosseto, the Albinia bridges, and the bridge near Orbetello. Along the central lines from Florence to Rome, via Siena and Perugia, bridges north and southeast of Orvieto, bridges near Acquapendente and Marsciano, and the viaduct at Terni were pounded. On the east coast several bridges below Ancona and the bridges at Guilianova and Civitanova were attacked. In all of the raids from the 15th through the 22d around 650 sorties were flown and 1,350 tons of bombs dropped by the B-17's, P-38's, P-39's, P-40's, P-47's, and Wellingtons which staged the blitz. Damage was extensive, being particularly severe on the bridges around Orvieto²⁶ and in the Montalto di Castro, Albinia, Guilianova, and Acquapendente areas. In addition, the approaches to these and the other bridges were blocked in almost all instances. The net result was the interdiction of virtually all rail transport north of the Rome area, which forced the enemy to resort to an increased use of motor transport and coastal snipping--which, in turn, were attacked (as noted above) by light and fighter-bombers as they moved into the region between or adjacent to the severed lines in central Italy and the battle zone.

In these missions only a few formations encountered enemy planes. In only four instances did decisive engagements develop, and in each instance P-38's were flying escort. Results were: 627 losses, 15 planes destroyed and about an equal number probably destroyed or damaged; 443 losses, 3 destroyed and 1 missing. Partly to offset his lack of defensive fighters the enemy threw up an ever-increasing quantity of flak. For example, the 370th Bombardment Group (H) had 10 of 12 planes holed by

AA fire on the Venafro mission of the 23d.²⁹

From the 23d through the end of the month Strategic devoted most of its missions to a continuation of the previous week's attacks on lines of communication in general and bridges in particular. The weather was alternately good and bad. It grounded all of SAF's bombers on the 27th and 28th, limited them to one mission on the 26th and one on the 29th, and forced a large number of missions to return without having bombed the primary target (although in some instances alternative targets were hit). It permitted, however, several days of full operations. Targets were in three groups: those between Grosseto and Ancona which had been the targets during the preceding week, a new set of objectives much farther north between Pistoia and the French border, and a couple of targets on the coast above and below Rome.

In the first group of targets B-25's and B-26's hit the railway bridges at Albinia, Montalto di Castro, and north of Civiteto but missed the bridges at Marsciano and the viaduct at Terni. At the two latter places the bad bombing was somewhat compensated for by damage to tracks and roads near the primary target and by the destruction of some five enemy planes when the GAF attacked in small numbers. Wellingtons hit the bridge and railways at Civitanova. A total of 300 Allied planes took part in the six missions and dropped 315 tons of bombs. The second group of communications targets included the important transportation and shipping points of Pistoia, Genoa, Imperia, Porto Maurizio, and Varazze. Except for Pistoia all were along the coast of northwest Italy. Genoa was attacked twice: by 123 B-17's which unloaded 345 tons and scored hits on tracks, rolling stock, buildings in the Ansaldo steel works, electric

and ordnance works, ships and small craft at the Ansaldo fitting works, and buildings at the San Giorgio instrument factory; and by 30 B-24's which unloaded 60 tons and scored direct hits on the Ansaldo steel plant, causing fires and explosions. The Pistoia W/Y's were blasted by Wellingtons, fires and explosions being observed and observation showing hits on an aircraft assembly plant and the railway junction. Varese took 78 tons from 26 B-17's, hits being recorded on an iron works and warehouses and within the port area. The attacks on Imperia and Porto Maurizio were on a small scale, by seven and two B-17's respectively. In this series of raids 934 effective sorties were flown and 575 tons of bombs dropped. The third set of targets consisted of two ports in the Rome area--Civitavecchia and Anzio. The former was attacked by 36 B-25's which dropped 53 tons and scored 7 direct hits on railways and warehouses; the latter was slugged by 35 B-26's whose 52 tons covered the docks, completely destroyed all buildings on the north dock, and hit several small craft.

Strategic's operations from the 23d through the 31st against communications were supplemented by bombers and fighter-bombers of Tactical. ³⁰ B-25's created road blocks, especially around Terni and Grosinone; Bostons hit roads and bridges, particularly around Vairano, created road blocks, and attacked bridges near Minturno; and A-33's bombed bridges along the east coast and around Fratella.

In these missions, by both Strategic and Tactical, enemy opposition was sporadic and on a small scale. The only major encounter was over Orvieto, where 25 to 30 GAF fighters engaged NASAF's mediums in a running

battle which cost the Germans six planes destroyed, five probably destroyed, and four damaged against no Allied losses, and where the escorting P-38's were attacked by 20 enemy planes, with one P-38 being listed as missing.

The result of these attacks on supply routes was a continuation against the lines above Rome of the interdiction which had been created by the attacks from the 15th through the 23d, and an extension of the interdiction to include the most direct line of communication from Rome to the important industrial centers of northwest Italy and to southern France. Incidentally, the bombings around Genoa and Imperia helped to create in the minds of the Germans a concern which would always be present, down to the very end of the Italian campaign: that the Allies would launch an amphibious operation against the area between La Spezia and Imperia.

AAFH's second major activity outside of the battle area during the last two weeks of October consisted of counter-air-force operations. These were directed against the fields in the general vicinity of Rome and were designed either to smash the GAF fighter forces which were operating both offensively and defensively from bases in that area or to force them to withdraw farther north (at least as far as the Grosseto complex) where they would pose much less of a problem to the Allied ground and air forces.

Marcigliana and Casale each were attacked twice and Cerveteri, Furbara, and Guidonia once. All of the fields were single-engine fighter bases, the Guidonia field only recently having become important. The attacks were made by B-17's, B-25's, and Wellingtons, 350 sorties being

flown and almost 400 tons of bombs dropped. Around 40 enemy aircraft were destroyed on the ground and several were damaged, the fields were well portholed, and a number of installations were smashed or burned. The last of this series of attacks was made on the night of 23/24 October. There was then a break in Strategic's bombing of airfields until the night of 30/31, when 27 Wellingtons attacked the Ju-88 base at Perugia, about halfway between Rome and Florence.

The counter-air-force operations of the heavies and mediums were supplemented by raids conducted by A-36's of Air Support Command. Tarquinia A/D and a near-by landing ground (L/G) were attacked on the 19th, L/G's near Acquapendente on the 24th, Tarquinia again on the 25th, and an L/G west of Sutri on the 28th. Smaller-scale bombing and strafing attacks were made on the 28th against fields near Civita Castellana, Cerveteri, Tarquinia, and Viterbo, all of which were in the Rome area. In all of the raids 19 enemy planes were claimed as destroyed and at least 15 as damaged. Additional NEEAF attacks on airfields were made by A-20's, which hit fields at Cassino and Aquila.

Strategic's third major group of operations during the last half of the month was directed against the Balkans and Greece. From the 15th through the 23d, lines of communications in the Balkans received the major attention. Hardest hit was Skoplje--a key point in Yugoslavia on the Fish-Salonika railway and the control point for all traffic from Yugoslavia to Greece--which was attacked by bombers and fighter-bombers on the 19th and by P-38 fighter-bombers on the 21st. The attack on the 18th was the first USAF effort against a Yugoslavian target.³¹ In

the two raids 36 B-25's and 44 P-38's participated in the bombing, dropping 45 tons, while another 26 P-38's strafed. In the bombing attack 21 direct hits were scored on the M/Y's, leaving all but 1 track un-serviceable and destroying 3 locomotives, 7 M/T, and 1 reconnaissance car and damaging 10 M/T and several locomotives and cars. In the strafing attack 43 out of 44 locomotives present in the yards were reported destroyed or damaged. On the 30th the Fish³² M/Y's were attacked by 36 B-25's, with fighter escort; 44 tons were dropped, cutting the main lines to Belgrade and Sofia at many points and putting many direct hits in the yards. At the same time 16 P-38's dive-bombed the roundhouse with four tons and left it in flames.

During the last 10 days of the month IAF's operations across the Adriatic were directed against airfields. Thirty-six B-25's pounded the Athens/Eleusis A/D with 22 tons of frags, results being excellent. The field at Tirana, Albania, was attacked by another 36 B-25's (which used it as an alternate target when Larissa A/D was found to be overcast), the 23 tons of frags which were dropped covering the field and destroying 12 aircraft.³³ The A/D at Podgorica in Yugoslavia was strafed by P-38's and bombed by B-25's, with four planes being destroyed on the ground. The Salonika/Seles and Negalo/Mitra A/D's each were blitzed by 18 B-25's, the fields being well covered and 11 enemy planes being destroyed and 8 damaged on the ground by the 2,500 x 20-lb. frags which were dropped. The final Gracco-Balkan operation was a return visit to Tirana A/D, with 16 P-38's bombing and 16 strafing and with hangars and buildings being thoroughly covered, fires started, and aircraft damaged.

In all of the raids beyond the Adriatic there was no real enemy air opposition; nevertheless, in the attacks from 4 through 23 October on objectives in Greece, Albania, and Yugoslavia, the USAAF destroyed 131 enemy planes in the air and on the ground and the RAF accounted for another 49.³⁴

MAAF's attacks during October on Balkan targets, and especially those on Greek and Aegean airfields, were less for the purpose of protecting the Allies in Italy than for aiding the British who were trying to hold the islands of Samos and Leros (seized in mid-September) against GAF raids and the threat of German landings. The greater part of the Allies' air operations over Greece and the Aegean were carried out by the B-24's and B-25's which had been transferred from North Africa to Cyrenaica and Calcut in order to aid the air-war in Middle East; the operations included not only attacks on airfields but on enemy shipping (by B-25's, with most disappointing results, only one vessel being sunk and 21 damaged). Planes of Middle East added to the efforts of the USAAF by flying almost 200 sorties against enemy airfields during the month. The net result of these operations was the destruction of a large number of GAF planes; but GAF bombings continued and by the middle of November the Germans had assaulted and taken both Samos and Leros.

In addition to the three major operations by Strategic during the last half of October, two special missions were flown. The first was against Wiener Neustadt on the 21th. Six bomb groups sent 111 B-17's and B-24's against the target, but it was hidden by 10/10 clouds so that only 23 Liberators of the 93th were able to drop their bombs on the

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primary target and they did so by dead reckoning. Sixteen planes of the 301st went seven miles beyond Wiener Neustadt and hit railways and installations at Ebenfurta with excellent results. The weather kept the Luftwaffe grounded, and there were no encounters. The second special mission was against the Antenor viaduct in southern France. The attack was made by 38 B-17's, which dropped 108 tons, placing a heavy concentration on the viaduct and its approaches and scoring direct hits on tracks and near-by roads that left them unserviceable. There were no encounters with the GAF.³⁵

The activities of AAF's other elements during the last half of October were in the same general pattern as during the last half of September. Coastal Air Force covered convoys, hunted for U-boats, made shipping strikes, conducted air-sea rescues, and protected rear installations; between the 20th and 30th it began taking over from XII ACG the job of protecting harbors and other installations along the west coast. FAW flew daily reconnaissance missions, seeking out new targets and recording the damage done to old ones. Troop Carrier Command continued to bring in supplies and to take out wounded.³⁶

Enemy Air Activity. During the period 11-31 October the enemy's main offensive air effort--outside of the Regain--came on the night of the 21st when three separate attacks were made. The harbors at Naples and near-by Sagnoli were raided by some 30 Ju-88's; the only damage to installations was the destruction of a gun position, but around 50 military personnel were killed and 100 wounded. Night fighters of IAFW³⁷

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shot down three of the raiders, and AA destroyed another. The second attack was against a convoy off Algiers by approximately 95 Ju-87's and He-111's, the raiders coming in unusually low and using torpedoes and radio-controlled bombs. Two ships were hit, but fighters and AA knocked down six of the attackers. The third raid of the night was made on bridges along the Volturno, but apparently was not on a large scale and did no material damage.

On the night of the 23d the GAF made its other principal bombing effort of the period, about 20 Ju-88's attacking Naples. A vessel was set on fire, but otherwise there was little damage and the enemy lost three planes to Deaufacturers of Tactical and Coastal and one to AA fire. On this raid the Luftwaffe used strips of tinfoil (commonly known as "window" or "chaff") in order to upset the Allies' radar control.

The GAF's fighter-bomber activities over the battle area, which had been much greater than usual during the period 12-15 October while the Fifth Army was crossing the Volturno, fell off after the 15th. Between that date and the 23d about 100 sorties were flown, but the formations were not large. Allied fighters shot down six planes. In the last week of the month the enemy's effort declined still further, only a few small formations coming over the Allied lines.

Defensively the German Air Force was not much better than it was offensively. Despite a fairly heavy concentration of fighters in the Rome area and in Crece, not more than one-fourth of all the Allied missions over central and northern Italy, the Balkans, and Greece met any opposition and it was light. Attacks were chiefly against mediums.

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Between the 16th and the 23d planes of LANTAF and night bombers met no opposition; from the 23d through the 31st they met negligible opposition, mostly in the Rome and Viterbo areas where some 45 enemy planes were seen. Reconnaissance missions met few enemy planes and no determined attacks, although on one or two occasions a PRJ plane would be pursued by as many as four enemy aircraft.

By the end of October the Luftwaffe was established on the new northern Italian bases to which it had moved during the last part of September and in October. All bombers were north of 43°, being located chiefly at Bergamo/Seriate, Cameri Novara, Ghedi, Perugia, and Villafranca. A majority of the fighters were in the Rome area. There were a few fighters north of 43°. In the Balkans and Greece there were still around 110 fighters--as there were early in the month--but there had been some increase in the number of Ju-88's on Crete and Do-217's in Greece, evidently for use against shipping and against the British on several of the Aegean islands.³⁸

Summary of October Operations

LANTAF's activities during October everywhere were on a smaller scale than they had been during September. This was due to more days of bad weather for flying and bombing, to the shifting of units to new bases, to a greater stabilizing of the battle lines, and to a decrease in the need for tactical cooperation with the ground troops. It also appears to have been due to the demands of weary men and aircraft for a reduction in effort and to the fact that a very large percentage of combat men completed their missions and were withdrawn from combat.³⁹

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During the month NAAF's planes flew approximately 27,000 sorties. Of this number the USAAF accounted for some 14,300. Among the fighters and fighter-bombers P-40's flew the largest number of effective sorties, almost 2,600, followed by P-38's with 1,600 and Spitfires with 1,500. A-36 fighter-bombers flew almost 1,600 sorties. The bombers were led by the B-25's which put in over 1,500 sorties, the B-17's coming next with around 1,000. No other type flew as many as 1,000 sorties.

The total tonnage dropped was around 12,000 tons, the figure including operations from the Middle East by planes of Twelfth Air Force and RAF Middle East. Of the total NAAF unloaded more than 10,000 tons, with the USAAF accounting for over 8,000 and the RAF for more than 2,000.

Approximately 160 enemy aircraft were destroyed in aerial combat, 30 probably destroyed, and 60 damaged. On the ground around 160 were destroyed, 40 probably destroyed, and 80 damaged. Against these victories IAF lost some 90 planes. The majority of the losses were to flak, for during the month the principal German defence against the Allied air arm came from antiaircraft guns and not from the GAF.⁴⁰

The brunt of NAAF's operations was borne by Strategic and Tactical and Coastal also put in a busy month. Its planes flew 5,322 sorties, of which 3,132 were for convoy protection, 1,308 were patrols, 367 were U-boat hunts, 368 were fighter scrambles, 314 were air-sea rescue missions, and 113 were reconnaissance missions. Twenty-two enemy planes were destroyed, the small number being the result of limited enemy reconnaissance activity and few bomber attacks. Five submarines were sighted and three were attacked; and for the first time the U-boats regularly and savagely fought back against the planes. Ships under NAAF's protection traveled

around 1,400,000 miles, with only three ships being lost to enemy action.⁴¹

Troop Carrier Command also was heavily engaged during October. Its 531 Wing flew 553 missions, involving 3,095 aircraft, carried 3,300 tons of freight, and transported 17,069 personnel. Among the personnel moved were 10,253 passengers, 2,237 patients, 1,152 airborne troops, and 3,413 other troops.⁴² Figures for the 51st Wing are not available, but an estimate of its activities (based on the figures of the 53d Wing) would indicate that the planes of the two wings flew more than 6,000 sorties, hauled some 8,000 tons of freight, and moved around 35,000 passengers.

MAF's other air transport agency, MSTS, by the end of the month was carrying more than 6,500 passengers and over 700,000 pounds of freight per week. During the month it conducted 625 American and 92 British flights, plus some 40 special flights, and extended its operations from North Africa to the Italian mainland.⁴³

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Chapter VI

THE ESTABLISHMENT OF THE FIFTEENTH AIR FORCE

The Tactical Situation, November-December 1943

During the last two months of the year the Fifth Army pushed toward the Garigliano, while the Eighth moved across the Sangro. Progress on both fronts was slow. The weather was wet and cold, with heavy rains along the coast and snow in the mountains. Every forward movement was impeded by mud, streams, rugged mountains, demolitions, well-prepared positions, and a stubborn enemy defense which included numbers of sharp counterattacks. By the end of November the Fifth Army had crept forward to a line which ran from the coast at Mondragone northeastwards to Sessa, to below Mignano, and to Castelnuova; the Eighth Army's left flank joined the Fifth at Fizzano, and its line then ran along the right bank of the Sangro through Castel di Sangro to above Bomba and to below Lanciano where it turned almost due east and reached the Adriatic near Fossacesia.

In December the advance was even slower than it had been in November. The Fifth Army directed its main effort toward seizing control of the high ground which dominated the approaches to the enemy's Cassino Line, but except for taking Mignano and Genafro little progress was made. Before the end of the month the Fifth had been reduced to vigorous patrolling while its tired units regrouped for a drive in January designed to cross the Garigliano. The Eighth Army made a little more progress than did the Fifth. During the first half of the month, activity on the left flank was at a standstill but near the coast San Vito and

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Lanciano were taken and Orsogna threatened. During the last half Ortona (on the coast) was captured after a fierce battle, but Orsogna proved too hard a nut to crack. Except for the advance of the Eighth from Fossacesia to above Ortona, the Allied ground troops had moved forward only a few miles, and then only in limited sectors, since the middle of November.¹

During November and December the Allied air arm, despite severe limitations imposed by unfavorable weather, cooperated strongly with the Fifth and Eighth Armies. It flew defensive patrols over the battle area, bombed and strafed enemy strong-points, gun positions, camps, concentrations, and transport; attacked lines of communication, airfields, production centers, and other objectives in Italy; and even went after shipping in the harbors along the east and west coasts. IMAF's planes also conducted air-sea rescue, escorted convoys, protected Allied installations, attacked enemy ships and submarines, bombed airfields and supply centers in the Balkans and Greece, aided the partisans in Yugoslavia, and went far afield to participate in the Combined Bomber Offensive (CBO) which was designed to smash the German war potential in general and GAF fighter production in particular.

In the midst of these varied activities, a major organizational change was carried out. In order that IMAF might be able better to carry out its various assignments--and especially in order that it might play its full part along with the Eighth Air Force in the CBO--the old Twelfth Air Force was split into two air forces. On 1 November the Twelfth's heavies, some of its mediums, and a part of its long-range

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fighters were removed from its operational control, but not its administrative control, and placed under the Fifteenth Air Force, which was created the same day. By this arrangement the Fifteenth became the major component of NAAF's strategic air force and the Twelfth the major component of its tactical air force. Coastal, Troop Carrier, FBM, Training Command, and the newly created Engineer Command³ were not affected by this development, and Air Service Command was concerned only to a small degree until the end of December.³ Nor was the over-all headquarters, NAAF, affected, as it exercised the same control over the Fifteenth and Twelfth that it had previously exercised over the Twelfth.

The Fifteenth Air Force

Genesis. From available information it is difficult to know the full story of what lay behind the establishment of the Fifteenth Air Force. It seems certain that its creation was the outgrowth of the setting up of the CBO, and that the lateness with which the move to create it got under way--early October--was due to the fact that the whole plan for CBO operations by aircraft based in the Mediterranean was contingent upon Allied occupation of bases in Italy, a condition which was not met until after the capture of Naples and Foggia. It appears that General Arnold and, possibly, General Spaatz were the principal proponents of the plan for the new air force and that General Eisenhower was in favor of it, while Air Marshals Portal and Harris and Generals Baker and Edwards were strongly opposed.

The idea of hitting Germany with long-range bombers operating from Italy as well as from the UK was considered at the Quebec Conference

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(QUADRANT) in August 1943.⁴ At this time General Arnold said that he questioned the possibility of obtaining the maximum use of heavy bombers in England during the winter, and felt that "in this connection Northern Italian bases would prove valuable." Air Marshal Portal agreed, and further observed that bombers then based in the UK could use bases in northern Italy if the necessary ground crews and facilities were provided. His principal interest, however, was in reducing the German fighter force by a combination of blows from Italy and UK. He felt that the battle against the enemy's fighter forces was a vital one, and that unless these forces were "checked in the next 3 months, the battle might be lost." The key to the bombing situation, he said, consisted in placing strong offensive air forces in northern Italy; from there all of southern Germany would be within comfortable range, two of the largest German aircraft factories--which between them produced almost 60 per cent of the GAF's fighters--could be reached, and Floesti would be much easier to attack. Half of the enemy's fighters currently on the Western Front would be required to protect the new southern German front. And bombings from Italy would be better than normal because the Alps would render the German radio warning system relatively ineffective.⁵

The Americans did not feel, however, that it was essential to have bases in northern Italy. Secretary of War Stinson stated that he had discussed the matter with General Spaatz and that the latter had said that bombing would be just as effective from fields above Rome as from fields north of the Po River. General Arnold agreed with this, and felt that it was important that Rome not be declared an open city as its

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railroad facilities would be essential in supplying air bases north of that city.⁶

During the QUADRANT Conference the CGS eliminated the overriding priority which had been given to antisubmarine measures at the TRIDENT conference in May 1943. This move "freed" the air forces of LEO and LEO for extensive participation in a combined offensive against German industry; the offensive, known as Operation POINTBLANK and which had been approved by the CGS on 14 May 1943, had as its object the smashing of the German war potential in general and of fighter aircraft production in particular so as to pave the way for a successful cross-Channel invasion of the Continent (Operation OVERLORD). The CGS then directed that Operation POINTBLANK "have highest strategic priority," stating that "the progressive destruction and dislocation of the German military, industrial and economic system, the disruption of vital elements of lines of communication, and the material reduction of the German air combat strength by the successful prosecution of the Combined Bomber Offensive from all convenient bases" was a prerequisite to OVERLORD.⁷

This decision definitely committed RAF's Strategic Air Force to the Combined Bomber Offensive. But it did not suggest that a U. S. air force in LEO, comparable to the Eighth Air Force in LEO, was to be established in order to carry out the CBO.

In September General Eisenhower addressed a message to General Marshall in which he discussed the matter of bombing German-held Europe from Italian bases--but without mentioning a "new" air force. There were, he said, five advantages in using Italian bases:

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1. Targets beyond the range of UK bombers could be reached.
2. There would be better weather in Italy.
3. Initially, there would be fewer GAF fighters and less anti-aircraft.
4. German fighter and AA resistance would have to be thinned out in order to meet attacks from two directions.
5. There would be greater flexibility in meeting cyclic weather changes.

He and General Spaatz believed, said General Eisenhower, that, at least at times, greater intensity of air effort against Germany would be obtained with proportionately smaller losses if a substantial portion of the heavy bomber effort were applied during the winter from Italian bases. There were, of course, certain complications which he recognized: fields must be built, runways extended, and additional steel mat shipped in; and he would like to know, for planning purposes, the number of heavy bomber units which might be employed from Italian fields.⁸

On 9 October General Arnold submitted to the Joint Chiefs of Staff (JCS), and subsequently to the CCS, a plan for splitting the Twelfth Air Force into two air forces--the Twelfth (tactical) and the Fifteenth (strategic)--in order that the CIO might be carried out more effectively and "in conformity with JMWAVE decisions." In presenting the plan General Arnold said that by utilizing Italian air bases important targets which could not be bombed from UK could be destroyed,⁹ the Axis air and ground defenses would be dispersed, alternative bases could be utilized to the fullest, shuttle-bombing would be possible, and operations

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could be carried out from UK or Italy in terms of the weather. He felt that operations from LHO would contribute heavily to the progress of POINTBLANK and hasten the deterioration of the enemy's capacity to wage war. General Arnold then recommended that the Twelfth be divided into two air forces, the old Twelfth to become a tactical outfit and the new Fifteenth to become a strategic unit; that some of the units presently allotted to the UK be sent to LHO; that the Twelfth operate under the direction of the theater commander; and that the Fifteenth operate under the theater commander, but receive directives from time to time from the CCS as to its employment in the CBO.¹⁰ The nucleus of the Fifteenth would be the six heavy bomber groups presently assigned to the Twelfth, with 13 additional groups to be diverted from the Eighth Air Force in order to bring the new unit up to the size necessary for it to operate successfully.¹¹

Over in LHO, news of General Arnold's plan had been received late in September or early in October. Neither the British nor the American air leaders approved of the idea. Maj. Gen. I. H. Edwards, Lt. Gen. Ira C. Eaker's Deputy Commander of the Eighth Air Force, having noted that the plan had been approved by CEB and by Lt. Gen. J. E. McFarney, Deputy Chief of Staff, declared that the major factors in the plan and the diversion of bomber groups had apparently received scant consideration. The figure of 21 groups, he stated, "was apparently pulled out of a hat"; there had been no completed study of targets or fixing of priorities, although such a study was currently under way by a group of economic analysts; and such considerations as logistical factors, airbases, depots, and levels of supplies had "been given only cursory study." General Edwards asked

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what and how many targets could be more expeditiously bombed from Italian bases than from the UK, and how important these targets were; why new bases should be built and a new supply setup be established in Italy when adequate bases were available in the UK; whether MAW realized and had adequately considered the increased maintenance requirements incident to operations over Germany, the increased battle damage, and other factors; and whether it was realized that shuttle operations would require additional service personnel in both MTO and MTO.¹²

The Air Ministry was notified of the plan by its delegate in Washington, Air Marshal William Welsh, who cabled that General Spaatz had been in Washington for a week and in conference with General Arnold and his staff. On receipt of the cable, Air Vice Marshal Norman Bottomley drafted a reply for the Chief of the Air Staff, Air Marshal Portal, which stated that the progress of the Eighth Air Force in reducing the German fighter force already had been retarded by a shortage of bombers, bomber crews, and long-range fighters and that the new scheme promised to delay still further the flow of aircraft and crews to MTO "and may indeed completely jeopardize prospects of success of POINTBLANK and OVERLORD." There is danger, said the draft, that "enthusiasm for an idea" might result "in sending aircraft and resources to the Mediterranean only to find them unable to contribute effectively from that theater."¹³

Meanwhile, during the discussion in Washington concerning the creation of a strategic air force in MTO, General Spaatz and Maj. Gen. W. B. Smith (General Eisenhower's Chief of Staff) approved of the idea.¹⁴ Their approval was strengthened by a message from General Eoolittle, CG of

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XII Bomber Command. General Doolittle stated that "it is estimated that high-level bombardment of targets in Southern and Eastern Germany and the Balkans during the winter months favor Foggia as a base from two to one to three to one over bases in the British Isles." The number of days per month on which bombers might be expected to operate were as follows:¹⁵

<u>Month</u>	<u>Foggia</u>	<u>UK</u>
Nov.	10	8
Dec.	9	5
Jan.	8	3
Feb.	7	3
Mar.	9	5
Apr.	12	7

During the summer months there was little difference between bases around Foggia and bases in UK.

General Doolittle further noted that severe winter storm tracks were more frequent and more severe in England than in eastern Italy; that Foggia was better protected because it lay immediately east of a range of mountains; and that icing below 10,000 feet was worse over western Europe because planes had to pass through cold fronts. In general, he said, frontal systems over Europe were oriented north and south; therefore, bombers from England had to go through the fronts whereas from Foggia "missions may be carried out between through passages inasmuch as their routes run . . . parallel to the frontal areas." In the Balkans "some of their best weather is experienced during the winter months."¹⁶

Following the discussions with Generals Spaatz and Smith the JCS approved General Arnold's plan, and on 16 October sent to General Eisenhower a proposed directive relative to the setting up of the new air force.¹⁷ The Fifteenth was to be established from the units comprising

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the XII Bomber Command (3 bombardment wings consisting of a total of 11 bombardment groups--6 heavy and 5 medium--and 4 fighter groups, with supporting units), with a subsequent build-up to 31 heavy bomber and 7 long-range fighter groups by 31 March 1944; it was to be under the command control of IAF; and its primary mission would be strategic bombing, although it could be used in support of the ground forces when necessary.¹⁸

On 22 October the CCS discussed the creation of the Fifteenth. The U. S. Chiefs of Staff explained that the new air force was designed to take advantage of better weather in the Mediterranean area and to disperse the CAF's fighters; the CCS would dictate priorities and objectives, but operational control would belong to General Eisenhower. Air Marshal Welch expressed doubt that the build-up in Italy which would be necessary for large-scale strategic bombing would be possible because so many of the aircraft in MEA were required for tactical employment and because it would be difficult to stock all of the airfields with gasoline. To this General Arnold replied that General Spartz had stated that he could take care of all additional bombers provided they came in on schedule. Air Marshal Welch thereupon agreed with the plan for implementing the Fifteenth, but with the proviso that if logistic potentialities developed more slowly in Italy than hoped for, the bomber groups for which there were no accommodations would be sent to the UK. General Arnold accepted the amendment. The CCS then agreed to the build-up of the Fifteenth under the provisions of CCS 217/1 (19 October 1943), with Welch's proviso.¹⁹

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A cable was dispatched on the same day, 20 October, to General Eisenhower, announcing that effective 1 November the Fifteenth Air Force (Strategic) would be established under his command. Initially it was to consist of the 6 heavy bomber groups and the 3 long-range fighter groups presently assigned to the Twelfth; the proposed build-up would give it 12 heavy bomber groups, 4 long-range fighter groups, and 1 reconnaissance group by 31 December--and 21 bomber groups, 7 fighter groups, and 1 reconnaissance group by 31 March 1944. It was to be employed primarily against the targets of the USO as directed by CCS, but the original units might be used mostly against objectives other than ~~CONFIDENTIAL~~ until such time as the air base objective area, north and east of Rome, was secured. In order to carry out the USO the Fifteenth was to have close and direct liaison with the Eighth. In the event of a strategic or tactical emergency the Commander-in-Chief (General Eisenhower) was authorized to use the new air force for purposes other than the primary mission. ²⁰

As soon as this directive was issued, further objections were heard from ESO. Air Marshal Portal believed that the plan would reduce the total number of heavy bombers to be used against Germany; that the bases available in Italy during the winter could accommodate "very little more" heavies than the six already there, while the Eighth by the end of the year would lose six groups for which preparations already had been made; and that the weather appeared to be no better in Italy than in the UK. Portal said that the British Chiefs of Staff appreciated the decision of the U. S. Chiefs to form the Fifteenth but felt that the build-up should

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be gradual and not at the expense of the Eighth; and that every available group should be sent to the UI for the next few months, for to do otherwise would "involve a serious additional risk to the success of COMBELL and therefore of OVERLORD."²¹

General Taker said that the plan "depreciates our capacity in heavy bomber strength" and that it "makes impossible our complete accomplishment of the task set forth in the CEO." In his opinion, he said, "it seriously jeopardizes the success of OVERLORD."²² He believed that "the main air force effort should be launched from the UI."²³

Air Marshal Harris argued that the greater number of targets and the most important ones were nearer to the UI; that the weather was no better in Italy than in England; that the necessity of having to fly around the Swiss Alps increased the Fifteenth's distances and dangers and gave the GAF a narrow southern corridor to defend; and that it would be difficult to set up the required bases and services in Italy. It was his opinion that it would be a year after the Allies had taken northern Italy before they could operate economically a "palatable" force of heavy bombers from that country. He also felt that any advantages which would be gained would be negligible, and that the loss of striking power and time while the bombers were being transferred to Italy would be "quite disastrous."²⁴

The opposition from HQ was countered by approval from HQ, General's Staff and Iscolittle--like General Arnold--believing that the CEO should be made jointly from the UI and Italy because of more favorable weather conditions and because "we could then hit from both sides."²⁵

The British in Washington continued to reflect the opinion of the air leaders in UI. At the 125th CGS Meeting, 29 October, they still expressed doubt that enough facilities could be made available in Italy and they feared that there would be so many diversions from the UI that the bomber offensive from ETO bases would be hurt. The U. S. Chiefs of Staff assured the British on both points; further, they emphasized the need for a greater dispersion of the GAF's fighters in order to protect the Eighth from further heavy losses. The British then declared that they were afraid that the build-up in Italy might interfere with General Eisenhower's build-up of his ground troops and tactical air units. To this argument the Americans replied that Eisenhower himself had asked for the formation of a strategic air force in the Mediterranean.²⁶ These discussions do not seem to have affected the directive which had been sent to General Eisenhower on 29 October.

Meanwhile, on the 29th, it was announced at Headquarters, AAF that action had been initiated to divert three B-21-groups from movement to UI and to send them to MEQ in November. "Necessary action has also been initiated to activate on 1 November 1943, the Headquarters and Headquarters Squadron of the Fifteenth Air Force."²⁷ Two days later, on the 30th, The Adjutant General informed General Eisenhower that the Headquarters and Headquarters Squadron, Fifteenth Air Force "is constituted, assigned to MEQ, and will be activated on 1 November 1943 at station to be selected by you." The unit would be organized and equipped in accordance with E/O S E 1-900-16-RS. Personnel and equipment necessary for activation were to be supplied from sources available to General Eisenhower.²⁸

General Arnold--probably as a result of the British position at the COS meeting on the 29th--was still concerned over IAF's ability to meet the build-up necessary for the additional bomber and fighter groups. He was reassured by General Spaatz, who cabled on the 30th that the program "will be met insofar as airbases are concerned." All heavy and long-range fighter groups in North Africa, he said, would be moved into Italy and all new groups also would be placed there, except that shipping limitations might force the putting of not more than three groups of heavies and one of fighters in Sardinia. The B-24's would be stationed in the heel (and Sardinia, if necessary) and the P-47's around Foggia. Little work would be required to put the Foggia fields in shape as they were on level ground; moreover, there was less rain at Foggia than on the west coast of Italy or in Tunisia. Already, pipe lines were being laid from the ports at Bari, Brindisi, Barletta, and Manfredonia (all on the east coast) to handle bulk gasoline. Finally, said General Spaatz, by bombing through the overcast it was expected that each heavy bomber would average 15 missions per month. ³⁹

Maj. Gen. W. B. Smith was not quite so optimistic as General Spaatz, but he felt "sure that we can accept the increased air forces and we will certainly do so." He believed, however, that the increase in air forces would be possible only if shipping were adequate, bulk storage and distribution of petrol implemented, and special service units provided. ³⁹

Establishment. The following day (31 October) General Arnold replied to General Spaatz' cable of the 30th, informing him that the Fifteenth

was established and that units would be diverted to it from UI "to attack combined bomber objectives . . . because the bases you have captured, or will capture, in Italy provide a better point to take off for the reduction of the German ability to continue to fight and to force the dispersion of German fighters and other air defense agencies," although "air bases and logistic support for these groups could unquestionably be available in the UK." General Arnold suggested that bombers for POINTEBLANC should operate from the Foggia area while those which were to hit targets in Italy should use the Heel and Sardinia. He then informed General Spantz that the British Chief of Staff "challenge" the wisdom of sending strategic groups to the Mediterranean in the future "when they are not convinced that you will be able to base, maintain and operate them as effectively as will be possible in the UK. I refused to discuss this subject on the basis of your assurance that you could sustain them on schedule"31

Over in the Mediterranean General Eisenhower had been engaged in carrying out the CGS directive of the 23d and on 1 November he announced the activation of the Fifteenth. General Spantz was designated as CG of the USAAF in the theater, and he named General Doolittle--who was CG of XII Bomber Command--as CG of the Fifteenth. Until administrative procedures could be clarified General Spantz was to continue in command of the Twelfth and "upon completion of same Spantz intends to name General Cannon as commander of the Twelfth Air Force."32

General Doolittle assumed command on 1 November. On the same day he appointed his general staff. Brig. Gen. Earle E. Partridge was named

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Chief of Staff, and in December became Deputy CG.³³

Under the new setup the administrative control of the Fifteenth was: MAFOUSA--Twelfth Air Force--Fifteenth Air Force. This channel continued until 31 December at which time the setup became: MAFOUSA--AAF/NAFO--Fifteenth Air Force, and MAFOUSA--AAF/NAFO--Twelfth Air Force, the two air forces being co-equal commands. On 1 January 1944 AAF/NAFO was replaced by AAF/MIO in the chain of command. Operational control as of 1 November 1943 was: AEFQ--MAG--MMAF--MASAF--Fifteenth Air Force, and AEFQ--MAG--MMAF--MMAF--Twelfth Air Force. On 10 December when MIO and MMAF were combined to form the Mediterranean Allied Air Forces (MAAF)* this channel was changed to the following: AEFQ--MAAF--MASAF--Fifteenth Air Force, and AEFQ--MAAF--MMAAF--Twelfth Air Force.³⁴

Beginning on 1 November the Fifteenth's activities outside of the area under the operational control of AEFQ, that is, outside of Italy, southern France, and the western Balkans, were coordinated with the Eighth Air Force by direct liaison. This arrangement continued until 6 January 1944 when United States Strategic Air Forces in Europe (USSAFE) was established; thereafter, the chain of command for operations against GSO targets was USSAFE--MAAF--MASAF--Fifteenth Air Force. For operations of the Fifteenth within the theater over which AEFQ had operational control, the chain of command on 1 November 1943 was AEFQ--MMAF (later MAAF)--MASAF (later MMSAF)--Fifteenth Air Force.³⁵

* For the establishment of MAAF, see below, Chapter VIII.

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Structure. When the Fifteenth was activated its headquarters was in the Lycee Carnot in Tunis, where the headquarters of XII Bomber Command was located. The headquarters had an advance echelon in Bari. On 22 November orders were issued for the entire headquarters to move to Bari; the movement began on 30 November and was completed on 3 December, a rear echelon of 50 bodies being left in Tunis and moving to Italy between 4 and 16 December. The headquarters officially closed at Tunis at 0001 hours, 1 December and opened at the same time in Bari where it remained until the end of the Italian campaign.³⁶

In establishing the new air force, personnel and equipment came from the Twelfth Air Force. The Headquarters and Headquarters Squadron was provided by the redesignation and transfer of the Headquarters and Headquarters Squadron of XII Bomber Command. The original tactical units came from the same source and consisted of three bombardment wings, six heavy bombardment groups, five medium bombardment groups, and four fighter groups. Assignment of tactical units was as follows:³⁷

To the 5th Wing:

2d, 97th, 98th, 99th, 301st, and 376th Bomb Gps. (H);
14th and 335th Fighter Gps.; 907th Airbase Security
Sq.; Hq. & Hq. Sq., 5th Wing.

To the 43d Wing:

176th, 319th, and 320th Bomb Gps. (H); 1st Fighter Gp.;
910th Airbase Security Sq.; Hq. & Hq. Sq., 43d Wing.

To the 47th Wing:

310th and 321st Bomb Gps. (H); 83d Fighter Gp.; 909th
Airbase Security Sq.; Hq. & Hq. Sq., 47th Wing.

At the time of the creation of the Fifteenth its tactical wings and units were mostly in Tunisia. The headquarters of the 47th Wing was at

Manduria (Italy) and some of its units were on the mainland; headquarters and units of the 401 Wing were in Tunisia but were scheduled to move to Sardinia; headquarters and units of the 5th Wing were in Tunisia but were to move to the Foggia complex.³⁹ It was estimated at AFM that by 1 January 1944 all of the six groups of heavies would be in the Foggia area. General Eisenhower on 1 November, having noted that he fully understood the functions of the Fifteenth and would exploit every possibility in furthering POINTBLANK, informed Washington that all heavy units would be placed as quickly as possible in aerodrome areas where they could best be utilized in the G20; this would include full exploitation of the possibilities of Corsica. The main thing that would limit the move from North Africa was landing craft.³⁹

General Eisenhower also informed the CGS that he was keeping OVERLORD in mind and that within two months Corsica could be built up with enough airfields to take care of the fighter force which would be needed to protect the invasion of southern France.⁴⁰

Plans for the Build-Up. After the activation of the Fifteenth and the assignment of its basic units and personnel, the next matter of importance was to get it in condition to carry out its full share of the G20. The first action, of course, was to move its units out of North Africa to bases nearer the targets against which it would operate; as noted above this was scheduled to be done during November and December. The next was to increase the number of its heavy and fighter and its personnel and service units to where it had adequate strength to meet its obligations.

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It was not enough merely to bring in additional bomber and fighter aircraft. The matter of crews was even more important. General Doolittle said that the average combat crew could fly only eight long hard missions per month although the average plane could fly 16.⁴¹ So he considered that the Fifteenth should have at least two crews for each heavy bomber (i.e., 96 crews per group of 48 aircraft) and at least 1.5 pilots for each long-range escort fighter. Two fighter pilots per plane would be required as the escorts began making longer trips. General Doolittle also insisted that the element of time must be considered: replacement crews would require at least two weeks of indoctrination into conditions characteristic of the theater before they would be available for missions, and thereafter for several more weeks they would have to be sent on easy missions until they became acclimated to combat. After 50 missions the crews would need one month of complete rest, and then three to six months of noncombat duty. After rehabilitation they should be returned to the same theater and, as far as possible, to the same unit in which they formerly served.⁴² The primary need in the theater, General Doolittle felt, was to bring the ground personnel up to strength. The next need was to raise the replacement rate of all personnel from the "grossly inadequate" present rate of .5 per cent per month to 2.5 per cent.⁴³

As of the first week of November the Fifteenth had 3,604 officers, 16,878 enlisted men, and 231 operational aircraft. These made up a headquarters, three wings, six groups of heavies, and four groups of fighters.⁴⁴ Back in October, soon after General Arnold had recommended

establishing the Fifteenth, plans had begun to be made for adding 15 new groups of heavies and three of fighters to the original groups and for a general expansion of the new air force. On 13 October 40/AS, Plans informed the Secretary of the Air Staff--and General Arnold informed General Dyer--that 15 groups of heavier, presently scheduled for the UI, would be diverted to the Mediterranean at the rate of three per month, beginning in November.⁴⁵ Two weeks later, 40/AS, Materiel, Maintenance, and Distribution (MMSD) announced that from November through January 1944 three B-24 groups would be shipped to the Mediterranean each month, and that in February and March 1944 three B-24 groups and one B-17 group would be shipped each month.⁴⁶

On 3 November General Arnold informed General Spaatz that the 449th, 450th, 451st, 454th, 455th, and 456th Bombardment Groups (H), each with 63 B-24E aircraft, were scheduled to leave the U. S. for LEO before the end of December. The 332d Fighter Group (Colored), with 75 P-39 aircraft, also was scheduled to leave;⁴⁷ on reaching the theater it would unite with the 99th Fighter Squadron (Colored). The 449th, 450th, and 451st arrived in the theater in mid-December but the other three groups of heavies did not come in until mid-January, so that the Fifteenth had only 9 of its 12 groups at the end of the year. The 332d Fighter Group did not reach the Fifteenth until February.⁴⁸

Concurrently, the North African Theater was allocated for December 100 B-17's and 70 crews, and 547 B-24's and 728 crews; for January 100 B-17's and 108 crews, and 192 B-24's and 208 crews; and for February and each month thereafter 60 B-17's and 87 crews, and 171 B-24's and 217

crews.⁴⁹ Filler personnel scheduled to move from the U. S. to the Fifteenth would amount to 117 officers, 9 warrant officers, and 1,240 enlisted men in December, 128 officers, 10 warrant officers and 2,170 enlisted men in January, and 327 officers, 13 warrant officers and 3,633 enlisted men in February.⁵⁰ In addition, CGAS, Operations, Commitments, and Requirements (CGCR) took necessary action to authorize the constitution and activation of the following units to implement the Fifteenth:⁵¹

In November: Hq. & Hq. Sq., 304th Bomb Wing (H); 2 air depot groups; 2 service groups.

In December: Hq. & Hq. Sq., 305th Bomb Wing (H); Hq. & Hq. Co., 306th Bomb Wing (H); 3 service groups.

In January: Hq. & Hq. Sq., 307th Bomb Wing (H).

The expansion of the wing organization in the Fifteenth began on the 22nd of December when the 304th and 305th Wings were activated.⁵²

The fighter force did not begin to expand until April 1944, although--next to decent weather--the Fifteenth's greatest need in its early days was for more fighter groups. In the beginning it had only four, at about half strength, when it actually needed seven at full strength. This shortage was destined to reduce the success of its G20 operations.⁵³

Yet, it may have seemed that there were enough fighters in the theater to take care of the needs of the Fifteenth, there being 14 groups on hand on 1 November. Actually, however, such was not the case. For one thing there were only three groups of P-39's, which alone were suitable for long-range escort. Of the other 11 groups two had P-39's and C3's, two had P-51's and 36's, two had Spitfires, and five had P-40's.

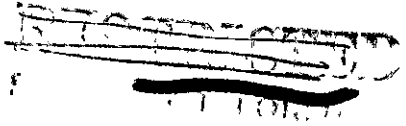
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The P-40 groups were being re-equipped with P-47's, but the transition was only beginning. For another thing, five of the 11 non-P-38 groups were scheduled to be transferred to UK and CBI.⁵⁴ Thirdly, because of heavy losses by the Eighth Air Force, especially in the second Schweinfurt raid on 14 October, it had been decided in Washington that all P-38's and P-51's which were scheduled to go to MIO in October, November, and December would be sent to UK, with MAAC receiving P-47's in their place.⁵⁵ This would result in a loss in fighter activity while pilots were going through the training incident to changing over to the Thunderbolts; it would also hurt the operations of MAAC's two A-36 fighter-bomber groups which needed the P-51's as replacements.⁵⁶ Finally, the theater had a shortage of more than 300 fighters.⁵⁷ The photo reconnaissance group which had been stipulated in the War Department directive of 23 October was never given to the Fifteenth. Reconnaissance of strategic targets was done by six aircraft from the 15th Combat Mapping Squadron (5th Photo Group, 80th PRG) which came to the Fifteenth in January 1944.⁵⁸

On 3 December 1943, II Air Service Area Command (S-) was transferred with all its units from the Twelfth Air Force--and XII Air Force Service Command--to the Fifteenth Air Force. On 1 January 1944, II ASAC (Sp) was redesignated XV Air Force Service Command and on 2 January was assigned to the Fifteenth.⁵⁹

As a result of these developments the Fifteenth had grown by the end of December from 3,621 officers and 10,875 enlisted men to 4,873 officers and 33,367 enlisted men.⁶⁰

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Even while the Fifteenth was expanding, it was losing the medium bomber groups which had been assigned to it on 1 November. This was a logical procedure inasmuch as the Fifteenth had been created primarily for long-range bombing. On 3 November two of its groups of mediums were returned to the Twelfth. On 1 January 1944, after three new groups of heavies had arrived in the theater, the 43d Bombardment Wing (H) and the remaining three groups of mediums were sent to the Twelfth.⁶¹

After the return of the two groups of mediums on 3 November, the Twelfth had under its operational control⁶² the following:

1. XII Fighter Command, consisting of the 62d Fighter Wing (one fighter group), the 63d Fighter Wing (two fighter groups and two night fighter squadrons), one bombardment group and one antisubmarine group, together with supporting units of Air Service Command, Signal, etc.

2. XII Air Support Command, consisting of the 57th Bombardment Wing (three bombardment groups and three fighter groups), the 64th Fighter Wing (two fighter groups and one tac/recece squadron), one separate fighter group and one separate fighter-bomber group, together with supporting units.

3. Troop Carrier Command (Prov), consisting of the 51st Wing (three groups) and the 52d Fighter Wing (four groups),⁶³ with supporting units.

4. XII Air Force Service Command.

5. XII Photo Reconnaissance Wing (Prov), consisting of the 3d and 5th Photo Recon Groups.

6. XII Training Command (Prov), consisting of one fighter-training and one bomber-training center and three replacement battalions.⁶⁴

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Objectives and Target Priorities. With the Fifteenth Air Force properly established and with plans made for its expansion, the next step was to put its bombers into action, particularly against GSO targets but also against such other objectives as lines of communication in northern Italy. This was more easily said than done. For one thing, weather in the Mediterranean proved to be so unfavorable during November and December that by far the greater part of the Fifteenth's missions had to be flown, not against GSO targets, but against objectives in Italy whose destruction was of strategico-tactical value to the Fifth and Eighth Armies. For another thing, much of November and December had to be given over to the movement of units from Tunisia to Italy and Sardinia. As a result the Fifteenth's role in the GSO was exceedingly limited until well into 1944.⁶⁵

Obviously, however, these conditions did not keep higher authority from laying down the basis upon which the Fifteenth was to operate. On 5 November, CGS issued CGS 217/3, which called for coordination between the Eighth and the Fifteenth in order to expedite the carrying out of POINTBLANK and which provided that a new priority list of GSO targets was to be established.⁶⁶

Pursuant to this directive Generals Spaatz, Hayer, and Eshlittle and Air Marshal Tedder met at Gibraltar on 8 and 9 November and arranged for coordination of operations between the Eighth and the Fifteenth. POINTBLANK targets were allocated between the two air forces. The procedure for combined operations was drawn up. Liaison officers were established at the headquarters of both air forces so as to insure

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rapid interchange of operational experience and intelligence data. Operating technique, technical data, and provision for prompt and continuous interchange of ideas and experience were worked out.⁶⁷

The conference brought out the fact that one of the principal needs of the Fifteenth was an adequate supply of bombing-through-overcast equipment.⁶⁸ This resulted in H2X equipment being shipped to the theater, a number of H2X experts being sent over from the U. S., and a training program in the use of H2X being set up for the Fifteenth.⁶⁹

During the last two months of 1943 each theater established its own priority list of GPO targets from those allocated to it. Before examining the list assigned to the Fifteenth, however, it is necessary to consider the general missions given to it, for the Fifteenth was not limited to participation in the GPO.

Soon after the Fifteenth was established it began to operate under a NAAF directive of 14 November which set forth the four main objectives of NAAF, in general order of priority:

1. To destroy the GAF in the air and on the ground, wherever it might be located within range of NAAF planes.
2. To support the battle on the Italian mainland.
3. To participate in POINTBLANK, which included the destruction of German fighter aircraft plants, ball-bearing plants, oil, rubber, munitions, etc.
4. To weaken the German position in the Balkans.⁷⁰

Objective No. 2--support of the land battle in Italy--was primarily the task of TAF, which was to handle all close-support operations and

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missions against communications in southern and central Italy up to and including a line from Civitavecchia to Ancona. Above that line Strategic would operate, with the B-29's taking this as their primary task.⁷¹ In connection with Objective No. 2 it should be noted that General Eisenhower, in discussing with the GCS the build-up of his air forces, wanted it "clearly understood" that the increase was not altogether for use in POINTBLANK but that much of it was for "assisting the land battle."⁷²

Objective No. 4--operations in the Balkans--also was assigned to SAC, except for such special missions as might be given to Strategic. Important objectives which could be reached only by heavies--such as the Sofia H/Y's, and the Ploesti oil refineries--were to be assigned specifically to Strategic.⁷³

This left Strategic with two main objectives: the destruction of the GAF and participation in POINTBLANK. It was felt that the wholesale destruction of the GAF and of military, industrial, and economic targets in Germany would accomplish two things: first, it would contribute very heavily to successful OVERLORD as well as to any other Allied operations against Germany; second, it would crush the will and ability of the German people to carry on the war and thereby would hasten the end of the conflict.⁷⁴ General Spaatz believed that the heavies, which in the past had had to be used freely against critical communications points in north-central Italy in support of the ground campaign,⁷⁵ now would be free to participate in POINTBLANK and to hit the northern approaches to Italy, while B-29's--operating from Sardinia--could take care of the

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 enemy's supply routes in central Italy.

The destruction of the GAF, particularly of its fighter elements, was given No. 1 priority because the first prerequisite of a successful strategic daylight bombing program (i.e., POINTBLANK) was the attainment of superiority over the German defensive fighter force. Otherwise, strategic attacks could not be conducted without prohibitive losses. The reduction of the GAF would, of course, also be of value to Allied ground troops, installations, shipping, etc., and in any additional operations (such as OVERLORD) which might be conducted on the Continent. The wrecking of the GAF was to be accomplished by destroying aircraft on the ground and in the air and by smashing fighter factories, ball-bearing plants, air depots, aviation repair facilities, and hangars.⁷⁷

In order to destroy planes on the ground and in the air, IAAF would bomb German airfields and depots and strafe grounded planes, and its newly armed bombers and their fighter escorts would shoot down enemy fighters which came up to protect installations from raids by Allied bombers.

In blasting fighter factories and ball-bearing plants the principal attacks would be made on airframe and assembly factories--studies having shown these to be the best targets--with ancillary attacks against the highly concentrated ball and roller-bearing industry. Such attacks, while immediately designed to destroy the GAF, also would constitute the first phase of the OSO.⁷⁸

The airframe and assembly plants were selected because the two

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frequently were close together in one target area, because a large portion of the total capacity was within range and was centered in a relatively small number of large factories, and because the smashing of the two production phases would give both a quick effect on the GAF's front-line strength (the assembly plants) and a lasting effect (the airframes). The main attacks were to be against single-engine fighter (SE) plants.⁷⁹ The principal centers of SE production were at Wiener Neustadt and Regensburg (these two units produced 500 out of 650 Me-109's per month) and at Braşov and Győr. Outside of GAF's range but within striking distance of the Eighth was the Erla-Leipzig complex. Factories in Italy also produced some 200 SE's per month, but these were mostly Italian planes. Two-engine fighter (TE) and jet-fighter production centered around Augsburg, Budapest/Csepel, Schwechat, Oberpfaffenhofen and Friedrichshafen.⁸⁰

The ball-bearing industry was chosen because it was concentrated and lay mostly within range, because damage to it would affect not only aircraft but M/T, tanks, heavy guns, and precision instruments, and because there was no substitute for bearings.⁸¹ The main ball-bearing factories were at Steyr, Klosterle, Fuerstein, and Schweinfurt, and at Turin and VillarFara in Italy.

In addition, there were a number of important armament factories within range of the Fifteenth: Munich-Milbertshofen Ordnance Depot, St. Valentin Tank Factory, and the Herman Goerz; works at Linz, Austria.⁸²

Targets under the FORTRESS program would be given priority in terms of weather, capabilities of GAF, and coordination with the Eighth

Air Force and the RAF Bomber Command.⁸³ During November and December 1943 priorities were assigned by HAF (and HAF) and were as follows:⁸⁴

1. Werke II, Micher Feustadt
2. Messerschmitt A. G., Augsburg
3. VillerFerosa Ball Bearing Factory, Turin
4. Bad Constadt Ball Bearing Factory, Stuttgart
5. Manfred Weiss Messerschmitt Plant, Budapest
6. Steyr-Daimler-Puch, Steyr
7. Regensburg Aircraft Factory

The remaining part of the POLNEPLAN program involved attacks on the German economic, industrial, and communications systems, with emphasis on the production of such war essentials as oil, rubber, and munitions. Many of the targets were within range of the Fifteenth, for Germany had moved many of her smaller vital industries to eastern Europe. IO/AS Intelligence considered that "qualitatively" the important targets now were closer to Italian bases than to bases in UK and believed that the fact that such targets were within effective reach of HAF was "one of the outstanding recent developments of the war."⁸⁵ For example, 31 plants, producing 41 per cent of the enemy's crude and synthetic oil, were less than 600 miles from Regio, and an additional 31 plants, producing 32 per cent, were within 600 miles of Ancona. Production of the 53 plants was 11,825,000 tons annually, or 76 per cent of the enemy's total. Of the 53 plants only about three-fourths were within 600 miles of the UK.⁸⁶

In selecting targets the basic idea was that of concentration, that is, the destruction of a few carefully selected industries which represented vital elements in the enemy's military strength. The idea was based on the premise that the enemy would be hurt more if deprived

paralleling frontal systems over Germany, whereas aircraft from the VII would have to fly through the fronts; that the rapid build-up of the Fifteenth would force Germany to disperse its fighters and AA defenses, and this dispersion, coupled with well coordinated attacks by the Eighth and Fifteenth, would greatly disrupt the German fighter-control system; that, currently, most of the German fighter units with their most efficient control centers were in northwest Germany and much time would be required to establish a fighter control in southern Germany which would be as efficient as the present organization facing the VII; and that the increase in heavy bomber bases in Italy would simplify shuttle-combing and cut down on losses along the routes of withdrawal.⁹⁰

It was on this optimistic note that the Fifteenth began its operations in November 1943.

The Strength of MAAC, November-December 1943

During November and December MAAC (and its successor on 10 December, the Mediterranean Allied Air Forces)⁹¹ had available for all of its operations--strategic, tactical, coastal, photo reconnaissance, services, air transport, etc.--an average of around 120,000 USAAF and 182,000 RAF personnel (the latter including personnel of RAF, RZ) and 3,300 USAAF and 7,400 RAF planes, the latter including planes of Middle East as well as a large number of aircraft which were of little or no value in actual operations.⁹² At the beginning of November the USAAF had a total of 2,420 combat crews, divided as follows: B-17 crews, 254; B-24 crews, 70; B-25 crews, 263; B-26 crews, 234; fighter pilots, 1,019.⁹³ On the same date the Twelfth Air Force had in it, or en route to it, 8 groups of

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medium and light bombers, 12-1/4 groups of fighters and fighter-bombers, 3 groups of reconnaissance planes, and 7 groups of troop carriers. The Fifteenth had 6 groups of heavies and 2 groups of fighters and would at once be given 2 more groups of fighters. The scheduled build-up for the two Air Forces for the remainder of the year called for the Twelfth to have on 31 December 8 groups of medium and light, 11 groups of fighters and fighter-bombers, 2 groups of recons, and 7 groups of troop carriers, and for the Fifteenth to have 12 groups of heavies, 4 groups of fighters, and 1 group of recons. This meant that USAF would increase from a total of 30-1/4 groups on 1 November to 45 groups on 31 December. But it should be noted that the entire increase was for the Fifteenth and that the Twelfth actually would have 2-1/4 squadrons fewer with which to begin its 1944 operations. 94

During the last months of 1943 USAF had the use of Simon from several nations other than the United States, England, and the Dominions. As already noted, the Italians had begun to operate with USAF on a small scale late in October. The French had been flying against the enemy for many months, but it was only since the beginning of the Italian campaign that they had begun to play an active role in combat, their first major operations having come late in September and early in October in connection with the Allied conquest of Corsica. During November the USAF had 12 squadrons in service: 4 Spitfires, 3 P-39, and 1 each B-26, P-40, Hurricane, Mustang, and Lockheed. All of these were under Coastal. In addition, there was one French B-51 squadron which was assigned to USAF. At the beginning of November the USAF had around 125 crews and 300 aircraft;

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of the latter an average of 75 were operational. In December, the French had 13 squadrons besides the squadron with P.M. It had an average of around 350 aircraft (70 per cent of which were fighters) and an average of 110-120 serviceable planes. The IAF flew 1,870 sorties in November and 2,373 in December, almost all on patrol and convoy duties.⁹⁵

In November a detachment of Yugoslavian flyers joined IAF. The four crews which comprised the detachment had been trained in the United States; on 6 October 1943, in a ceremony at Bolling Field, President Roosevelt had formally accepted their services from the Yugoslavian Ambassador and had dedicated four B-24's to their use. On their arrival in the Mediterranean early in November they were assigned to the 376th Bombardment Group (E), the "oldest heavy bombardment group operating overseas." The four 10-man crews participated in four major missions before the end of the year (Athens/Elorus A/D on 15 November, Sofia on 24 November and 10 December, and Augsburg on 19 December) in the course of which two of the crews were lost.⁹⁶

Movement of Units

In November and December IAF virtually completed the task of moving its combat units from North Africa and Sicily to Italy, Sardinia, and Corsica. Late in August Air Marshal Leeder had charged General Spaatz with the responsibility of the planning and extension of air operations. General Spaatz was to prepare for the ultimate operation from the mainland of up to nine groups of heavies, and in addition to stocking for these forces, a 25% reserve of bombs, petrol and maintenance should be provided to cover possible operations by heavy bombers based on the U

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out using Italian airfields for refuelling and rearming purposes." Further, he was to plan the movements of units into Italy so as to "keep in phase" with the progress of the ground forces and, if possible, to move in the units of Strategic ahead of those of Tactical.⁹⁷ The military situation never permitted Strategic to move in before Tactical, so that the principal movement of heavies and mediums did not come until November and December.⁹⁸ Even had the military situation been different it is doubtful whether the move could have been made faster or earlier than it was made, because of supply difficulties and because--and this was the main reason--initially there were not enough airfields to take care of all of the units.

At the beginning of November, in the heel area the fields of Lecce, San Francesco, Manduria, Campo Casale, and Ciola del Colle were ready for use; in the Naples area Montecorvino, Capodichino, Pouigliano, Cercola, and Casale were ready; and in the Foggia area Foggia Main and seven satellites were expected to be in condition by the 15th or 20th of the month. It was presently possible to support three heavy bomber groups in the heel, all TEF units in the Naples area, and all fighters at various fields both in the east and the west. All subsequent arrivals of heavies up to 15 groups could be cared for in the Foggia and heel areas, as could four additional fighter groups and one additional reconnaissance group.

On Corvara four fighter fields were under construction, at Ajaccio, Borgo, and Galvi (2), and two bomber fields were being built at Gaisnaccia and Casabianca. By the end of December three fields would be operational

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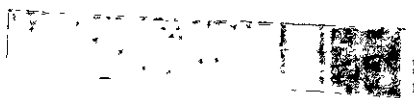
and a program of construction calling for the development of 11 all-weather fields would be under way. The full program--which would not be completed until May 1944, according to December estimates--would accommodate 10 fighter groups and four bomber groups plus elements of Coastal and FEW. The build-up on Corsica was given a high priority so that the island would be in position to play a large role in the air phase of the projected invasion of southern France (Operation ANVIL), but the build-up during December and January was somewhat retarded by the decision to launch the Anzio operation (SHINGLE) late in January.⁸⁰

On Sardinia, as of early November, Air Service Command units had repaired enough fields around Elmas, Villacidro, and Decimomannu to take care of the 401 Win's B-25's, which already were beginning to move in.¹⁰⁰

Miscellaneous Developments

Engineer Command. The job of lengthening old fields and constructing new ones on the mainland and the islands was the responsibility of the aviation engineers. Up to 22 October 1943 all the U. S. aviation engineers in the theater had operated under the Engineer of the Twelfth Air Force (who was also the Engineer of XII Air Force Service Command), who had simply headed the Engineer Section within the Twelfth. On 22 October the XII Air Force Engineer Command (Frov) was activated and on the 26th was assigned to the Twelfth Air Force. This new arrangement gave a command status to the Engineer, gave him authority equal to his responsibility for all airfield construction, and made it easier for him to

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obtain supplies and equipment. Various U. S. aviation engineer units in the theater were promptly assigned to the new command, and on 4 November Brig. Gen. D. A. Davidson became Commanding General. Area Engineers were then appointed for the West Italy, East Italy, Sardinia-Corsica, North-west Africa, and Sicily Areas. Subsequently, in November and December, the Sardinia-Corsica Area was split into two areas and a South Italy Area was created, so that there were finally seven areas. This arrangement meant that the U. S. Engineers were responsible for all airfield construction for planes to be used by IAF except the fields which were to be used by RAF, those being the responsibility of the British.¹⁰¹

In spite of great difficulties imposed by rain and mud, insufficient equipment and personnel, poor transportation (especially in Corsica where the Germans had blown every bridge, the one railway, and the roads, and where there was only a single port on the entire east coast) the engineers during November and December completed or were in process of completing construction on more than 45 airfields. The work ranged from repairs and drainage to building runways (paved, steel plank, etc.) up to 6,000 feet in length and with adequate hardstanding.¹⁰²

Pipe Lines. In October, after the Bari and Foggia areas were in Allied hands and the numerous fields in the areas were being prepared for use by IAF, MIL AEGC was given the responsibility of constructing an aviation gasoline pipe-line system in eastern Italy. An engineer Petroleum Distribution Company at once started work in the Foggia area, and in December a second company started in the Bari. During the week

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of 18-25 November a pipe line from Manfredonia to Toglioli was completed and began operating, moving up to 100,000 gallons of 100-octane gasoline each week. By the time AAF's heavies were ready to move to their new fields in eastern Italy the problem of keeping them supplied with gasoline had already been solved--with a consequent reduction in tonnage to be off-loaded at ports, besides relieving roads and rails of the burden of hauling gasoline.

A pipe-line system was also set up along the east coast of Corsica, running from Bastia--the only port on that side--to the complex around Ajaccio. A small system was established at Ajaccio. In maintaining these lines, and more particularly in handling the gasoline at the airfields, Air Service Command carried the responsibility. Both the engineers and Service Command were able to supplement their own limited personnel engaged in servicing fields and handling gasoline, or employing small numbers of French aviation engineers on Corsica and by using large numbers of Italian POW's in North Africa, Italy, and Sardinia. ¹⁰³

Adriatic Depot. The development of air bases in Italy not only created the problems of airfield construction and the supplying of gasoline but also the problem of handling supplies for the air forces. The latter problem was a peculiar one in eastern Italy. That area was to be a great base for the USAAF. But it was under the jurisdiction of the British because their ground troops were operating there; consequently, the Americans would not establish a base section for handling supplies common to ground and air, although British common items were altogether

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was satisfactory to the American air units. The problem was solved by establishing the Adriatic Depot, located at Bari and under the control of XII Air Force Service Command. The Depot, staffed largely with ground forces service personnel but a part of the air forces organization, got under way late in October and by the end of the year was supplying the air forces with common items from numerous offices, warehouses, and dumps in and around Bari. Few operations in the Mediterranean theater were more unique--or more successful--than this setup, in which the air forces ran a ground force activity in a British-controlled area.¹⁰⁴

An operation somewhat like that of Adriatic Depot took place in Corsica where the 300th Service Squadron, at Ajaccio, not only performed normal air service duties but also functioned as a base section from October 1943 until late in February 1944 when the Northern Base Section was activated.¹⁰⁵

In Sardinia, where there were no Allied ground forces, the air forces handled military matters, Brig. Gen. Robert H. Webster, CG of the 43d Wing, being the Allied Garrison Commander. Supply and maintenance were handled by XII AFSS and certain of its units which were stationed on the island.¹⁰⁶ Originally, it had been planned to move the entire XII Bomber Command to the island within two weeks after it fell--so as to get units, especially short-range units, as far forward as possible at the earliest moment. The plan was changed, however, when it became apparent that the Eighth Army was encountering but little opposition in its drive toward the Foggia complex; hence in the end only TAF's B-29's were moved to Sardinia.¹⁰⁷

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The Air Prospect, November - December 1943

As a result of the movement of units from North Africa and Sicily to Italy, Sardinia, and Corsica during September and October, and the continuation of the movement in November and December, IIAF was in a much better position to strike hard blows at the enemy and to defend Allied troops, installations, and shipping during the last two months of 1943 than it had been during September and October. IIAF's opportunities were further enhanced by the Luftwaffe's decline in strength in Italy. This had come about partly as the result of German losses in combat and on the ground and partly because the new Allied air bases in Italy brought southern Germany, Austria, Hungary, and the Balkans within bomber range from the Mediterranean and thereby forced the IAF to disperse its fighter strength. Centers of fighter aircraft production at such places as Jener Koenigsfeldt, Augsburg, and Regensburg, and other important industrial installations had to be defended; so did the Balkans, over whose safety the German High Command already was showing concern. It could be expected that, at least for the time being, the enemy would keep only enough fighter aircraft in Italy to afford some protection to his holding and defensive action. Nor was there much danger that the Germans would project a real long-range bomber offensive in the Mediterranean, what with the IAF's serious losses to IIAF's counter-air offensive in Italy and with bomber production in Western Europe out sharply in favor of fighter production. About the only bomber operations over which the Allies had to be concerned were those which might be launched by B-24's operating from southern France and using radio-controlled

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bombs--but these could be expected to be on a small scale and directed mostly against shipping. Not even the GAF's fighter-bombers, currently fairly active, could be expected to pose a major threat to the Allies, as that element of the GAF had never recovered from the losses it had suffered during the Sicilian campaign and the first two months of the Italian campaign. ¹⁰⁹

With a weak enemy air force opposing it, with bases for use by Tactical located close to the ground forces, with Strategic ready to move to bases 300 miles nearer to its targets, with ports like Naples and Bari running full blast, with pipe lines for gasoline being laid, and with the other developments noted above, GAF began the month of November under conditions which suggested that the last two months of 1943 might be the most successful of the year. But they were not to be. Miserably bad weather, ¹¹⁰ movement of units, training programs, ¹¹¹ and the shift of Strategic's operations from close to long-distance targets were responsible. Nevertheless, GAF's planes put in two busy and useful months of operations on behalf of the ground campaign in Italy and the Combined Bomber Offensive.

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Chapter VII

AIR OPERATIONS DURING NOVEMBER

Tactical Air Force

Fifth Army Sector. During the first two weeks of November the Fifth Army made little progress in the face of rain, mud, heavy demolitions, blocked roads, and fierce German resistance--especially around Mignano. The principal accomplishments were the capture of Venafro and Cassano Lirano and the forcing of the enemy back across the Carigliano in the Minturno sector. In the last two weeks of the month the Fifth made virtually no advance, the weather being so bad that even patrol activity had to be curtailed.

Over the western half of the battle line RAF's planes flew almost 1,400 sorties during the first week of November.¹ Conversely, there was very little enemy air activity and even that was made largely ineffective by USAF and RAF Spitfires which shot down 11 planes and probably destroyed three others, without loss to themselves.

In order to reduce the resistance which the Fifth Army was meeting, RAF made steady attacks on German gun positions. P-40's, A-36's, A-20's, and P-51's hit at guns around Venafro, Mairano, Cervaro, Cassino, Terracina, Scanno, and other points adjacent to the battle line. The full extent of the damage inflicted in these attacks cannot be estimated accurately, but reports indicated that considerable damage was caused to the enemy's artillery.

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A heavy fighter-bomber effort was made against road and rail bridges as a part of the never-ending task of interfering with the enemy's movement of men and supplies. Attacks were delivered against bridges below Minturno, at Pontecorvo and Roccasecca (both near Cassino), and in the Isernia and Atina areas. Results ranged from excellent to very poor, the Pontecorvo bridge apparently bearing a charmed life.

Tactical also went for roads and vehicles in the battle zone and in the rear areas. In particular, roads at Acquafredda, Atina, and near Isernia and Cassino were raided, while the movements of enemy reinforcements into the central sector were hampered by P-51 attacks on roads around Terracina. Meanwhile, A-20's, operating at night, bombed roads, railways, vehicles, and bivouac areas.

As a means of reducing the GAF's fighter-bomber effort A-20's hit Cisterna, Ferrara, and Tarquinia airfields, destroying or damaging 13 planes on the ground and three in the air; and Wellingtons attacked Piano/Forno airbase with good results.

During the second week of the month bad weather interfered with III AF operations, closing them down on the 8th and 14th except for a few Spitfire sorties; but despite this interference fighter-bombers got in over 700 sorties and fighters over 800. Attacks were delivered against strong-points, gun positions, and roads over the Mignano area generally, against vehicles, roads, bridges, and targets of opportunity around Cassino, Atina, Cora, Roccasecca, San Biagio, and Santa Lina, and against trains, vehicles, and M positions southeast and north of Fome. M, et

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bombers flying by day pounded enemy troops and guns above Lignano and in and around the towns of Atina, Acquafredda, and Santa Licia. Night-flying Mustangs could get in only 40 sorties but managed to make successful attacks against the harbor at Civitavecchia and the I/Y's at Anzio and to aid naval vessels bombarding Formia and Gaeta by dropping flares and by diversionary bombing. Operations at night were augmented by the activities of RAF Mosquitoes which intruded as far north as Genoa, Padua, and Venice, strafing 33 trains and attacking railroads in the Genoa, Spezia, and Ancona areas, airfields at Tarquinia and near Cerveteri, searchlights at Milan, and road transport in the Spezia, Rome, and Terracina areas.

During this second week of November the CEF was using around 100 fighter-bombers (P-51's and FW-190's) in support of their ground troops, the planes being based in the Rome and Viterbo areas. The scale of effort was usually low, but on two days it rose to between 80 and 100 sorties, attacks being directed against Allied positions and against communications immediately behind the front. This CEF effort accomplished very little, the formations being met in almost all cases by Allied fighters, and the enemy lost 17 planes without shooting down a single Allied plane. To plan surprise, however, Tactical sent its fighter-bombers against the enemy's forward landing grounds on the 13th, attacks being made against Aquino, Marsigliana, and Trosciane.

During the last two weeks of the month the weather was so bad that Tactical's planes were able to accomplish but little. The effort for the week of 15-21 November was the smallest to date, the 19th being the only day

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when operations were on a normal scale. On that day almost 20 defensive patrols were flown, and 32 fighter-bomber sorties were made against the bridges at Pontecorvo and Santa Elia. From the 22d through the 25th the weather was no better than it had been in the previous seven days. However, a few attacks were carried out, notably by P-40's against roads and strong-points northwest of Anafre and by A-26's against roads and positions below Cassino and against the docks and railway yards at Civitavecchia.

On the 23th, 27th, and 28th the weather was better and tactical-minded enemy positions in the Mignano area, near San Sabrogia (southeast of Cassino), and south of Cerveteri and Valmontone, bombed battlefield roads, hit the docks at Civitavecchia, and struck hard at the west coast railway and junctions below Rome, at the bridges southeast of Minturno (immediately ahead of Allied troops), and at Anzio Harbor. At night Mustangs harassed enemy movements in the rear. During these three days Tactical's fighters and fighter-bombers flew around 350 bombing missions and an equal number of defensive patrols and fighter sweeps, the latter usually culminating in strafing attacks on vehicles. No enemy aircraft were encountered.

On the 29th the good weather collapsed, and on that day and the 30th planes of TAF flew almost no missions.

Eighth Army Sector. During November Tactical's operations over the British Eighth Army sector were not appreciably different from what they were over the western half of Italy, but because the weather was somewhat better and because a special effort was made on behalf of the Eighth

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Army's drive against the Sangro River line, Tactical 1 was more active in eastern Italy.

Air cooperation with the Eighth Army was strong during the first three days of the month, B-17 fighters flying over 900 sorties, USAAF light bombers carrying out around 390, and EAF mediums flying some 70. The first set of attacks was against concentrations, guns, positions, etc. around Carpieno, on behalf of the left flank's drive towards Isernia; the second set, except for a few line cracker at Carpieno, was against the enemy opposing the right flank's push across the Trigno River. P-40's hit hard and accurately at Cupello, Falcoli, Delli, Turci, Colonna, and Carunchio; light bombers pounded the enemy's main gun positions at Falcoli, Turci, and Colonna and dumps at Cupello; and A-20's and A-24's bombed enemy troops, dumps, and vehicles at Cupello and Falcoli. In addition to the two major operations, Spitfires strafed the enemy's Sulmona-Avezzano line of communications, escorted bombers and protected snip-in, flew armed reconnaissance over the battle area, and destroyed, probably destroyed, and damaged a total of seven enemy planes; P-40's destroyed three planes on the Falconara Marittima landing ground and destroyed two and damaged five on Ieri landing ground, near Ancona; while in the rear of the German lines light bombers attacked roads and rails around Antrodoco and the road junction at Alfedena, and B-25's bombed the W/V's and railway at Aquila.

From the 4th to the 11th the weather was generally unfavorable. However, fighter-bombers maintained a moderate effort along the coast and in the central mountains, attacking vehicles and all positions along

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the Sangro River, shipping in east-coast harbors, tanks and vehicles northeast of Avezzano, trains and transport in the Avezzano-Sulmona area, lateral roads and vehicles in the Pescara-Ancona area, aircraft on the Iesi and Ancona L/G's, gun positions below Atessa, and military billets down the Sangro River near Roccaraso; light bombers attacked gun positions at Castelirentano (on the enemy's left flank, across the Sangro) and the railway station, troops, and guns in and around Palena (between the Sangro and Sulmona), the Palena operations being particularly heavy and successful, with more than 120 sorties being flown.

In the third week of the month the weather continued to be a limiting factor in Tactical's operations, but DAF fighter-bombers were able to give some close support to the ground troops, and Spitfires got in a fair number of bomb-line and defensive patrols. Almost all of these activities were immediately in the battle area. From the 16th through the 20th operations were over the left flank of the Eighth Army in order to soften resistance to the advance of the 8th Indian Division: fighter-bombers went for gun positions at Archi and Perano and strong-points at Rivisondoli and Larrea, while light bombers pounded positions around Rivisondoli. On the 21st the attack was shifted to the right flank, P-40's going for targets at Santa Maria and Poggioflorito and Baltimores bombing positions south of Fossacesia. These operations were preliminary to the drive which the Eighth was about to launch across the lower Sangro.

On the night of 22/23 November, the Eighth crossed the Sangro near the coast and 36 hours later had established a bridgehead six miles long and a mile deep. On the left of this sector the Eighth also had

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crossed the Sangro above Atessa and had reached the San Angelo area. Farther down the line of the Sangro very limited progress was made above Castel di Sangro and east and south of Alfedena.

In cooperation with this general movement against the Sangro line Tactical made a strong effort to soften resistance and support the advance. On the 22d attacks were delivered against defensive positions and concentrations in the San Maria Imbaro, Lanciano, and Fossacesia sectors, all adjacent to the coast where the main drive was being made. The operations were by B-25's, Baltinores, and P-40's, with the last also going farther afield to attack rail and road movements in the Ancona and Pescara areas.

On the 23d bad weather stopped air operations, but the next day B-25's bombed the enemy around Santa Maria and Fossacesia in an attack described by the ground troops as "magnificent," and more than 120 light bombers and P-40's gave direct support to troops which had crossed the Sangro. During this period the GAF offered opposition only once, and this was by two FW-190's, one of which was shot down.

From the 25th to the night of the 27th the Eighth Army was busy consolidating its positions across the Sangro preparatory to continuing its drive against the enemy. During this stage Tactical gave excellent support to the ground forces. Medium and light bombers smashed at defensive positions around Fossacesia, Lanciano, and Santa Maria, putting in more than 450 sorties. P-40's flew almost 400 sorties against targets in the same areas, with a lesser effort against Casoli, farther south. Ground troops confirmed the fine results achieved by the bombers and

fighter-bombers. Meanwhile, B-25's went for the H/Y's and harbor at Ancona and, on the night of the 26th, Bostons attacked some 50 vehicles south of Pescara.

On the night of 27/28 the Eighth Army launched an assault in the eastern half of its line, driving hard against the enemy's winter line on the high ground overlooking the Sangro valley. The Germans counter-attacked fiercely but the Eighth stopped the attacks and by the end of 30 November had taken Fossacesia, Santa Maria, Mozzagrogna, Romagnoli, and the whole of the high ridge dominating the valley. In this operation the ground troops received tremendous help from Tactical's planes.

The German lines on the ridges already had been worked over by TAF, and on the 28th, 29th, and 30th its bombers and fighter-bombers continued to pound them and to hit at key points in the German defenses. Lanciano, Fossacesia, Santa Maria, Rocca, and Castelfrentano bore the brunt of the assault but attacks also were made on concentrations near Guardiagrele, Casoli, and Orsogna. In these attacks the Allied day bombers flew around 400 sorties and the fighter-bombers flew almost 800. So severe were the attacks that the Germans were unable to mass enough troops to deliver heavy counterblows, and the way was paved for the Eighth's drive through the winter line.

Excellent cover was given to the advancing troops by fighters of DAF, which destroyed eight enemy planes, probably destroyed one, and damaged eight, for the loss of two planes. Meanwhile, 63 B-25's effectively bombed the road and rail bridges at Guilianova and 36 more hit the H/Y's at Civitanova (both places being on the coast between Ancona

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and Pescara), while by night A-20's continued their attacks on road and rail movements and targets of opportunity to the north of the battle area.

During the month Tactical's operations included a number of activities other than its main one of working with the ground forces. Attacks were made on vessels in east coast harbors in order to interfere with a mode of German transportation which naturally increased as Allied bombings further interfered with land communications.² At night Bostons and Mosquitoes went as far north as Padua and Ferrara on intruder missions against trains, railways, roads, vehicles, and bridges. Naval operations along both coasts were aided by diversions which included bombings and the dropping of flares. Phubarbs, escorts, patrols, and photo, tactical, and weather reconnaissance missions were flown regularly. To an appreciable extent all of Tactical's missions were conditioned by the weather. This was particularly true of its missions over the Yugoslavian coast, for, as a general rule, these were flown when operations over and north of the battle zone were limited by bad weather. The principal missions across the Adriatic were against the harbor and shipping at Split, these being bombed and strafed a number of times by B-25's, A-30's, P-40's, and Baltixores. Metkovic also came in for a large number of attacks, primarily because of the concentrations of enemy vehicles frequently found in the vicinity; one of the most successful of all the operations over Yugoslavia was near Metkovic on 6 November when P-40's destroyed 40 M/T and damaged 50. Other places which received special attention

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were the harbor and shipping at Zara, the docks at Durazzo, and the harbor and H/Y's at Sibenik. Large numbers of sweeps and armed recess also were made along the coast.

Strategic Air Force

During November Strategic's operations were on a smaller scale than at any time since the Tunisian campaign, its tonnage dropped being less than one-third what it had been in September.³ The reduction was due in part to such internal conditions as the reorganization attendant upon the creation of the Fifteenth and the moving, or preparing to move, of units to Italy and the islands. These matters, however, were minor. The principal thing which cut down on operations was the weather,⁴ which, as already noted, was consistently bad. One result of the poor weather was the shift of many of Strategic's missions from CBO targets to lines of communication in Italy,⁵ which meant that SAF was supporting the operations of TAF on behalf of the ground campaign. In view of the difficulty which the Fifth and Eighth Armies had in making any appreciable progress during November it was undoubtedly to their advantage that the shift took place.

Lines of Communication. In attacking lines of communication--and other targets--Strategic was aided during November and thereafter by improved weather forecasting. This was made possible by daily weather reconnaissance flights over northern Italy, southern France, Corsica, the Adriatic, Albania, and southern Greece. The missions were flown by PRW pilots using P-39's.⁶

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Strategic's attacks on lines of communication were directed largely against railways in northern and central Italy. There were seven main lines that were important to the maintenance of the German armies:

1. Rome-Florence Directissima Line
2. Rome-Pisa
3. Pisa-Florence
4. Arezzo-Foligno-Ferni-Orte
5. Genoa-Pisa
6. Marseilles-Genoa
7. Bologna-Rimini-Ancona

During November each of these lines, with the exception of the Marseilles-Genoa, was hit by Strategic, the main targets being M/Y's and bridges.⁷ This represented a combination of the emphasis revealed in September attacks, which had been mostly against M/Y's, and in the October program, which had been centered on bridges.

The first phase of the assault on lines of communication began on 1 November and ran through the 6th. The Vezzano railway bridge (near Spezia) was attacked;⁸ the Viareggio M/Y's (near Pisa) were severely damaged; experimental low-level attacks were made by B-17's on three sections of the west-coast railway between Cecina and Montalto di Castro, hits being scored on the line and adjacent highways; Wellingtons put 75 tons of bombs into the M/Y's at Orte; a few B-17's attacked a bridge over the Fiora River, northwest of Rome, and a railway bridge south of Orvieto; P-38's hit the railway viaduct at Ferni and low-level bombed a railway bridge near Tarquinia and one below Orvieto; and 24 B-26's

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went for the Marsciano railway bridge, south of Perugia, but missed the target. The results of these missions ranged from outright failure to extreme damage, the average being good.

One mission during the week was not against railways--36 B-26's attacked Civitavecchia harbor, hitting a merchant vessel and small craft.

From the 6th to the 10th Strategic passed up the railways for industrial targets, but on the 10th it returned to lines of communication and continued to work on them through the 14th. The heaviest attack in this period was delivered on the 10th by more than 75 B-17's (another 25 were turned back by weather) against Bolzano. The heavies dropped 218 tons of 500-pound bombs, rendering the M/V's largely inoperative, cutting the lines to Innsbruck and Callendo, slightly damaging a railway bridge, and registering direct hits on a road bridge.⁹ Two of the Fortresses were destroyed, and two were reported missing.

The other daylight attacks of the period came on the 12th. All were delivered by B-26's, operations being greatly hampered by clouds. The railway bridge northwest of Montalto di Castro was attacked, and the tracks south of that town and below Orbetello were considerably damaged.

At night Wellingtons went for railway bridges northwest of Rome, east of Florence, south of Pisa, and southeast of Genoa. Direct hits were claimed in each case, and tracks were damaged. All of these attacks were by small groups, but on the night of 11/13 a larger force made a successful raid on the Prato M/V's, north of Florence.

Meanwhile, B-17's struck at the Antheor railway viaduct, near Cannes in southern France, cutting the tracks and highway north of the

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viaduct. Wellingtons also attacked the viaduct, as well as a railway bridge over the Var River, north of Nice.

From the 14th to the 22d Strategic encountered unusually bad weather as well as some commitments in the Aegean, so that only on the 18th and 21st was it able to operate against lines of communication. On the 18th half of a force of 48 B-26's were able to reach the Grosseto W/Y's where they inflicted considerable damage on sheds, sidings, freight yards, and warehouses. On the 21st B-26's hit the Civitavecchia dock area and two vessels in the harbor and bombed the W/Y's at Chiusi. In the latter attack the OAF offered one of its few challenges to Strategic's operations during November, sending up about a dozen fighters; the mediums and their escorting P-38's shot down one enemy plane and damaged three, losing one P-38. On the same day Strategic made one of its few attacks up to this time on enemy rear communications on the east coast when 25 B-26's struck at the road and rail bridges at Fano (between Ancona and Rimini), dropping 43 tons and scoring direct hits on the side of the railway bridge.

On the 22d Strategic began the fourth and final phase of its November operations against rail lines. The attacks came intermittently to the end of the month, were made against three important lines, the Genoa-Spezia-Rome, Bologna-Florence-Rome, and east-coast routes, and involved some 160 sorties by heavies and more than 225 by mediums. On the west-coast line the Cecina railway bridge, the 1,350-foot, 20-span Recco viaduct (southeast of Genoa), Grosseto W/Y's, Ciampino railway junction, and a railway bridge across the Ombrone River below Grosseto

were attacked. On the Bologna-Rome line the M/Y's and bridges at Grizzana (north of Arezzo) and the rail center at Foligno (between Orte and Ancona) were hit. Along the east-coast line heavy attacks were delivered in order to weaken the enemy's strong resistance to the Eighth Army's push across the Sangro River. The principal attacks were against the Rimini M/Y's and bridges, the Doga railway viaduct (north of Trieste), and the railway bridges at Cesano, Senigallia, and Falconara, northwest of Ancona. The Rimini mission was flown by B-17's, the Doga raid by F-38's, and the attacks on bridges above Ancona by low-flying B-24's. As a result of these assaults against railways widespread damage was caused on each of the three lines. The attacks were virtually unopposed by enemy fighters.

By the end of the month the attacks on lines of communication had been sufficiently productive for General Eisenhower to feel that once the Allies were north of Rome it would be possible for AAAF to keep the Germans from bringing in any kind of supplies, and that with 50 per cent good weather the lines could be cut and kept cut.¹⁰

Combined Bomber Offensive. During the month Strategic found it possible to initiate one large and important mission against an enemy fighter-production plant and deemed it advisable to send out several expeditions against enemy airfields. These were designed to carry out the primary mission assigned to AAAF and to the new Fifteenth Air Force at this time, "the attainment of air supremacy through counter-air-force operations and the destruction of the enemy's aircraft production."¹¹

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The missions against enemy airfields also gave extra protection to Allied ground and air forces and shipping against enemy fighters and bombers, not only in Italy but in the Aegean. The number of counter-airforce operations, as noted above, was limited by weather.

The blow against the enemy's production of fighter planes was struck on 2 November when a highly successful 1,600-mile mission was flown against Wiener Neustadt by Strategic's heavies. The immediately previous attack on 24 October had been largely wasted because of a complete overcast, the 159 heavies having to bomb by dead reckoning or attack unobserved targets of opportunity in the vicinity. The November mission more than compensated for this unsuccessful effort.

The blow was struck by 74 B-17's and 38 B-24's, escorted by 72 P-38's, and 327 tons of bombs were dropped. Photo reconnaissance showed, in particular, that a large aircraft assembly shop in the Messerschmitt factory was destroyed and another damaged; two flight hangars were destroyed and one damaged; 13 aircraft on the Wiener Neustadt/Tord airfield were damaged; heavy damage was caused to large machine and assembly shops in the Menschel and Sohn and the Steyr-Daimler-Puch works; and foundries, storage sheds, and offices were destroyed or damaged.¹²

On this mission Strategic got a good conception of the importance which the enemy attached to his fighter-production facilities and of his willingness to defend his key installations with large forces of fighters. Between 120 and 160 enemy planes, including He-109's and 110's, FW-190's and Ju-88's, were encountered; they attacked before, during, and after

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the bomb run over a period of 45 minutes. But, despite the extent of the enemy's fighter opposition, the Americans had a field day, claiming 56 planes destroyed, 27 probably destroyed, and 8 damaged. Against these victories the USAAF lost 5 P-17's and 5 P-24's destroyed and 1 P-17 missing, some of these being victims of flak, which was heavy, intense, and accurate over the target.¹³

The Wiener Neustadt mission, considered as being the "outstanding event" during the first four months of the Fifteenth's operations,¹⁴ was an unusually important operation. It was the first major mission conducted after the strategic units were formed into the Fifteenth Air Force, and it was the first POINTBLANK operation from the Mediterranean. The destruction laid upon the aircraft assembly units was estimated to deprive the GAF of a future output of 250 fighters per month for several months--the plant was considered as having no further target value for a period of four months--which not only eliminated 30 per cent of the total German production of single-engine fighters but would impair German defenses against attacks by the Eighth and Fifteenth and would weaken the German air defense on both the Russian and Italian fronts.¹⁵ As General Arnold put it in a message to General Spaatz: "the effects of your attacks on Wiener Neustadt, 2 November, will cost the enemy hundreds of fighter aircraft and will save us many lives in our continued air war."¹⁶ Furthermore, the Germans now realized thoroughly that their industry and air forces were faced with savage air attacks on three fronts.

As a part of the plan to cripple German industry in general and fighter aircraft production in particular, the Fifteenth was to attack

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industries, with especial attention being paid to factories which produced ball bearings. In November six such attacks were made--against Turin (two) and near-by VillarPerosa (two), the Ansaldo steel works at Genoa, and a ball-bearing factory at Annecy in southern France.

The heaviest attack was delivered on 8 November against Turin, the primary target being the Fiat ball-bearing works. This factory produced the majority of Italian bearings and its output, together with that of VillarPerosa, comprised almost 20 per cent of all the antifriction bearings available to Germany.¹⁷ In the attack (by 81 B-17's, dropping 183 tons) most of the factory buildings were severely damaged and hits were scored on the near-by motor and aero-engine works and the Lingotto H/Y's. The attack was reported to have eliminated some two months of the output of the Fiat works.

The second raid on Turin (by Wellingtons on the night of 24/25) was almost entirely abortive because of extremely bad weather, only seven out of 76 planes being able to strike at the target. The other four attacks, against VillarPerosa (two), Ansaldo, and Annecy, all were on a smaller scale than the first raid on Turin and all were interfered with by very unfavorable weather. In none of the attacks were the primary targets hit although there was some damage to adjacent buildings, H/Y's, etc.

At the end of the month Air Chief Marshal Portal reported that even the comparatively light attacks made by IIAF on German industrial areas had led the enemy immediately to transfer 200 fighter planes to their defense.¹⁸ At the same time, Sir Alan Brooke stated that air

attacks from UK and WFO were containing about one million men in Germany.¹⁹

Counter-Air Operations. In attacking airfields IAAF's planes found themselves going for one or more of four main types of fields: (1) those containing concentrations of operational aircraft, (2) those containing important installations suitable for large-scale repair, assembly, or experimental work, (3) those presenting a combination of operational aircraft and important installations (1 and 2, above), (4) airdromes defending key target areas.²⁰ By way of illustration, the fighter bases around Viterbo and the bomber bases in the Po Valley were examples of type No. 1; Guidonia, the most important experimental station in Italy, was an example of No. 2; the Istres complex was an example of No. 3; and the fields around Rome, Genoa, and other key industrial and transportation centers were examples of No. 4.

The first attack against airfields in November came on the night of 2/3 November, when 36 Wellingtons dropped 52 well-concentrated tons of bombs on Fiano/Fomana airdrome, destroying or damaging many planes on the ground and putting a number of direct hits on the landing ground. This mission was followed by two raids across the Adriatic, one against Araxos A/D in Greece and the other against Berat-Kucove A/D in Albania; results were good in both bases. These missions terminated counter-air force operations until the 16th, when IAAF initiated the first of three sets of attacks against airfields which would feature its counter-air force operations during the last half of the month.

The first of the three sets was against fields in southern France from which enemy bombers had launched raids against shipping in the central

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Mediterranean earlier in the month. Eighty-five B-17's battered the Istres complex with almost 180 tons of demolition and frag bombs; at Istres/Le Tube seven hangars were damaged, barracks, stores, workshops, and a motor transport depot were hit, and one aircraft was destroyed and one damaged on the ground; at Istres/Les Pates two hangars were damaged and one plane destroyed. Meanwhile, 43 Sardinia-based B-26's, with P-38's as escort, made the first daylight attack by mediums on southern France,²¹ dropping 4,602 x 20-lb. frag bombs on the field at Salon and destroying six and damaging three of 23 He-111's on the ground. Enemy opposition to these two missions was strong, a total of some 30 to 40 fighters challenging the bombers and their escort; but 13 were destroyed for the loss of 2 B-17's. Another Fortress was lost to flak and a B-26 had to crash-land in Sardinia.²²

Between the 28th and 30th Strategic flew its second set of missions against airfields, but a number of the raids were rendered abortive because of solid clouds over the targets. This was the case on the 28th when 116 B-26's were unable to attack the Salon field, and on the 29th when 67 B-17's had to forgo their bombing of the Fiano/Romana field. On the Salon trip 13 enemy fighters were encountered and in the resulting melee 5 were destroyed, 1 probably destroyed, and 3 damaged, for the loss of 3 B-26's. Two of the major missions were carried out, however. On the night of the 28th 53 Wellingtons unloaded 70 tons on the Rome/Ciampino fighter base; results were poor, although hangars and dispersed areas were hit. The next day B-17's and B-26's hit the Grosseto field, and results were excellent.

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Strategic's third group of operations was against fields in the Aegean, in a strong but futile effort to help the British who were in process of being driven from the islands of Leros and Samos by German air and ground forces. No fighter support for the British was possible but bombers of SAAF and EAF carried out sweeps in the Leros-Calino-Cos area and attacked Eleusis and Kalamaki airfields in five days of operations between the 12th and 16th. These efforts were coordinated with operations by planes of Middle East, whose B-24's, Halifaxes, Wellingtons, Hudsons, and Baltimores flew 97 sorties against airfields on Rhodes, Crete, and Cos. After Leros had fallen to the enemy on the 16th and before Samos was evacuated on the 22d, NAAF continued to strike at airfields in the Aegean, B-17's and B-2b's hitting Eleusis, Kalamaki, and Larissa. In these attacks at least 50 enemy planes were destroyed or damaged on the ground.

Other missions. During November NAAF's heavies and mediums flew two important missions against Sofia. The Sofia attacks were partly to interfere with the movement of German transport into the lower Balkans but equally for political reasons and as an assault on the morale of the Bulgarian people.

The impetus for the attacks on Sofia grew out of a cable from the CCS to General Eisenhower, 23 October. The message stated that the CCS was of the opinion that, provided the planes could be made available without detriment to more important operations, the Allies "should administer a sharp lesson to Bulgaria" with the primary object of forcing her to withdraw all or part of her forces from Yugoslavia and Greece,

"thereby adding to Germany's difficulties." The CCS believed that this could be accomplished by "surprise air attacks on military objectives in Sofia, such as the rail center and marshalling yards," accompanied by leaflets citing the fate of Hamburg and Hanover. The timing of the attacks was to be left to General Eisenhower. ²³

Both of the attacks on Sofia were directed specifically against the M/I's, where the east-west traffic on the Berlin-Istanbul line was handled. The first raid came on the 14th, with 91 B-25's (escorted by a group of P-38's) dropping a total of 558 x 500-lb. bombs which covered the yards and caused fires and explosions. Many of the bombs were set for delayed action, and reports showed that a number of these fell on near-by Vrajedna airfield and exploded several hours later. Over the target area 15 to 20 enemy fighters attacked; but the escorting P-38's shot down 5, probably destroyed 1, and damaged 2, and the bombers accounted for 1 destroyed and 1 damaged. One P-38 was lost. The second raid was on the 24th and was largely unsuccessful. Only 17 of the B-24's on the mission could locate the target, and they bombed through heavy clouds. Enemy fighters appeared, and of the 8 to 12 which attacked 4 were destroyed and 2 probably destroyed; losses were 2 Liberators destroyed and 1 P-38 missing. ²⁴

The final outstanding combat operation of Strategic in November came on the 24th. This was a heavy blow against Toulon, home port of the Vichy fleet and an important German submarine base. The attack followed an abortive mission on the 22d when 152 B-17's were forced back by weather. On the 24th 103 B-17's reached the target (in spite of low

visibility) and dropped 31b tons of bombs. A cruiser, a torpedo boat, a submarine, four smaller vessels, and several barges were sunk, five "E" or "F" boats probably were sunk, two merchant vessels were damaged, and three submarines took near misses. Dry docks and a submarine station were damaged. One unit of 15 B-17's was unable to locate Toulon and unloaded on the Antheon viaduct. These planes were aggressively attacked by 10 to 15 enemy fighters over a period of 35 minutes; one enemy plane was shot down without loss to the Fortresses.

Strategic's fighters operated over Yugoslavia on a small scale. P-33's escorted mediums of Tactical which bombed installations along the coast; they also protected IAF planes which dropped supplies to the Partisans and covered IAF fighters engaged in strafing inland points.²⁵ These operations, plus the larger ones carried out by TAF, enabled Air Marshal Tedder to report at the end of the month that air operations into the Balkans were working "reasonably well."²⁶

Psychological operations by the Fifteenth were heavy during the month. Three "campaigns" were conducted. One was primarily designed to assist in the preservation of Italian art treasures. Some 3,250,000 leaflets were dropped, mostly in the Florence-Legnora-Spezia triangle. The second campaign was for the purpose of hurting the morale of the German soldier by giving him full information on German defeats outside of Italy and by recording Allied successes in other theaters. Around 4,000,000 of these leaflets were dropped. The third was directed toward Italian workers in the larger industrial cities. As the workers were largely anti-Fascist, the several million leaflets which were dropped were

designed to induce them to retard production by working slowly, being late for work, and carrying out other methods of committing passive sabotage. After November the nickelling operations in the Mediterranean were drastically reduced as a result of the stabilizing of the Italian front and the reconstituting of the Psychological Warfare Board.²⁷

GAF Operations

In November German long-range bombers were more active than they had been since the beginning of the Italian campaign. Their heaviest and most frequent attacks were delivered against Naples, which, with its satellites (notably Sagnoli and Torre Annunziata) currently was handling around 9,000 tons of shipping per day (which was more than the Heel ports collectively were handling), and from which rail lines were in operation to Reggio, Crotona, Taranto, Bari, and other southern centers. The enemy made three raids, on the 1st, 5th, and 10th. The last two were especially heavy, each involving some 30 Ju-88's, but damage was limited, the main losses being the destruction of a petrol and ammunition ship, the partial destruction of a gasoline dump, and the damaging of one LCI. The enemy's use of "window" kept him from losing any planes to Allied night fighters, but AA guns brought down three of the bombers and probably destroyed two more.

On the evening of the 6th an Allied convoy was raided off Philippeville, Algeria, by 10 to 15 enemy planes, some of which used torpedoes and radio-controlled bombs. Two troopships and a destroyer were sunk. Bad weather kept Coastal's planes at home, but the convoy's AA guns

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claimed five victims. The same night a few Ju-88's were over the Capua-Montecorvino area, and about 15 or 20 were off Bari, apparently laying mines.

On the night of the 10th, while Naples shipping was under attack, a small enemy bomber effort was directed against La Maddalena harbor, Sardinia, but with no important results. A more serious attack came the next night when about 20 bombers flew down from southern France and attacked a convoy off Oran. CAF's fighters drove off the Do-217's, but the He-111's and Ju-88's, using torpedoes and glider bombs, sank four ships and damaged a fifth. Beaufighters claimed two enemy planes destroyed and two damaged, and AA gunners accounted for two shot down and one probable.

The enemy's activity between 5 and 12 November was the highest in three months and was one of the main reasons for Strategic's mission against the Istres complex on the 16th. This attack plus bad weather stopped the activities of the German bombers until the 24th when 10 to 15 attacked La Maddalena; only minor damage resulted and four of the raiders were shot down. On the 26th a major attack was made against a convoy off Bougie. More than 30 bombers participated. One troopship was sunk, but the enemy suffered heavily, RAF and EAF planes shooting down eight planes, probably destroying two and damaging eight, while AA accounted for another. According to CAF "this was the heaviest loss ever suffered by the enemy in a convoy attack." The raid was also interesting for the fact that it marked the debut in the Mediterranean of the CAF's He-177, a twin-engine mid-wing monoplane with a wing span of over 103 feet.

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On the same night as the Bougie raid the enemy attacked shipping off the island of Procida (near Naples), but there was no damage. The final raid of the month came on the night of the 29th when 20 to 25 Ju-88's struck at a convoy off Benghazi. Damage was slight.

In spite of the losses to this series of attacks on convoys Coastal's protecting fighters still piled up an excellent record, in view of the fact that ships under its escort traveled 1,543,000 ship miles during the month.²⁸

The sudden increase in the activities of GAF bombers in November,²⁹ the variety of targets which they attacked, and their new habit of raiding more than one target on the same night indicated to NAAF that the enemy's "Pelz doctrine of concentrating all the available bombers on a single target at long intervals, which has governed German Air Force practice in the Mediterranean during past months, has apparently been abandoned."³⁰ NAAF might also have come to the conclusion that the bombers were preparing to "throw the cook" at Allied installations and convoys in an effort to disrupt the movement of men and supplies into Italy--but the events of December would show that the November operations established the high-water mark of the GAF bomber effort in the Mediterranean and that thereafter the Allies had but little to fear from the enemy's long-range bombers.

At the end of November the GAF had around 800 operational aircraft in the Mediterranean and about 120 fighters in the section of southern Germany into which NAAF's heavies could penetrate. All aircraft in Italy were under the operational control of Fliegerkorps II which was

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subordinate to Luftflotte 2; those in Greece and the Aegean were under Fliegerkorps X which apparently enjoyed an autonomous status. In the western Mediterranean the CAF bomber force consisted of six Gruppen in northern Italy and two torpedo bomber Gruppen in southern France. The force in southern France had been used almost entirely against shipping; evidence indicated that it was about to be withdrawn to northern France. The six Gruppen in Italy showed operations far below their paper strength, probably because of inadequately trained crews, insufficient crews, and the CAF policy of conservation. The enemy's fighter force in Italy was about equally divided between the area south of the east-west Apennines and the area north of the mountains, having three Gruppen generally around Rome, two in the Turin-Milan area, and another in the general Bologna-Venice sector. There was one fighter-bomber Gruppe based in the Rome area. In Greece, Crete, and the Aegean there were four long-range bomber Gruppen and two single-engine fighter Gruppen.

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Despite its increase in long-range and fighter-bomber operations in November, the CAF--as indicated by weak fighter activities--was in a serious but not necessarily disastrous situation at the end of November. Its fighter force had deteriorated rapidly since the end of the Sicilian campaign as a result of extremely high wastage during July and during certain periods in the Italian campaign, because of considerable losses from BAAF's attacks on airfields and successful bombing of fighter factories, and from the CAF's lowering of the previous high priority which the Mediterranean had enjoyed on replacement fighter aircraft. The latter factor is illustrated by the fact that Me-109's allotted to

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the Mediterranean totaled 220 in July, 120 in August, 60 in September, and about 100 in October. The Western Front currently had the No. 1 priority. The CAF fighter situation was likely to recover somewhat as a result of the policy of using fighters almost entirely on defensive operations and because many of the better type of Italian planes (notably the Macchi-205's) were beginning to be used by the CAF. However, if Allied attacks on fighters in the air and on the ground and raids on assembly plants could be continued and if the CAF could be further dispersed, the fighter situation would continue to deteriorate.

As for the enemy's bomber situation his unwillingness to press his attacks with determination, the poor standards of his crews, his periods of low morale, and the fact that by December the production of bombers had long been secondary to the production of fighters indicated that the enemy's bomber force was not likely to become a major factor in operations in the Mediterranean. ³²

Summary of MAAF's November Operations

MAAF's efforts during November were lower than they had been in the previous months of the Italian campaign; nevertheless, they were sizable. In fact, the principal decline was in tons of bombs dropped, for sorties-- thanks to increased operations by CAF--were almost as many as in October.

A total of 24,375 sorties were flown. Of these, Strategic flew 3,216, Tactical flew 13,014, Coastal put in 7,386, and FAW accounted for the remaining 759. Tabulation by air forces reveals that the USAAF flew 13,060 sorties. Of these 2,826 were flown by USAAF units for

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Strategic, 7,694 for Tactical, 2,341 for Coastal, and 199 for FRW; the EAF flew 11,315 sorties: 390 for Strategic, 5,320 for Tactical, 5,045 for Coastal, and 560 for FRW.

Tonnage of bombs dropped was 8,522. Of these, Strategic dropped 4,010, Tactical dropped 4,499, and Coastal dropped 13 plus 8 depth charges and 6 torpedoes. The fact that Tactical dropped more tons of explosives than did Strategic is understandable in the light of weather conditions and Tactical's constant fighter-bomber operations on behalf of the ground forces (as noted above). The USAAF dropped 6,723 tons (almost 80 per cent of the total), with Strategic's American units unloading 3,443 tons, Tactical's 3,278, and Coastal's 2; the RAF accounted for 1,799 tons, 567 for Strategic, 1,231 for Tactical, and 11 for Coastal. In types of targets the final standing for the month was as follows: gun positions and camps, 1,678 tons; railroads, 1,347; N/Y's, 1,247; airfields, 1,074; industrial establishments, 828; and port facilities, 814; with the remaining tonnage distributed among highways, cities and towns, I/T and enemy movements, shipping, supply dumps, and miscellaneous.

Computation of victories versus losses indicates that the Allies destroyed 171 enemy planes, probably destroyed 41, and damaged 62. Of these totals the USAAF accounted for 126 destroyed, 31 probably destroyed, and 40 damaged. In addition to these air victories Allied planes destroyed on the ground 56 enemy aircraft, probably destroyed 5, and damaged 88. IMAF lost 150 planes and had 277 damaged, many of the former and most of the latter being victims of flak. Of these the USAAF lost 80 and had 216 damaged.

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A feature of November operations was the increase in Coastal's activities. CAF flew more than 7,000 sorties, over one-half of which were on convoy escort; flew over 300 air-sea rescue missions, involving 62 searches and rescue of 134 survivors;³³ and destroyed 11 enemy planes, probably destroyed 4, and damaged 10. During the month it initiated the "Swamp Hunt," a new system of antisubmarine operations in which CAF's planes after a sighting maintained a constant hunt, searching in increasing numbers and in widening areas until the U-boat was forced to surface, and then attacking. Of greater interest was Coastal's increase in offensive operations, its fighters flying 232 such sorties and attacking radar stations, harbor installations, bridges, M/T, gun emplacements, A/D's, and grounded aircraft. CAF even took on a new sort of offensive operation by twice escorting B-25's on raids.

Troop Carrier Command also put in a busy month. It flew 13,788 hours, hauled 4,267 tons of freight, carried 25,475 passengers, evacuated 9,217 patients, and transported 3,271 airborne troops and 3,000 other troops. In the process it lost 4 planes and 1 glider and had 19 planes and 33 gliders damaged.³⁴

During November the Allied air forces in the Mediterranean celebrated the end of the first year of operations since the landings in North Africa on 6 November 1942. A summary of those 12 months gives some idea of the extent of air operations in MTO, the following figures including IIAAF, RAF MW, the Ninth Air Force, and Malta:³⁵

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Sorties: 350,147--USAF, 150,202; RAF, 199,945
Bombs dropped: 113,870 tons--USAAF, 81,306; RAF, 32,564
Enemy a/c destroyed, combat: 4,626--USAAF, 2,952; RAF, 1,674
Enemy a/c probably destroyed, combat: 1,074
Enemy a/c damaged, combat: 2,047
Enemy a/c destroyed, ground: 2,731
Enemy a/c damaged, ground: 643
Total enemy a/c destroyed: 7,357
Total enemy a/c probably destroyed: 1,074
Total enemy a/c damaged: 2,690
Total enemy a/c found abandoned: 4,634
Allied a/c lost to enemy action: 2,246--USAAF, 1,248; RAF, 998
Enemy ships, over 500 tons: sunk, 343; probably sunk, 201;
damaged, 463
Tonnage of enemy ships: sunk, 318,000 tons; probably sunk,
317,000 tons; damaged, 699,000 tons.

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 Chapter VIII

AIR OPERATIONS AND ORGANIZATIONAL CHANGES IN DECEMBER

Air Operations

During December the Fifth and Eighth Armies, whose advance had become progressively slower since the beginning of October, made but little progress against the obstacles provided by terrain, weather, and a stubborn German defense. The Fifth took Fignano and Venafro but could neither cross the Liri Valley below Cassino nor force the Corigliano River; the Eighth moved up the coast from around Fossacesia to above Ortona but inland was unable to pass Orsogna.¹

Bad weather, which had so hampered the Allied air forces in November, continued in December to be a limiting factor, so that the air effort--while it was maintained at the highest possible intensity and was many times greater than that of the CAF--was never able to be the decisive factor in the slow, dreary battle up the Italian peninsula.

Tactical Air Force. Yet, December opened with the promise of being a month of tremendous air operations² when, on the 1st and 2d, Strategic and Tactical flew more total sorties than on any two consecutive days since the middle of September. On the 2d, Tactical flew more than 1,200 sorties--all except 70 of them in cooperation with the ground forces--the effort being DAF's greatest since the Tunisian campaign. During that day DAF fighters and fighter-bombers carried out 340 sorties over the Eighth Army, attacking positions, guns, and vehicles along the front

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(especially around Lanciano), raiding traffic in the enemy's rear, hitting a bridge over the Pescara River above Chieti, and patrolling over forward troops. The main part of the day's activities, however, was over the Fifth Army front, in a softening-up program for the Army's full-scale attack which was launched during the night against the enemy's key stronghold at Mignano. From dawn to dusk medium, light, and fighter-bombers pounded gun positions around Mignano and in the area southeast of Cassino, flying 260 bomber sorties and 273 fighter-bomber sorties and dropping more than 450 tons of bombs. Targets were well covered and damage was heavy. In addition to these bombing missions Spitfires (USAAF and RAF) flew more than 100 offensive and defensive patrols. Another 70 sorties were flown over the Yugoslavian coast in fighter sweeps.

The 2d of December proved to be Tactical's peak day of the month, for thereafter weather and the status of ground operations never permitted it to equal its effort of that day. Throughout the month, however, it continued its program of bombing, strafing, and patrolling over the Italian front, in the enemy's rear, and over the Yugoslavian coast.

From the 3d through the 7th weather forbade all but a few missions in support of the armies. On the Eighth Army front fighter-bombers flew a major mission on the 3d which helped the British, Indians, and New Zealanders to capture San Vito, Treglio, and Lanciano and to penetrate Orsogna, and on the 5th more than 100 P-40 sorties were of considerable assistance to New Zealanders who had been stopped at Guardiagrele. In the Fifth Army sector the major effort was the harrying of rail and

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road lines and the bombing of bridges north and south of Rome by A-36's in order to hinder the movement of supplies to the front; other principal operations were a hard smash at Civitavecchia on the 7th by 55 B-25's and 36 A-36's (Invaders) and a number of attacks by light and fighter-bombers on the bridge at San Ambrogio (west of Rocca) and on bridges north of Mignano and near Ceperano.

On the 8th and 9th better weather enabled Tactical to fly a large number of sorties over both fronts. In the east, on the 8th, 240 fighter-bomber sorties aided the New Zealanders as they battled for Orsogna, and 180 light and fighter-bomber sorties supported the Canadians as they crossed the Moro River preparatory to driving on Ortona. On the 9th and 10th DAF's strong close support continued, 59 light bomber and 300 fighter-bomber sorties being flown against troop concentrations, gun positions, strong-points, and M/T between Orsogna and Miglianico and M/T from Chieti to the coast. The attacks on M/T were so successful that on the 10th 53 vehicles were destroyed and 125 damaged. The value of DAF's operations during the 9th and 10th was increased by a new feature, the shifting of its fighter-bombers to strafing targets after a bombing mission had been completed, the pilots being bricked in the air. In the west, on the 8th and 9th, over 400 P-40 and A-36 sorties were flown against the Avezzano-Trosinone line of communications, troop concentrations around Viticuso and Santa Elia, and troops and gun positions at San Giorgio, southwest of Cassino; and 60 A-20's bombed guns and bivouac areas around Santa Elia.

On the 11th and 12th bad weather cut down Tactical's operations in the eastern sector to a few sorties against road transport and gun positions.

On the 10th, 11th, and 12th the weather over the western sector permitted only a limited fighter-bomber activity against Civitavecchia harbor and the strongholds of Acquafondata and Itri, Spitfire strafing sorties against trains near Terni, and a few B-25 efforts against the railway at Terracina.

From the 1st through the 13th TAF B-25's flew some 230 sorties against railways north of a line from Rome east to the Adriatic, bombing Pescara, road and rail bridges at Giulianova, the junction at Terni, and the station at Aquila. During the period fighters and fighter-bombers of TAF continued to operate against the Dalmatian coast and to bomb enemy-held ports, while CAF fighters swept over Yugoslavian airfields.

On the 13th the weather was better over both fronts and continued so through the 17th. Thereafter, until the end of the month, flying or bombing conditions were mostly very unfavorable so that there were only three days in which normal tactical air activities were possible over the Fifth Army and only five days in which a full effort could be made over the Eighth Army. To rain and clouds was added a strong cross-wind, especially in eastern Italy, which frequently made operations out of the question.

During the last half of the month the principal activities in western Italy were in support of the Fifth Army's slow and bitter operations against the enemy's strong positions on the high ground above Acquafondata and Mignano. From the 13th through the 17th effective sorties were flown by more than 1,100 A-36's and P-40's, 215 A-20's, and 24 B-25's, while USAAF and RAF Spitfires averaged better than 100 patrol sorties per day. Most of the fighter-bomber sorties, all of them flown by Americans,

were against lines of communication entering the Cassino sector. Attacks were made on bridges at Pontecorvo and Aquino, on roads and bridges along the Cassino-Atina route, and on the Cassino-Sora route; the enemy's reinforcement port of Civitavecchia also was bombed several times. The remainder of the fighter-bomber operations were against gun and troop concentrations on the 16th and 17th in order to soften resistance to the Fifth Army's drive toward the Cassino line from the San Vittore and Acquafondata areas. Most of the targets attacked were around Cervaro and Vallerotonda. The light bomber effort was divided between bombing the enemy's base at Frosinone and hitting gun positions at Cervaro, Vallerotonda, and Santa Elia; the small B-25 effort was against bridges around Pontecorvo.

From the 18th through the 31st, with only three days of normal effort, missions were few. About 1,000 A-36 and P-40 bombing and strafing sorties were flown, mainly against positions and guns in the Cervaro area, supply routes, dumps, and bases on the Sora-Arce and Agnani-Frosinone lines, roads and bridges around Cassino, roads and bases at Santa Elia and Atina, and the docks and M/Y's at Civitavecchia. About 180 A-20 sorties were flown, the targets being generally in the same zones which the fighter-bombers were raiding. Whenever the weather permitted, night-flying A-20's intruded over the roads below Rome. B-25's made a few attacks against road bridges northwest of Aquino and the enemy's base at Terracina; B-25's also dropped large numbers of leaflets over the battle area.

On only three days--the 14th, 15th, and 19th--were enemy planes encountered in any strength, and on these days the Allies bagged 13 of the

enemy while losing 6. For the whole month of operations over the western front in Italy, XII ASG fighters and fighter-bombers claimed 25 enemy planes destroyed, 6 probably destroyed, and 21 damaged against 26 Allied planes lost to air and ground action. The small bag is indicative both of the unfavorable weather and of the paucity of the GAF's air effort. Claims against M/T's totaled 54 destroyed and 91 damaged. The small number seems to have been due as much to reduced road movement as to the limited number of sorties flown by XII ASG. The record against rail movement was better, 59 engines and cars being destroyed and 111 damaged. Three enemy vessels were sunk and 15 damaged.

The story over the eastern half of Italy was not much better than it was over the western part. The Eighth Army's Canadians spent most of the last two weeks of December in a drive against Ortona, finally clearing it of the enemy on the 23th; the Indians made considerable progress toward Tollo; but the New Zealanders still were unable to take Orsogna. It was in support of these drives that DAF flew most of its sorties; the remainder were flown across the Adriatic.

Particularly important days were the 13th, 16th, 18th, 22d, 30th, and 31st. On the 13th the major operation was an attack by 154 P-40's on defended positions at Miglianico. On the 16th 150 fighter-bombers smashed at gun positions and a number of defended areas along the coast ahead of the Canadians; 48 Bostons and Baltimores hit gun positions at Miglianico in front of the Indians; and 10 P-40's knocked out 13 M/T's and damaged 27 in the Tollo area. The 18th was featured by a very heavy P-40 effort against defended positions and concentrations in the Tollo-

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Canosa sector, but bad weather rendered many of the sorties abortive. On the 22d more than 200 Spitfire and P-40 sorties were flown against strong-points from Orsogna to the coast, while farther up the coast other Spitfires and P-40's attacked lines of communication, especially at San Benedetto.

On the last two days of the month unusually good weather allowed DAF to operate on a big scale. A total of almost 550 sorties were flown by fighter-bombers and 24 by Baltimores against infantry positions and artillery concentrations along the entire coastal sector, with excellent results.

Enemy air activity was no greater over the eastern half of the battle zone than it had been over the western, and there were few encounters. DAF claimed 22 planes destroyed, 4 probables, and 16 damaged, out lost 44 to enemy ground and air activity. DAF's record against transport was as good as usual: 51 road vehicles were destroyed and 335 damaged; 20 railway engines and cars were destroyed and 104 damaged; and 7 vessels were sunk and 22 damaged.

DAF's claims against transport included a number of successes across the Adriatic, although there, as in Italy, operations were sharply limited by bad weather. Attacks were made on Yugoslavian airfields, Dalmatian ports, and on road and rail lines which supplied the enemy for his operations against Tito's forces. In particular, the Split oil depot, ports and shipping at Sibenik and Zara, and the airfield at Mostar were hit by B-25's. Enemy fighters were not very active, the main engagements occurring on the 16th and 17th and resulting in the enemy losing nine

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fighters to U. S. P-47's and P-40's while one Allied plane was lost.

During the month a total of 346 fighter-bomber and 327 medium bomber sorties were flown by TAF against Yugoslavian targets, but many of these were rendered ineffective by weather.

Coastal Air Force also was active across the Adriatic, its operations there being carried out by TAF 242 Group, which had moved to eastern Italy in October. CAP, through its 63d Wing (currently on Corsica), also operated offensively over the Tyrrhenian Sea. Operations by the two units included ship strikes and attacks on ports, railways, military installations, and motor transport.³

TAAF's operations over Yugoslavia were greater in December than they had been during the preceding two months. Strategic, Tactical, Coastal, Troop Carrier, and PRW all participated. Their operations were designed partially to destroy as many German planes, vehicles, equipment, etc., as possible as a part of the over-all plan of attrition of the enemy's war potential. But they were also intended to aid Tito and the Partisans and thereby to contain large numbers of German troops and many thousands of items of equipment which the enemy needed elsewhere. The growth of TAAF's activities over Yugoslavia in December was the result of a directive from the COS, 4 December, which ordered that support to the Partisans be enlarged, General Eisenhower being told to increase their supply of arms and equipment, clothing, medicine, food, etc., and to furnish them "such air support as you consider advisable in the light of the general situation."⁴

In these operations the Italian Air Force played a role which

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gradually grew to be one of considerable importance. By the middle of December its fighters, under the direction of TAF, were engaged in ground-strafting, escorting bombers, and protecting reconnaissance planes, while its bomber transports, also under TAF, were dropping leaflets and transporting supplies.⁵

Strategic Air Force. During December--as in November--the weather interfered more with Strategic's operations than with Tactical's, but Strategic's total effort for the month was slightly higher than it had been in November. This was due in some measure to the fact that a number of its squadrons had completed their moves to the mainland and the islands by the middle of December.

Targets attacked followed the same pattern as in November--railways and H/Y's, aircraft production and other industries, counter-air-force and miscellaneous targets--but operations against railways and H/Y's were greater even than they had been during the preceding month, the emphasis being caused by the weather and being at the expense of the targets of the Combined Bomber Offensive.

During the month KAAF's program against lines of communication in Italy underwent its usual monthly shift in emphasis. In September the targets had been mostly H/Y's; in October, mostly bridges; in November, about half-and-half between H/Y's and bridges. Now, in December, KAAF returned to H/Y's and during the month dropped twice as many tons of bombs on this type of target as on bridges and rail lines. It is possible that the Zuckerman Report, which appeared late in the month, with its insistence that the best way to interdict lines of communication

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was to smash M/Y's and large concentrations of repair facilities and rolling stock, had a strong influence on December operations.⁶ Of course, not everyone agreed with the Zuckerman thesis. For example, British officers engaged in repairing and operating the Foggia M/Y's in December declared that the experiences of the Sicilian and Italian campaigns showed that the best way to interrupt rail traffic was to destroy bridges, block tunnels, and cut lines in mountain passes and away from stations; these officers further believed that the best way to render an M/Y inoperative was by wrecking and overturning cars and not by trying to cut rails.⁷ In December, however, such arguments were of less importance than the pro-M/Y concept.

Strategic started the month with two days of extensive attacks. On the 1st 70 B-26's bombed railway bridges on the Genoa-Rome line at Sestri Levante, Aulla, and Cecina. The Cecina bridge and highway to the northwest were hit; at Aulla all bombs were in the target area; at Sestri Levante the bridge was missed but hits were scored on the tracks, the station, and near-by warehouses. Over Sestri Levante and Aulla 10 to 15 enemy planes were met and for once the GAF won an aerial combat, the score being 3 U. S. fighters destroyed and 1 missing against 2 enemy fighters shot down.

The largest mission on the 1st, however, was against Turin. The main target was the ball-bearing works, which now was more important than ever to the Germans as a result of the Eighth Air Force's hard blow on 14 October against Schweinfurt.⁸ One hundred and eighteen B-17's, with P-38 escort, reached the target and unloaded 354 tons of bombs.

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Severe damage was inflicted on the ball-bearing works and near-by industrial buildings; further heavy damage was caused to the Fiat Lingotto works; and tracks in the M/Y's and the north-south line were hit, although traffic was not completely stopped. About 30 enemy aircraft were encountered, two being destroyed and three being listed as probables.

On the night of the 1st, 48 Wellingtons put 83 tons into the Fontassieve M/Y's (southeast of Florence), hitting the M/Y's and damaging the station and industrial sheds but missing the 700-foot railway bridge.

On the 2d 3b B-24's dropped 106 tons on the Solzano M/Y's, damaging tracks and rolling stock in the southern end of the yards. The P-38 escort, while returning from the target, was attacked by 33 enemy planes, three of the Lightnings being shot down against two of the enemy. Meanwhile, 57 B-26's dropped 97 tons of bombs on the Arezzo M/Y's, with good results; and 23 more Marauders damaged the bridge 10 miles south of Orvieto with near misses.

The big attack of the 2d was carried out by 118 B-17's against U-boat pens which were under construction at Marseilles. Workshops, railway tracks, and rolling stock were hit hard, the entire target area being covered with bomb bursts. The P-38 escort scrapped with 12 to 15 enemy planes, destroying 2, and the B-17's took on another 15 or 20 and claimed 9 destroyed, 4 probables, and 2 damaged.

From the 3d to the 12th the weather was so bad that the German-controlled Italian railway system suffered less damage than at any time during the previous two months. The main effort for the period consisted

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of 230 sorties by TAF B-26's against railways along a line from Rome to Pescara--as noted above. Strategic's efforts were limited to missions by B-26's against the Spoleto viaduct and the Orte W/Y's (on the Rome-Bologna line), and the bridges at Ventimiglia (at the Franco-Italian frontier on the Nice-Genoa line) where good results were obtained. The only important antitransportation operation by heavies during the period was an attack by 31 B-24's on the Sofia W/Y's. Around 30 enemy planes which attempted to intercept the formations took a licking, 11 being shot down to the loss of 1 P-38 destroyed and 1 missing.

Between the 3d and the 12th five counter-air-force missions were flown by Strategic's heavies. One was against Guidonia airfield (northwest of Rome) by 34 B-24's. The other four were against the enemy's air forces in Greece, which, having helped to knock the British out of the Aegean, now constituted a threat to Allied shipping in the eastern Mediterranean and the southern Adriatic and were a possible menace to Allied operations and installations on the east coast of Italy. On the 6th, Eleusis airfield was hit by 45 B-24's and Kalamaki by 56 B-17's, and on the 8th Eleusis took another pounding from 61 B-17's and Athens/Tatoi was attacked by 36 B-24's. In all four missions the fields were well covered. Enemy planes which attempted to stop the heavies and their P-38 escort took their usual battering: 10 were shot down, 6 were probably destroyed, and 8 were damaged. The Americans lost two bombers to flak, while three bombers and one fighter were reported as missing.

Strategic's attacks on the enemy's railway lines were intensified during the second half of December and, in fact, accounted for almost

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Civitavecchia harbor, rail lines and installations. Disruption to the line was considerable, especially at Civitavecchia where the combined Strategic and Tactical attacks completely isolated the town.

The interdiction of the Pisa-Rome route was complemented by assaults on the by-pass routes in the central and west-central part of the peninsula. The main attacks were delivered against the M/Y's at Poggibonsi, Foligno, Perugia, Castiglione, Prato, Spoli, Pistoia, and Borgo San Lorenzo, and against the railway bridges at Orvieto and Certaldo. In addition--as noted above--EAF's B-26's pounded Leri and Orte.

In all, the west-coast line took a beating to the tune of some 550 tons of bombs and the by-pass lines were the recipients of more than 600 tons.

The most successful antirailway operation, however, was against the east-coast route. The Rimini and Ferrara M/Y's, together with bridges and tracks in the vicinity, were pounded with 677 tons; the railway and canal junction at Favenna received 72 tons; and B-26's of EAF put 93 tons into the Falconara M/Y's. The disruption of traffic was more nearly complete than on any of the other Italian lines.

As a result of these and the November attacks there was a heavy reduction in rail traffic; troops, labor battalions, etc., were delayed in reaching the front; and much time and effort was lost by the enemy in effecting repairs and in transshipping.⁹ However, the interdiction was far from complete, and IMAI noted that "a comparison of rail capacities with enemy military requirements emphasizes the need for complete,

simultaneous and continuous interdiction of rail traffic supplying the enemy forces in central Italy."¹⁰ IAAF then recommended that the Spezia-Rimini line be attacked immediately and that the long-range program include the lines Genoa-Spezia, Aulla-Parma, Bologna-Fistola, Bologna-Frato, Faenza-San Lorenzo, and Rimini-Ancona.¹¹

During the last half of the month Strategic returned to the Sofia M/Y's, hitting them with 89 tons. Results were excellent; and Bulgarian morale, already shaken, was further undermined.

In addition to its raids on the enemy's lines of supply Strategic engaged in several other types of operations between 19 and 31 December. Counter-air-force missions were limited to two days, the 14th and 25th. All of the missions on the 14th were against airfields in Greece, the targets being Eleusis, Kalamaki, and Tatoi. One hundred and twenty-six sorties were flown and 341 tons of bombs were dropped, by B-17's and B-24's. Damage to the three airfields was severe and, in addition, 11 enemy fighters were shot down for the loss of one B-17.¹² Twenty-seven other bombers, blocked at Eleusis by thick clouds, unloaded 81 tons on the harbor area at Piraeus. All missions on the 25th were abortive as far as primary targets were concerned, but the airfields at Vicenza (above Padua) and Montedera (east of Pisa) took limited attacks as secondary targets.

In addition to Strategic's several attacks on airfields, Tactical hit Mostar in Yugoslavia and the two Ciampino fields in central Italy. The attack on the Ciampino bases was an unusually heavy operation, 59 x

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250 lbs. of high explosives and 3,743 x 20 lbs. of frags being dropped with extensive damage to administrative buildings, hangars, workshops, and aircraft on the ground; 36 A-36's added to the damage already caused by the B-25's by destroying 6 planes on the ground in a sweep which followed the medium's raid.

The only attack on the enemy's aircraft production during the last two weeks of the year came on the 19th when the Messerschmitt plant at Augsburg, site of research and experiment and final point of assembly for the Me-110, was hit. Fifty B-24's made the attack, dropping 86 tons through 10/10 clouds. During the trip between 50 and 60 enemy planes were encountered; of these, 13 were destroyed and 3 probably destroyed at a cost of 3 B-24's shot down and 1 missing.

In spite of the rather limited number of attacks which had been made against the German fighter production plants and GAF airfields during November and December, MAAF was able on 26 December to state that "the air offensive against the German fighter industry has reached a critical stage" and that the industry "is staggering from the blows received to date." However, said MAAF, "unless these are followed up with further blows the substantial results achieved thus far will be considerably dissipated"; therefore, it would be necessary to re-attack Regensburg and Wiener Neustadt, to destroy the Erla plant at Leipzig, and to smash a small number of specialized component plants in Poland, southern Germany, and southeastern Europe. "It appears well within the capabilities of Allied air power to deliver a fatal blow to the German fighter force through additional attacks on the aircraft industry."¹³

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AAAF's warning that further blows against the GAF were necessary was given a powerful boost on the 27th when General Arnold sent a "year's-end" message to the Fifteenth. Stating that he believed that the Eighth and Fifteenth had not been concentrating enough on destroying the GAF, but had been making too many diversionary uses of aircraft, the Commanding General of the Army Air Forces concluded: "Therefore, my personal message to you--this is a NOTE--is to, 'Destroy the enemy air forces wherever you find them, in the air, on the ground and in the factories.'"¹⁴

In the words of Maj. Gen. B. H. Giles, General Arnold's messages to the Eighth and Fifteenth put "considerable pressure on these commanders to destroy the German air power. General Arnold has not been satisfied with the effort made to date. He believes there have been too many diversion raids . . . that do not materially contribute to the destruction of the German Air Force."¹⁵

In the same messages the commanders of the Eighth and Fifteenth were assured that AAAF plans were to build up the two air forces at the rate of five heavy groups per month for each air force, sending over with each group 100 per cent combat crews and 50 per cent replacement in aircraft, and that "everything possible" was being done to send to the Eighth and Fifteenth "all the long-range P-36 and P-51 escort fighters," although this meant that other theaters would receive those types only as replacements to take care of attrition. "Every effort will be made in this headquarters," said General Giles, "to give you the tools to knock out the GAF at the earliest possible date."¹⁶

General Arnold also was concerned over the operations of the Eighth and Fifteenth on behalf of the CBO. Late in December he directed both

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air forces to furnish him with information on their planned operations, covering a period of two months, and periodically to notify him of any proposed changes in the plans. "When such plans are received," he said, "they will be studied to determine if they are in consonance with the planning of this Headquarters and to determine if the USAAF's and the RAF's bombings are properly coordinated." Records indicated, said General Arnold, that very few successful missions had been flown in recent weeks by the Eighth and Fifteenth against what Headquarters, RAF considered primary targets of the GBO.¹⁷

Considering the weather and other interfering factors the Fifteenth had not done too badly during the first two months of its operations-- out it was obvious that business would be expected to pick up with the new year.

GAF Activities. The GAF's noticeably increased offensive operations which had featured November were not continued in December, although the Luftwaffe began the month with its most successful raid of the entire year. This was the Bari affair of the night of 2/3 December. Around 30 aircraft were reported to have made the attack, their effort being preceded by aircraft which dropped radar-jamming "window." Normally, a 30-plane night attack by the GAF would have produced only limited damage, but this time the enemy enjoyed a freak success when his bombs hit two ammunition ships which blew up in the ship-crammed harbor; the resulting explosions and fires destroyed 17 ships totaling 62,000 tons and carrying 38,000 tons of cargo (mostly hospital supplies and 10,000 tons of steel plant), caused heavy damage to port facilities (which reduced Bari's

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capacity for some time), and resulted in many casualties.¹⁸ The success of the raid was due in part to the enemy's good luck in hitting the ammunition ships and to his skillful use of "window"; but it was due equally to the Allies' unwise crowding of ships in the harbor and to the lack of defensive fighter and AA effort which resulted from poor--and perhaps inadequate--communications and incomplete liaison between the several defensive elements.

The Bari raid indicated that the Germans were in a position to launch sudden and even heavy attacks in the Mediterranean because of their central position and because of the large number of air bases which were available to them in Italy and the Balkans.¹⁹ This indication appeared to be strengthened on the night of 13/14 December when the GAF again visited Bari, although the raid did only negligible damage (in part because of a good smoke screen) and AA gunners shot down two of the raiders.²⁰ The planes came from bases in Greece--the first time that bombers from that area had attacked an Italian target. However, this second raid produced another indication, favorable to the Allies, namely, that the attack had been delivered from Greece probably because the enemy was withdrawing his long-range bombers from Italy to fields in northern Europe; and subsequent photographic evidence confirmed this. The reasons for the withdrawal apparently were two-fold: first, the GAF was having difficulty in operating from fields in the Po Valley, which frequently are fog-bound in the winter; second, the enemy's scanty bomber force could not afford the losses which it was bound to suffer if it continued to run into NAAF's defensive fighters.²¹ A similar withdrawing of the GAF's long-range bombers from the eastern Mediterranean soon became evident.

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Except for the two Bari raids the enemy's bombers made only three other attacks during the month, against Castellorizzo (Rhodes), Augusta and Catania, and a convoy off Benghazi. None of the raids was on a large scale, and in none did the raiders do much damage.²²

The CAF's offensive fighter and fighter-bomber effort during December was highly variable, going up or down in terms of the weather or in proportion to the increase or decrease of Allied ground activity. For example, the average for the first five days of the month was 40 to 60 sorties per day; but on the next two days, as the Allies launched drives, the effort rose to between 120 and 130 sorties per day. For the remainder of the month, when weather permitted operations, sorties averaged from 80 to 100 per day. At no time, however, did these activities pose a serious threat to the Allies, for in the over-all picture the CAF's offensive operations were on a limited scale--as indicated by the fact that during the entire month the fighters of XII ASG and DAF shot down fewer than 50 enemy offensive planes.²³

Defensively, the CAF could have been expected to put up a better show than it did. Its system of fighter defense in northern Italy was well established by the beginning of December, and it had good warning and interception systems. Moreover, it had changed its tactics: instead of restricting its actions largely to attacks on bombers--which involved its planes with Allied fighters and bombers together--it was currently going for the fighter escort alone whenever possible.²⁴ However, these developments did not seem to help the defensive fighters to an appreciable extent, for they attacked only in spots²⁵ and their losses for the month

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greatly exceeded those of the Allies. Over Greece and the Balkans the GAF defensive effort was regular, but it was moderate and by no means adequate to the defense of the area.²⁶

Summary of NAAF's Operations in December

The Allied air effort for the month was greater than it had been in November. More than 30,600 sorties were flown, of which some 27,500 were effective. Of the effective sorties IAF flew 15,000, GAF flew 7,500, SAAF ran up 4,500, and PRW accounted for around 530. The USAAF flew approximately 17,000 (62 per cent) of the effective sorties and the RAF 10,500. The greatest difference between the two air forces lay in the operations of Strategic, where the RAF's Wellingtons flew less than 100 sorties while the USAAF's B-17's, B-24's, B-25's, and B-26's flew close to 2,700 and its escort fighters flew around 1,700. As usual, the RAF predominated in Coastal's operations, but the USAAF elements accounted for more of GAF's sorties than ever before, racking up 40 per cent of the total effective sorties as against 32 per cent in November.

Tonnage of bombs dropped was approximately 10,500, an increase of 2,000 tons over the November figure. Strategic dropped around 5,850 tons, Tactical unloaded some 4,650, and Coastal was credited with 16. Of the total the USAAF dropped slightly more than 9,700 tons (93 per cent) while the RAF dropped around 775. As usual, B-17's led the parade, unloading almost one-third of the total tonnage, with B-35's second and B-26's third. The most notable increase in activity was by the B-26's, which flew almost three times as many sorties and dropped nearly twice the tonnage in December that they did during the previous month.

In types of targets bombed, the picture was very different in December from what it had been in November when gun positions and camps led the list, followed (in order) by railroads, N/Y's, airfields, industrial establishments, and port facilities, with no one of the major types of targets receiving an outstanding percentage of the bombs dropped. In December, on the contrary, N/Y's were far ahead of all other targets, taking around 3,100 tons, or 30 per cent of the total.²⁷ Gun positions and camps were second with some 1,800 tons, followed by railroads with approximately 1,600 tons, airfields with 1,300, port facilities with 850, and highways with 750, the remainder being dropped on industrial establishments, cities and towns, shipping, and miscellaneous targets. Almost one-half of Strategic's effort was directed against N/Y's; of the remainder, one-fifth was against airfields and one-sixth against railroads.

In the matter of victories and losses IIAAF's record for the month showed an increase in both departments. USAAF planes destroyed in the air 223 enemy planes, probably destroyed 45, and damaged 44; the RAF destroyed 36, probably destroyed 8, and damaged 21; the total was 259 destroyed, 53 probably destroyed, and 65 damaged. On the ground the enemy lost 25 planes destroyed and about half that many more probably destroyed or damaged. In addition, Coastal sent two U-boats to the bottom. Allied losses were 127 USAAF and 82 RAF aircraft destroyed and missing. In addition, 544 Allied planes were damaged, 464 of them USAAF and 80 RAF, most of the damaged planes being victims of flak and enemy ground fire.²⁸

Unquestionably, the combined defensive efforts of the CAF and the enemy's antiaircraft were more effective than they had been in November

and, in some respects, more effective than they had been at any time since the beginning of the Italian campaign. For one thing--as noted above--Allied plane losses were heavier. For another thing, the percentage of combat crews killed, wounded, or missing in action per 1,000 sorties flown was higher than it had been in November and generally above the average for the period from 1 September through 31 December:²⁹

Month	B-17	B-24	B-25	A-20	P-38
Nov.	6.156	18.697	3.026	3.064	8.632
Dec.	7.570	22.907	3.192	3.308	10.109
Sep.-Dec. Avg.	5.788	19.083	3.378	2.940	10.021

The percentage of losses was lower than it would otherwise have been because of Coastal's system of air-sea rescue, which saved 39 lives during the month.³⁰

Organizational Changes

During December there were several highly important organizational and administrative changes which involved the Allied air forces in the Mediterranean. These changes were instituted for the following reasons:

1. To create a more highly integrated Mediterranean air arm by:
 - a. Combining the headquarters of Northwest African Air Forces (NAAF) and Mediterranean Air Command (MAC) into one headquarters, Mediterranean Allied Air Forces (MAAF).
 - b. Bringing Middle East under control of MAAF so as to make the entire Mediterranean one unit as far as air operations were concerned.
2. To enable the Fifteenth Air Force to operate more effectively by:

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- a. Giving it complete independence from the Twelfth Air Force.
- b. Making it a part of a projected unified command which would control all strategic bombing from MTO and ETO and thereby make the CBO more effective.³¹

The first of these developments was the creation of MAAF, which actually took place on 20 December but was effective as of 10 December. The basic plans for replacing MAAC and MAC with MAAF were made in November and December 1943 at the SLEMAN Conference between President Roosevelt and Prime Minister Churchill and their Chiefs of Staff. At the conference the British Chiefs recommended that one commander be made responsible for all operations in the Mediterranean and that the Commander-in-Chief, Allied forces, should assume responsibility for operations in the following areas in addition to those already under his command: Greece, Albania, Yugoslavia, Bulgaria, Rumania, Hungary, Crete, the Aegean Islands, and Turkey. Such action would place the entire Mediterranean under the Allied C-in-C, thus combining the operations of Middle East with those of Northwest Africa.³²

At the same time the British stated that "on Air Marshal Tedder's recommendation the British Chiefs of Staff would like to suggest that the Mediterranean Air Command should be renamed the Mediterranean Allied Air Forces."³³ The name of the proposed new air forces headquarters, they declared, had been suggested to Tedder by General Doolittle early in October, the latter giving the following reasons for his suggestion:

1. The designation of "air forces" would be more in keeping with the nature of the headquarters than was the title "command."

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2. Two designations (MAAF and MAG) would be replaced by a single designation.

3. "Many Americans have looked upon MAG as a British Headquarters" (to the detriment of Anglo-American good will) and it would be wise to eliminate the title.

Air Marshal Tedder had approved of the suggestion.³⁴

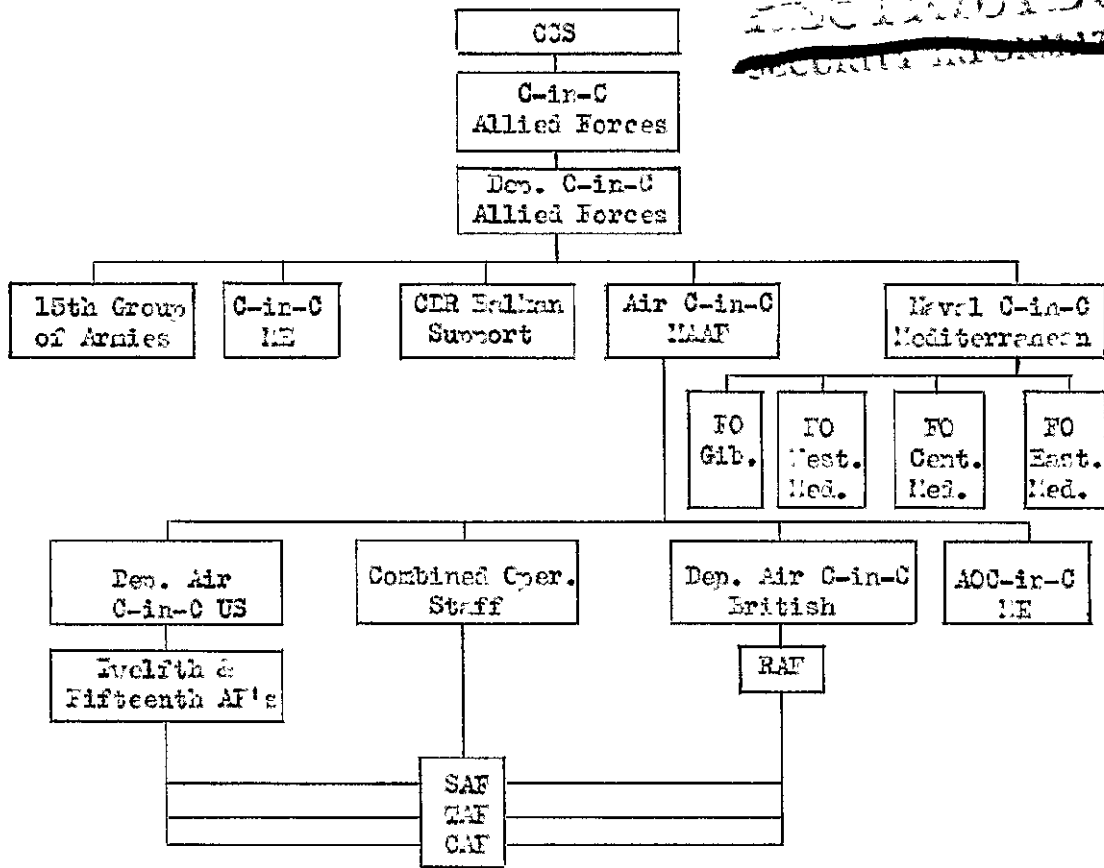
The recommendation of the British Chiefs³⁵ was then considered by the CCS in their 131st Meeting (SEXLIANT, 26 November 1943) at which time they agreed to the proposed unification of command.³⁶ Subsequently during the Conference President Roosevelt and Mr. Churchill laid final plans for the invasion of France and selected General Eisenhower to be Supreme Allied Commander, agreed upon a series of command shifts in the Allied forces engaged in the war against Germany, and decided upon a complete overhaul of the Mediterranean theater command so that instead of its being divided into east and west operational halves there would henceforth be "a unified command in the Mediterranean Theater on account of its geographical unity and its dependence on all bases in the area."³⁷

Pursuant to these developments the CCS on 5 December 1943 issued a directive--subsequently circulated as CCS 387/3--which laid down the new structure of the Allied forces in the Mediterranean:

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As far as the Allied air forces in the Mediterranean were concerned the new organization was unique, interesting, sensible, and valuable. For one thing, it placed the Air C-in-C on a level with the C-in-C, 15th Army Group and the Naval C-in-C, with all three reporting to the C-in-C, Allied Forces. For another thing, in accordance with the desire for a centralized tactical control as expressed by Air Marshal Tedder and General Spatz, it provided for a single combined U. S. and British Operational Staff under the Air C-in-C, and thereby made possible real unity of planning and action between the USAF and the RAF. At the same time it provided for three separate administrative staffs to be headed by a Deputy Air C-in-C (United States), a Deputy Air C-in-C (British),

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and an AOC-in-C, Middle East. This permitted each of these three distinct elements to control those matters which were peculiar to its own air units.

Thirdly, the Middle East was brought under the control of the Allied C-in-C, Mediterranean, and so ceased to operate as an autonomous area. The CG, U. S. Army Forces in the Middle East (USAFIME) was placed under the operational control of the C-in-C, Mediterranean for such operations and activities as might be conducted in the eastern Mediterranean, the Balkans, Crete, the Aegean, and Turkey, although the CG, USAFIME would remain responsible to the War Department for the performance of all functions presently assigned to him with the exception of those relating to operational activities in those four areas.³⁹

Fourthly, the creation of the new air organization brought together under the Air C-in-C, Mediterranean Allied Air Forces, every air element in the Mediterranean. The Air C-in-C's command comprised all units of the USAAF NATO, all RAF elements in the Mediterranean, including RAF ME, and all FAF and IAF units which were operating within the zone of USAAF's control, as well as any other air forces which might be assigned to it.⁴⁰ Thus, there was full unity of command over air units and air operations in the Mediterranean.

The logic and value of having a tightly knit, theater air force would be amply demonstrated many times in the 18 months of air operations in the Mediterranean which would follow the reorganization of 5 December.

The new air force setup of course marked the end of both USAAF and IAC and the creation of MAAF. But to make sure, CGS 387/3 stated that

"the Mediterranean Air Command will now be known as the Mediterranean Allied Air Forces."

CCS 337/3 further provided that the C-in-C, Allied Forces would provide the Fifteenth Air Force "with the necessary logistical and administrative support in performance of Operation POINTBLANK as the air operation of first priority"; however, "should a strategic or tactical emergency arise" the C-in-C might, at his discretion, "utilize the Fifteenth US Strategic Air Force for purposes other than its primary mission, informing the Combined Chiefs of Staff and the Commanding General, US Strategic Air Forces in Europe [USSAFE], if and when that command is organized."⁴¹ This arrangement was the one possibly dangerous feature of the new setup, for it offered plenty of chances for conflict of authority and assignment between USSAFE and MAAF.⁴²

At the 138th Meeting of the CCS, 7 December 1943, it was agreed that the unification of command in the Mediterranean should take effect from 10 December. Consequently, when MAAF was officially established on 20 December (per CCS Cable OZ4046 and G. O. No. 67, Hq., AFHQ, 20 December 1943) it came into existence as of 10 December.

Between 5 and 20 December, pursuant to CCS 337/3, the matter of selecting air force commanders for ETO and MTO was considered. On the 18th a tentative slate was announced by General Arnold, after a conference with Generals Eisenhower, Wilson, and W. B. Smith and Air Marshal Tedder. The slate called for Lt. Gen. Ira C. Eaker to move down from ETO and take charge of MAAF. Maj. Gen. J. K. Cannon was to take charge of the Twelfth and Maj. Gen. H. F. Elving the Fifteenth. General

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Spaatz would go to ETO as CG of USSAF, General Doolittle would go as CG of the Eighth, and General Brereton, who had moved from IIC to UK in October, would continue as CG of the Ninth.⁴³ There was no change in MACAF, which was to continue under Sir Hugh Lloyd.

General Baker was informed of the tentative slate on the 18th, in a cable from General Arnold.⁴⁴ General Baker replied that if he had any preference in the matter he would prefer to remain with the Eighth. He felt that if he left at this stage of the game nearly two years of experience in ETO would be "wasted"; besides, "it would be heartbreaking to leave just before [the] climax." If, however, he was not to stay with the Eighth, it was his recommendation that Maj. Gen. Idwal H. Edwards be given command of that air force and that General Doolittle stay with the Fifteenth, for "to do otherwise loses [the] value of prior training and experience for their tasks in their respective theaters and at the most critical time."⁴⁵

Lt. Gen. Jacob L. Devers, CG of the American forces in ETO, strongly recommended that General Baker stay with the Eighth, and even went so far as to say that "a change of commanders at this time would be disastrously felt throughout the war."⁴⁶ General Arnold replied in a message which praised General Baker's work with the Eighth but which stated that he could not see his way clear "to make any change in the decisions already reached."⁴⁷

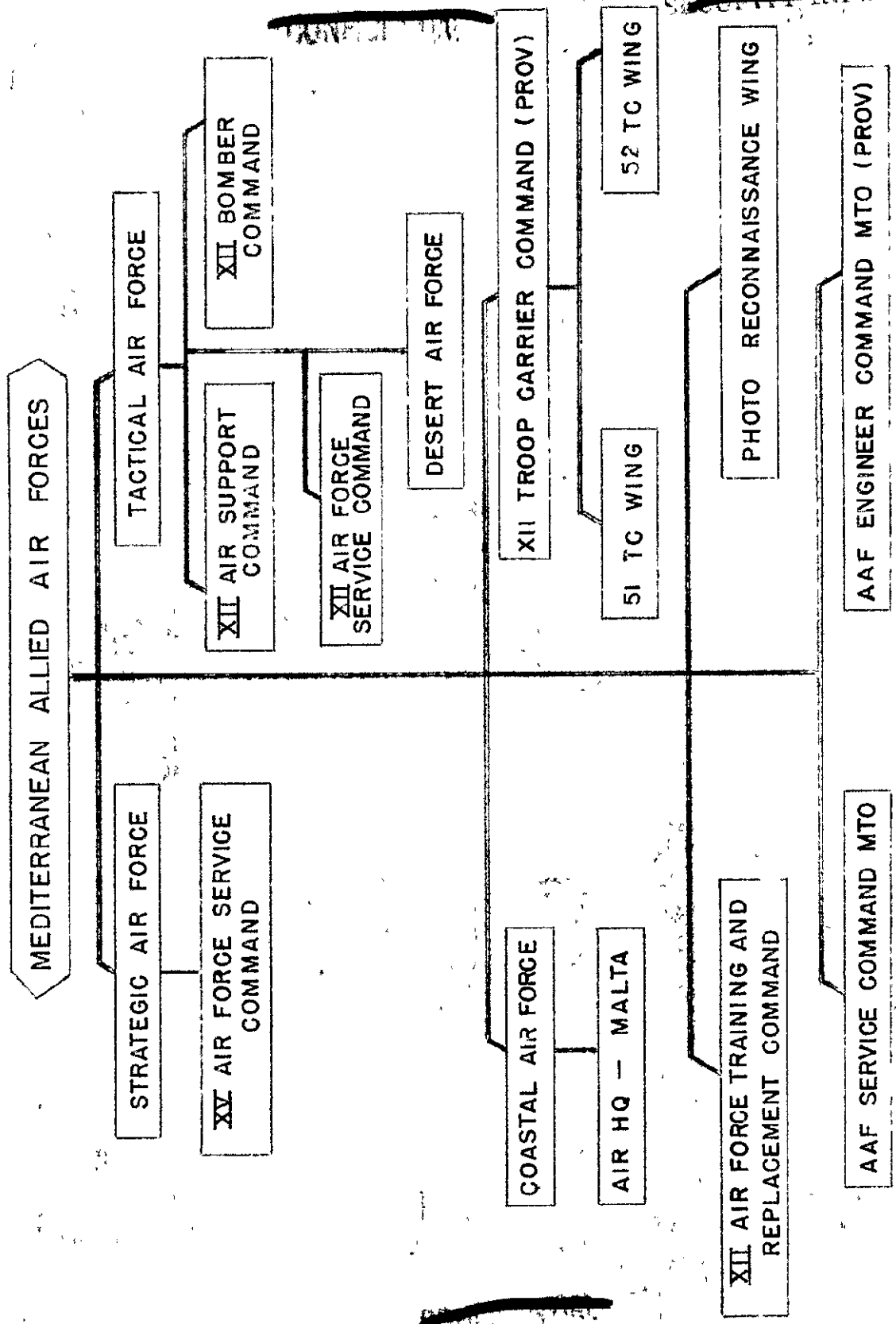
Consequently, when G. O. No. 67, Hq., AFHQ, dated 30 December 1943, designated Air Marshal Tedder as Air C-in-C, Mediterranean, and General Spaatz as his Deputy and as CG, USAAF HAFPO, it was understood that these

assignments were only for the moment; and two days later General Eaker was assigned to MTO (effective upon relief of Tedder) and General Spaatz was assigned to UK (effective immediately).⁴⁸ Later, General Eaker was ordered to delay his departure to MTO until such time as he had been able to give to General Doolittle the full advantage of his long experience with the Eighth Air Force.⁴⁹ On the 28th General Doolittle was officially transferred to the Eighth and General Twining to the Fifteenth.⁵⁰ General Cannon had already (21 December) been assigned as CG of the Twelfth per orders from NATOUSA.⁵¹

General Eaker and his Deputy, Air Marshal Sir John C. Slesser, did not arrive in MTO until the middle of January. In the interim (20 December-15 January) MAAF's operations continued as usual and under the old chain of command, Tedder and Spaatz having left the reorganization of the air forces to their successors.⁵² In order to clarify the interim arrangement, MAAF issued an Organization Memorandum of 27 December which gave the following instructions "pending full activation" of MAAF:

1. Headquarters, MAC, Algiers, relinquished its title and assumed the title of Headquarters, MAAF (Rear). The element would be responsible for war organization until MAAF (Adv.) assumed the function, also planning, maintenance and supply, and AFHQ liaison.

2. Headquarters, NAAF, and Air Command Post (an advance headquarters at La Marsa, near Tunis) relinquished their titles and were combined under the new title of Headquarters, MAAF (Adv). The element would be responsible for all Air Staff duties other than those specifically assigned to MAAF (Rear), and for RAF administration in Northwest African, Central Mediterranean, and Malta Forces.



MEDITERRANEAN ALLIED AIR FORCES
9 JANUARY 1944

6. Photo Reconnaissance Wing (MAPRW)---
3d and 5th Photo Recon Groups
336 PRW (RAF and SAAF)
1 FAF Squadron
7. Air Hq., Malta---
3 RAF wings, plus 4 squadrons
8. Air Service Command

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MAAF inherited four primary tasks. The first was to bring the maximum pressure to bear on the German war potential by helping to smash its industry, especially its aircraft production. This was SAAF's job. The second was to support the land armies, in the battle zone and by the interdiction of supply lines. This was TAF's responsibility, but SAAF would be expected to help by attacks against lines in northern Italy. The third was to assist in keeping open the sea-lanes and to protect shipping, harbors, rear establishments, etc. This was CAF's task. The fourth was to cooperate with the Partisans in the Balkans. This would be the responsibility of TAF and TCG, with the possibility of help from SAAF.⁵⁶

The Mediterranean theater had been the primary proving ground for the use of air power in close cooperation with ground troops ever since El Alamein and had been the crucible of joint command ever since D-day, 8 November 1942.⁵⁷ To these two features there had been added a third: participation in the CSO. Under MAAF the air forces in the Mediterranean would be in a position to carry on and to improve the standards which had been established in 1942 and 1943.

The second of the major developments in December was the complete separation of the Fifteenth Air Force from the Twelfth. When the

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Fifteenth had been established on 1 November it had remained under the administrative control of the Twelfth. This condition continued until 21 December,⁵⁸ when the Fifteenth was released from all control by the Twelfth.⁵⁹ The task of making the Twelfth a purely tactical air force in place of an all-purpose air force was thus completed.

The third of the December developments came on the 23d in the form of an advance directive issued by JAFUSA, which stated that, effective 1 January 1944, the USAAF elements of MAAC would be redesignated as follows:

<u>PRESERVE DESIGNATIONS</u>	<u>NEW DESIGNATIONS</u>
1. United States Army Air Forces, North African Theater of Operations	Army Air Forces, Mediterranean Theater of Operations
2. Twelfth Air Force	Twelfth Air Force
3. Fifteenth Air Force	Fifteenth Air Force
4. XII Air Force Service Command	Army Air Force Service Command, Mediterranean Theater of Operations
5. II Air Service Area Command (Sp)	XV Air Force Service
6. III Air Service Area Command	XII Air Force Service Command
7. XII Air Force Engineer Command (Prov)	Army Air Force Engineer Command, Mediterranean Theater of Operations (Prov)
8. XII Air Force Training Command	XII Air Force Training and Replacement Command
9. 90th Photo Reconnaissance Wing	90th Photo Reconnaissance Wing

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On 1 January these changes were put into effect.⁶⁰ The structure of the USAAF in MTO which they established continued until the end of the war in Europe.

As a result of the reorganization there were five major USAAF air headquarters in the theater, all directly under AAF/MTO for administrative control: Twelfth Air Force, Fifteenth Air Force, AAFSC/MTO, AAFEC/MTO, and 90th Photo Reconnaissance Wing. At the beginning of the Italian campaign all of these elements had been a part of the Twelfth Air Force. There were currently no changes in the operational commands: MASAF, MASAF, MACAF, and MAPEW. However, MAASC ceased to exist, the American element assuming the title of AAFSC/MTO and the PAF element that of Headquarters, 218 Group.⁶¹

Under the new setup all matters affecting USAAF policy were to be addressed to the CG, AAF/MTO. All matters affecting allocation of supplies to commands, priorities, movements of supplies and personnel into the theater, overwater shipments within the theater, and transfers within the commands would be the functions of the CG AAF/MTO, and his headquarters would be the agency to deal with AFHQ and MAFOUSA on all matters and with the appropriate headquarters in the U. S. on technical and technical-supply matters, excepting routine reports and other routine matters which would be rendered directly by the respective commands. Routine administrative matters were to be handled by the respective air forces according to normal and existing regulations.⁶²

A final development, small but important, concerned USAAF's air transport agency, Mediterranean Air Transport Service. At a conference

on 2 November between Generals Spaatz, Norstad, Kauch, Air Marshal Tedder, and others it had been decided that MATS would gradually turn over all of its North African traffic to ATC and PATC, so that by 1 January 1944 it would operate from North Africa to Italy and the islands and within Italy, Sicily, Sardinia, and Corsica but not within North Africa. MATS had been operating in Italy since October, and after the conference it extended its trips to Sardinia and Corsica. In order to carry out its commitments more effectively, it created on 31 December the Continental Division of MATS,⁶³ and the new division took over the activities of Advance Headquarters, MATS, which had been in Naples since 11 October.⁶⁴

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G L O S S A R Y

AAFEC	Army Air Force Engineer Command
AAFSC	Army Air Forces Service Command
A/D	Airdrome
AFAP	Office of Assistant Chief of Air Staff, Plans
AFHQ	Allied Force Headquarters
AFSC	Air Force Service Command
AFSHO	Historical Office, Hq., Army Air Forces
AGWAR	Office of The Adjutant General, War Department
ANFA	Anfa Hotel, Casablanca
AOC-in-C	Air Officer Commanding-in-Chief
ASAC	Air Service Area Command
ASC	Air Support Command
AT	Army transport (ship)
ATC	Air Transport Command
CAF	Coastal Air Force
CBO	Combined Bomber Offensive
CCS	Combined Chiefs of Staff
C-in-C	Commander-in-Chief
CPS	Combined Planners Staff or Combined Staff Planners
DAF	Desert Air Force
DZ	Drop zone
ETO	European Theater of Operations
FAF	French Air Force
FO	Flag Officer
GAF	German Air Force
GCI	Ground Control Interceptor
GP bomb	General purpose demolition bomb
IAF	Italian Air Force
Intop Summary	Operational and Intelligence Summary
Isum	Intelligence Summary
J/CCS Div.	Joint and Combined Chiefs of Staff Division, AFAP
JCS	Joint Chiefs of Staff
JIC	Joint Intelligence Committee
JPS	Joint Planners Staff

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L/G	Landing ground
MA	Mediterranean Allied; prefixed to other letters to form MASAF (Mediterranean Allied Strategic Air Force), etc.
MAAF	Mediterranean Allied Air Forces
MAC	Mediterranean Air Command
MATS	Mediterranean Air Transport Service
M/T	Motor transport
MTO	Mediterranean Theater of Operations
M/V	Military vessel
M/Y	Marshalling yard
NAAF	North African Air Forces
NATO	North African Theater of Operations
NATOUSA	North African Theater of Operations, U. S. Army
OPD	Operations Division, War Dept. General Staff
Opnl.	Operational
POL	Petrol, Oil, and Lubricants
POW	Prisoner of War
PRW	Photo Reconnaissance Wing
RAAF	Royal Australian Air Force
RAF ME	Royal Air Force, Middle East
RAFTC	Royal Air Force Transport Command
RCAF	Royal Canadian Air Force
SAF	Strategic Air Force (Cf. NASAF, MASAF)
SAAF	South African Air Force
S/AS	Secretary of Air Staff
SCORU	Statistical Control and Operational Report Unit
SOE	Special Operations Executive
SIF	Single-engine fighter
S/W	Secretary of War
Tac/Recce	Tactical-Reconnaissance
TAF	Tactical Air Force (Cf. NATAF, MATAF)
TBF	Tactical Bomber Force
TC	Training Command (Cf. NATC, MATC)
TCC	Troop Carrier Command (Cf. NATCC)
TCW	Troop Carrier Wing
TLF	Twin-engine fighter
UK	United Kingdom
USSAFE	United States Strategic Air Forces in Europe
ZI	Zone of Interior

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NOTES

Chapter I

1. WP III-F-5, Italy, in Office Services Br., AIAEP.
2. "Air Offensive Against Italy," 18 Nov 42, prepared by Intell. Service, AAF, in AAG 384.5.
3. CCS 124, 19 Nov 42.
4. Ibid.
5. Ibid.
6. GPS 49/1, 27 Nov 42.
7. Sicily was preferred to Sardinia because it was of greater military and political significance, would be a better base for air operations, would contribute more directly and effectively to opening the Mediterranean, and its loss would be more detrimental to Italian morale.
8. Minutes, GPS, 39th Meeting, 30 Nov 42.
9. Minutes, GPS, 40th Meeting, 3 Dec 42.
10. GPS 49/2, 4 Dec 42.
11. GPS 49/3, 8 Dec 42.
12. Ibid.
13. CCS 124/1, 30 Dec 42.
14. Minutes, CCS, 54th Meeting, 31 Dec 42.
15. For the decisions at Casablanca, see CCS 170/2, 23 Jan 43, and Gen. Eisenhower's Report on Sicily.
16. Minutes, GPS, 55th and 58th Meetings, 14 and 16 Jan 43 (AWEA).
17. Ibid.; Minutes, GPS, 60th Meeting, 22 Jan 43 (AWEA).
18. Minutes, GPS, 66th Meeting, 22 Jan 43 (AWEA).
19. Minutes, JCS, 50th, 51st, 52d, 54th, 57th and 58th Meetings, 13, 14, 16, 18, 21, 22 Jan 43 (AWEA), and Minutes of 1st and 2d Special Meetings Between the President and the JCS, 15, 16 Jan 43 (AWEA).

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20. Minutes of 1st Special Meeting Between the President and the JCS, 15 Jan 43 (ANFA); Minutes of 51st, 52d, 54th, 57th, and 58th Meetings, JCS, 14, 16, 18, 21, 22 Jan 43 (ANFA); Casablanca Conference, Minutes of ANFA Meetings, Jan 43.
 21. Casablanca Conference, Minutes of ANFA Meetings, Jan 43; CCS 165/2 and 170/2, 22, 23 Jan 43. It is interesting to note that apparently neither the Americans nor the British anticipated at this time that the Allies would find it necessary to occupy Italy. According to General Marshall the British stated that they were not interested in occupying Italy, feeling that it would add to the Allies' burdens without commensurate returns. The President agreed with this view. See Minutes of 2d Special Meeting Between the President and the JCS, 16 Jan 43 (ANFA).
 22. CM-IN-2240, Cairo to AGWAR, AIRSAS 1980, 5 Dec 42; unit histories, 98th and 376th Bomb Gps (H).
 23. RAF Middle East Review No. 2, Jan-March 43; unit histories, 98th and 376th Bomb Gps (H).
 24. RAF Middle East Review No. 2, pp. 18, 65, 66.
 25. Ibid., pp. 36, 37, 48.
 26. Ibid., p. 26.
 27. It should be noted that prior to the Italian campaign all B-17's in the Mediterranean theater were assigned to the Twelfth Air Force and all B-24's to the Ninth Air Force and RAF ILI.
 28. RAF Middle East Review No. 3, April-June 43, pp. 13, 14, 26-28.
 29. Ibid.
 30. Memo for C/S from G-3 Sec., AEFHQ, Action in the Mediterranean in the Event of the Collapse of Italy, P/55 (final); memo for C/S from G-3 Sec., AEFHQ, Action on Collapse of Italy, P/63 (1st draft). Both documents are in Operations Record Book (Form 540), MAC, Feb to Sep 43, incl.
 31. AEFHQ, G-3 Sec., "Alternative Course of Action if HUSKY Becomes Impracticable," P/62 (3d draft), in Opns. Record Book, MAC.
 32. Memo for C/S from G-3 Sec., AEFHQ, Action Against Italy After Operation HUSKY, P/70 (1st draft), in Opns. Record Book, MAC.
 33. Memo for C/S from G-3 Sec., AEFHQ, Mediterranean Strategy, 7 May 1943, P/68 (final) (revised), in Opns. Record Book, MAC.
 34. Ibid.
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35. Minutes, 1st Meeting, TRIDENT, 12 May 43.
 36. Ibid.
 37. The American view was initially drafted by the JPS, being approved by the JCS on 8 May. (See JCS 290 and JCS 290/1, 7 and 8 May 43, and Minutes, JCS, 78th Meeting, 8 May 43. The British view is in Appendix "E", CCS 219, 14 May 43.
 38. CCS 219, 14 May 43.
 39. Ibid.
 40. Ibid.
 41. CCS 223, 14 May 43.
 42. Ibid.
 43. CCS 224, 14 May 43.
 44. CCS 234, 17 May 43.
 45. CCS 235, 18 May 43.
 46. CCS 237/1, 20 May 43. On 22 May the Combined Staff Planners fell in line with the CCS plan to leave the matter of future operations in the Mediterranean to General Eisenhower by preparing and presenting to the CCS a report which called for continued operations to drive Italy out of the war; Sicily was to be taken, and thereafter HUSKY was to be exploited with such operations as were best calculated to eliminate Italy and contain the greatest number of German troops. See OPS 72-LD, 22 May 43, and LD OPS, 60th Meeting, 22 May 43.
 47. Minutes, 5th Meeting, TRIDENT, 24 May 43.
 48. Minutes, 6th Meeting, TRIDENT, 25 May 43.
 49. CCS 244/1, 25 May 43.
 50. CCS 242/6, 25 May 43; CCS 250/1, 25 May 43.
 51. Algiers Conference, 1st, 2d, 3d Meetings, 29 May-3 June 43.
 52. Notes for C/S from G-3 Sec., AFHQ, Operations after Husky, P/85, 31 May 43, in Opns. Record Book, MAC.
 53. Memo for C/S from G-3 Sec., AFHQ, Outline Plan for Assault on Italian Mainland, 7 June 43, P/72 (final), in Opns. Record Book, MAC.
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54. Ibid.
55. Memo to C/S from G-3 Sec., AFHQ, Post-Husky Operations, P/92 (final), 28 June 43, in Opns. Record Book, MAC.
56. Ibid., App. "B"; IAF 2FO, Eisenhower to AGWAR for CCS, 29 June 43.
57. IAF 165, CCS to Eisenhower, 17 July 43.
58. Fifth Army History, Vol. 1, p. 17.
59. Scarcely a day passed during the period without the G-3 Section and its allied sections working on the details of BUTERESS, COLLET and the other projected operations. See Opns. Record Book, MAC.
60. Signals Report on Amphibious Operations in the Mediterranean from July to September 1943, 22 Oct 43.
61. AFHQ, G-3 Sec., "Appreciation of an Amphibious Assault Against the Naples Area," 24 July 43, P/98 (final), in Opns. Record Book, MAC.
62. Memo to C/S from G-3 Sec., AFHQ, Comparison of Operations MUSKET and TOPHAT, 25 July 43, P/100 (2d draft), Opns. Record Book, MAC.
63. Ibid.
64. Memo to C/S from G-3 Sec., AFHQ, Outline Plan for Operation MUSKET, 24 July 43, P/96 (final), in Opns. Record Book, MAC.
65. CM-OUT-10374, CCS to Eisenhower, 26 July 43.
66. CM-IN-19362, Eisenhower to AGWAR for CCS, 27 July 43.
67. Ibid.; see also IAF 303, Eisenhower to AGWAR to CCS, 28 July 43, in File III-A, Reel Fo. 39, file 62, MAAP.
68. CM-II-1143, C-in-C to AGWAR, 3 Aug 43.
69. IAF 183, AGWAR for CCS to Eisenhower, 6 Aug 43.
70. An earlier plan for BUTERESS was published on 2 August. See Operational Directif for Operation BUTERESS--No. 1, Hq., Tactical Air Force, 2 Aug 43, in AFSEO. For an earlier BAYTOWN plan see operation "BAYTOWN," no hq., 3 Aug 43, in AFSEO.
71. Hq. IAAF, Provisional Outline Plan for Operations BUTERESS and BAYTOWN, 4 Aug 43, A-5/P.6 (final), in AFSEO.

72. Signals Rpt. on Amphibious Opns. in Med. from July to Sep 1943, 22 Oct 43; Hq. IAC to CGMAF, Operations on the Italian Mainland, 31 July 1943, in Opns. Record Book, IAC, App. "T"; Hq. MAAF, MAAF Planning Memoranda - Future Operations, No. 1, A-5/4316 (11 Aug 43).
73. See also Minutes of a Conference Held at Main Eighth Army at 1415 hours, 5 Aug 43, in AFSEO.
74. MAAF, A-5 Sec., "Administrative Implications as Between BUTRESS and AVALANCHE," 8 Aug 43, in File III-A, Reel 39, file 62, MAAF.
75. GM-IN-3438, Eisenhower to AGWAR for CCS, 5 Aug. 43; GM-IN-7355 (IAF 318), Freedom to AGWAR for CCS, 10 Aug 43; GM-OUT-3733, Eisenhower to C-in-C Med. et al, 10 Aug 43. A summary of the plans for BARRACUDA appears as Annex No. 1.
76. Memo for C/S from C-3 Sec., AFHQ, Command for Operations Against Corsica, 7 June 43, P/89 (final), Opns. Record Book, IAC.
77. Minutes of Meeting of JCS with President Roosevelt and Secretary Stimson, 10 Aug 43; CCS, 106th Meeting, 14 Aug 43.
78. FAN 198, CCS for Eisenhower, 20 Aug 43; GM-IN-16715, Eisenhower to AGWAR for CCS, 22 Aug 43.
79. GM-IN-9451, Eisenhower for Marshall, 13 Aug 43.
80. GM-OUT-4031 (FAN 4751), Marshall to Eisenhower, 11 Aug 43; GM-IN-9451, Eisenhower for Marshall, 13 Aug 43.
81. It should be noted that General Mark Clark, CG of the 5th Army, strongly favored the area around the mouth of the Volturno River (Gulf of Gaeta) over the Salerno area, provided the air forces could furnish air cover that far from the Sicilian airfields. Upon being told by Air Marshal Tedder that such cover was not possible, General Clark abandoned his preference for the Volturno assault. History of Fifth Army, Vol. I, pp. 20, 21.
82. The forces which would be used were those which were being set up for AVALANCHE. C-3's plans for invading near Rome were based on the assumption that BAYTOWN had been successfully launched.
83. Memo for C/S from C-3 Sec., AFHQ, Assault in Rome Area 14 August 1943, P/103 (final), in Opns. Records Book, IAC.
84. GM-OUT-6685, Eisenhower to C-in-C Med. et al, 16 Aug 43; IAF 326, Eisenhower to AGWAR for CCS, 16 Aug 43, in File III-A Reel 39, file 62, MAAF.

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85. Signals Rpt. on Amphibious Opns. in the Med. from July to Sep 1943, 22 Oct 43; MC-OUT-7810, Eisenhower to L. W. Douglas, US War Shipping Adm., 19 Aug 43, in File III-A, reel 39, file 62, NAAF; The Italian Campaign. Western Naval Task Force: Action Report of the Salerno Landings, September-October 1943, p. 68, in AFSEO (cited hereinafter as Western Naval Task Force).
86. 1st and 2d Meetings of President and Prime Minister with CCS, 19, 23 Aug 43.
87. Meetings 106-115 incl., CCS, 14-23 Aug 43.
88. CCS 303, 303/3, 319, 319/5, on 9, 17, 19, 24 Aug 43.
89. Minutes, CCS, 116th Meeting, 24 Aug 43.
90. Minutes, CCS, 116th Meeting, 24 Aug 43.
91. CCS 319/5, 24 Aug 43.
92. CCS 328/1, 27 Aug 43.

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Chapter II

1. Some knowledge of the structure of the Allied air forces, especially of NAAF, is also necessary to an understanding of the changes in organization which would take place during the first four months of the Italian campaign.
2. Discussion of the elements comprising NAAF is based upon NAAF organizational charts for 24 August and 9 September 1943 and upon the Administrative History of the Twelfth Air Force. For a complete picture of NAAF, see Annex No. 2, Charts 1 and 2.
3. By 9 September one wing of Spitfires and Kittyhawks had been moved from DAF (Rear) to DAF (Adv), while one of the Spitfire wings had been transferred from MAF to DAF.
4. By 9 September the Palermo, Tunis, and Sousse Sectors had been pulled together to comprise a separate echelon under MACAF.
5. For details of the structure and functions of MAASC--particularly of its U. S. component, XII AFSC--see Hq. AAFSC/MTO, History of the Original XII Air Force Service Command from Activation to 1 January 1944.
6. Historical Data, Mediterranean Air Transport Service, 25 May 1943-31 May 1944; Hq. AAFSC/MTO, History of AAFSC/MTO, 1 January-30 June 1943.
7. For additional details, see History of XII Air Force Training and Replacement Command, 18 February 1943-20 July 1944.
8. Diary, AC/AS, OCGR, 22, 23 Aug, 10 Nov 43, in AFSEO; History of NAFEW, 16 Oct 43.
9. Diary, AC/AS, OCGR, 17 Nov 43.
10. Data supplied by Statistical Control, Hq. AAF, September 1945.
11. See The History of NAAF, December 1943-1 September 1944, Vol. I.
12. Hq. 12th AF, Operations and Statistics of Twelfth Air Force, in AFSAO.
13. Hq. NAAF, Provisional Air Outline Plan for Operation "Avalanche," A-5/P.8 (final), in AFSEO.
14. The latter figure is based on internal evidence in the Provisional Air Outline Plan and on other sources, none of which are in complete agreement.

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15. Data supplied by Statistical Control, Hq. AAF. According to 23d SCORU, USAF personnel totaled 103,167 bodies (13,539 officers and 89,628 enlisted men), an understrength of 8,623 (1,927 officers and 6,696 enlisted men). See Eq. 12th AF, Operations and Statistics of Twelfth Air Force.
16. Provisional Outline Air Plan for Operations SUTRESS and BAYTOWN, Hq. NAAF, A-5/P.6 (final), 4 Aug 43; RAF Mediterranean Review No. 5, pp. 6, 12.
17. Provisional Outline Air Plan for Operations SUTRESS and BAYTOWN, Hq. NAAF.
18. Hq. NAAF, Operation Avalanche; Hq. DAF, Operation Instruction No. 10, no date.
19. Ibid.
20. Fifth Army History, Vol. I, pp. 25-27.
21. Between 40 and 45 thousand troops were expected to go ashore on D-day.
22. 10 Corps included the American 1st, 3d and 4th Ranger Battalions.
23. Later plans resulted in canceling the employment of the 82d Airborne Division as a part of the D-day assault forces in favor of an airborne operation at Rome. This plan, too, was canceled. However, the 82d was put to good use later in the invasion; see below.
24. Fifth Army History, Vol. V, pp. 26-28.
25. Western Naval Task Force, pp. 76-82.
26. The Control Force was under Vice Admiral Hewitt; the Southern Task Force was under Rear Admiral Hall, USN; the Northern Task Force was under Commodore Oliver, RN; the Support Carrier Force was commanded by Rear Admiral Vlam, RN; and the Diversion Group was under Captain Andrews, USN.
27. "Notes on the Implication of Air Assault on Italian Mainland--Naples Area," no date, in File III-A, Reel 39, file 62, NAAF.
28. Ibid.
29. Ibid.; Hq. NAAF, Operation Avalanche. There was no shortage of long-range tanks for P-38's. III ASAC (Sp) reported prior to 26 August that up to 1,300 were on hand. See "Notes of a Conference Held at NAAF Headquarters on 23 August 1943," in AFSEO.

30. IAF 808, Eisenhower to AGWAR for CCS, 28 July 43, in File III-A, Reel No. 39, file 62, IAAF; CM-OUT-323 (FAN 180), AGWAR (from CCS) to Eisenhower, 2 Aug 43. In requesting this shift of units of the Eighth Air Force, General Eisenhower suggested that General Devers lead the groups down in person as that would make it quite plain that the transfer was a temporary one.
31. CM-IN-8737, Eisenhower to AGWAR for CCS, 12 Aug 43; CM-IN-10230, Devers to Marshall and Arnold, 14 Aug 43; CM-IN-12549, Eisenhower to Marshall, 17 Aug 43; CM-IN-14200, Eisenhower to AGWAR for CCS, 19 Aug 43.
32. CM-IX-14807, Arnold to Eisenhower, 20 Aug 43.
33. AC/AS, Plans, Hq. AAF, Division Digest, 2 Aug 43. For additional data on the advantages of turning all B-26 groups (but no B-25 groups) into B-17 groups, as presented by Twelfth Air Force in September 1943, see Hq. 13th AF, Operations and Statistics of Twelfth Air Force.
34. CM-OUT-1137, Marshall to Devers and Eisenhower, 4 Aug 43.
35. CM-IN-3986, Eisenhower to Marshall, 5 Sep 43.
36. Hq. IAC to CG IAAF, Operations on the Italian Mainland, 31 July 1943, in Opns. Record Book, IAC, App. "T".
37. CM-OUT-2541, Marshall to Eisenhower and Brereton, 7 Aug 43.
38. CM-OUT-2371, Arnold to Brereton, 6 Aug 43; see also CM-OUT-959, Marshall to Devers, 3 Aug 43; CM-IN-3305, Devers to Marshall, 5 Aug 43.
39. CM-OUT-13047, Spaatz to Arnold, signed Eisenhower, 18 Aug 43; CM-IN-17606, Brereton to AGWAR for Arnold and Marshall, 23 Aug 43; CM-IN-18219, Eisenhower to AGWAR, 24 Aug 43; CM-IN-22388 to AGWAR for Arnold and Marshall, signed Brereton, 29 Aug 43. The 98th and 376th Bomb Groups (Heavy, B-24), already operating with the Twelfth, the 37th Troop Carrier Squadron, and eight supporting units were to be transferred from the Ninth to the Twelfth as soon as the Twelfth's heavies were ready to move to forward bases. Personnel of these units would total 700 officers and 6,900 enlisted men. See CM-IN-23053, Brereton to Marshall et al. 30 Aug 43.
40. MO-OUT-11728, G-in-C, Med. to 15th Army Gp, 31 July 43, ⁱⁿ File III-A, Reel 39, file 62, IAAF; CM-IN-668, Eisenhower to AGWAR for CCS, 1 Aug 43; CCS 280/5, 6 Aug 43; CM-IN-6608, Eisenhower to AGWAR for CCS, 11 Oct 43. For the assembly of CG-4A's in the theater see Hq. AAFES/MTO, Aircraft and Glider Assembly in the MTO, in AFSHO.

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41. Memo for C/S from G-3 Sec., AFHQ, Requirements of Airborne Troops and Craft for Future Operations, 5 July 43, P/93 (final), in Opns. Record Book, MAC; Northwest African Troop Carrier Command (Prov), Report of Operations and Activities Including the Sicilian Campaign, 18 May-31 July 1943; Hq. XII Troop Carrier Command (Prov), A Report of TCC Activities Including the Italian Campaign, 1 August-30 September 1943. All in AFSAO.
42. CM-IR-14200, Eisenhower to AGMAR for CCS, 19 Aug 43.
43. Hq. MAAF, Provisional Outline Air Plan for Operation "Avalanche."
44. Ibid.
45. Ibid.; Organizational Chart, MAAF, prepared by 23d SCORU, 24 Aug 43.
46. See pp.10-13, this study.
47. RAF Middle East Review No. 3, April-June 43, pp. 31, 38, 47-51.
48. Ibid., pp. 50-51, 53-54.
49. Ibid., p. 70.
50. Ninth Air Force A-2 Periodic Report No. 40, 10-16 July 43, and No. 41, 27 July 43; RAF Middle East Weekly Intelligence Summary No. 160, 6-13 July 43; Twelfth Air Force Weekly Isum No. 35, 10-16 July 43; RAF Med Review No. 4, July-Sep 43; MAAF Weekly Isum No. 37, 24-30 July 43; MAAF Operational and Intel. Sums Nos. 148-153, 18-23 July 43; MAAF Participation in the Sicilian Campaign; MAAF, A-3 Sec., Operations Bulletin No. 5, 1-31 Aug 43; JICA AFHQ Isum No. 161, 13-20 July 43; MAAF Weekly Isum No. 38, 31 July-6 Aug 43; RAF Middle East Weekly Isum No. 163, 27 July-3 Aug 43.
51. Ibid.
52. Ltr., Spaatz to Arnold, 30 July 43, in AAG 312.1.
53. Hq. 242 Gp, Operational Instruction No. 13, Operation PANTHER, 21 July 43.
54. MAAF Opnl. and Intel. Sums Nos. 163, 165, 173, 176-178, 2-17 Aug 43; MAAF Weekly Isums Nos. 38-39, 31 July-13 Aug 43; RAF Middle East Weekly Isum Nos. 163-165, 27 July-17 Aug 43; RAF Med Review No. 4, July-Sep 43.
55. Hq. MAAF, Provisional Outline Air Plan for Operation "Avalanche," A-5/P.8 (final).

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56. The Twelfth Air Force in the Southern Italian Campaign.
57. "Mare Kostrum," a Review of MACAF Operations, March 1943-September 1944, p. 2; MACAF, Operation Avalanche.
58. CM-III-19575, Eisenhower for Marshall, 26 Aug 43. For further details of the career of the antisubmarine squadron, see AAFRH-7, The Antisubmarine Command.
59. Annex No. 2 to Field Order No. 2, Hq. 12th Fighter Wing (Prov), 6 Sep 43, in Operations (Sp), Pt. IV, 12th Fighter Wing (Prov); MACAF, Operation Avalanche; Hq. TAF, Operational Directif for Operation "Avalanche" No. 1.
60. "Notes on the Air Implication of Air Assault on Italian Mainland--Ioples Area," in File III-A, Reel 39, file 62, MAAF; Hq. MAAF, Provisional Outline Air Plan for Operation "Avalanche," A-5/P.8 (final); CM-III-23717, Eisenhower to AGWAR for CGS, 31 Aug 43; Operation Avalanche, MAAF; Western Naval Task Force, p. 200.
61. Annex No. 2 to Field Order No. 2, Hq. 13th FJ (Prov), 6 Sep 43.
62. Hq. MAAF, Provisional Outline Air Plan for Operation "Avalanche," A-5/P.8 (final), Pt. I.
63. Ibid.; see also Pt. II.
64. Hq. MAAF, Outline Air Plan for Operation "Avalanche," Pt. II A-5/P.8 (final); CM-III-23717, Eisenhower to AGWAR for CGS, 31 Aug 43.
65. Field Order No. 2, Hq. 12th FW (Prov), 6 Sep 43; see also "Estimate of Build-Up of Air Forces on the Italian Mainland," no date, no hq., in File III-A, Reel 39, file 62, MAAF.
66. "Projected build-up of Air Forces--Operation AVALANCHE," no date, no hq., in File III-A, Reel 39, file 63, MAAF. It was planned to continue the build-up until, by D plus 100 (mid-December), virtually all of MAAF's combat aircraft would be based on the mainland. Ibid.
67. Ltr., Hq. XII ASJ, to All Concerned, 26 Aug 43, in File III-A, Reel 39, file 63, MAAF; Field Order No. 2, Hq. 12th FW (Prov), 6 Sep 43; CM-III-3402, Algiers to (?), 4 Sep 43, in AG/AS, Plans, European Br.
68. App. "H" to Annex 6, Hq. Fifth Army, 24 Aug 43, in File III-A, Reel 39, file 63, MAAF; Hq. Allied Central Med Force, "Air Support Control Arrangements for Operation 'Avalanche,'" 20 Jan 44, in A-2 Lib.

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69. Western Caval Task Force, p. 198.
70. MO-OUT-11728, C-in-C Med to 15th Army Gp, 31 July 43, in File III-A, Reel 39, file 62, MAAM; CM-III-23717, Eisenhower to AGWAR for CGS, 31 Aug 43; Warning Order No. 2, Troop Carrier Command, 1 Sep 43; Hq. XII TCC (Prov), A Report of TCC Activities, Including the Italian Campaign, 1 August-30 September 1943.
71. Hq. XII TCC (Prov), A Report of TCC Activities, Including the Italian Campaign, 1 August-30 September 1943; History, 52d Troop Carrier Wing, Aug 43.
72. Ibid.
73. Hq. MAAF, Provisional Air Outline Plan for Operation "Avalanche," A-5/r.8 (final); "Hare Kostrum."
74. CM-III-17056, Eisenhower to AGWAR for CGS, 22 Aug 43.
75. Directive, Hq. No. 242 Gp, RAF to MACAF et al., 3 Sep 43, Operations (Sp) Avalanche, in AFSDO.
76. History of Army Air Force Service Command, HHO, 1 Jan 44-30 June 44; Historical Data, MATS, 25 May 43-31 May 44.
77. AFHQ, to All Concerned, Subject: Air Transport Service, 26 Aug 43, in Ops. Record Book, MAO, App. "7", Feb to Sep 43 incl.
78. Provisional Outline Air Plan for Operation "Avalanche."
79. History of Northwest African Photo Reconnaissance Wing, 16 Oct 43.
80. Ibid.; Hq. Army Ground Forces, Observers Notes on the Italian Campaign, During the Period 25 August 1943 to 7 September 1943, incl., 5 Dec 43, in IAG 370.22-C.
81. History of the Original XII Air Force Service Command, Hq. AAFSC/HHO, Aircraft and Glider Assembly in the Mediterranean Theater of Operations, December 1942-December 1944.
82. History of the Original XII Air Force Service Command. See particularly, memo, Col. Milton M. Rowner, AG/S, A-5, Hq. XII AFSC to All Concerned, 24 Aug 43.
83. CM-III-131334 (?), CGS to Eisenhower, 18 Aug 43.
84. CM-III-13517, Eisenhower to AGWAR for CGS, 18 Aug 43.

85. CM-IM-524, C-in-C [Eisenhower] to AGWAR for CCS, 1 Sep 43.
86. Ibid.; CM-IM-3235, Eisenhower to AGWAR for CCS, 3 Sep 43: A Report of TCS Activities Including the Italian Campaign; Hq. MAAF, Amendment No. 1 to Operation AVALANCHE.
87. CM-IM-4570, Eisenhower to AGWAR for CCS, 6 Sep 43.
88. Ibid.; Outline History, 51st Troop Carrier Wing, 17 Aug-30 Sep 43. The full story of the Taylor-Gardiner mission is in Annex No. 1.
89. CM-IM-5963, Eisenhower to AGWAR for CCS, 8 Sep 43.
90. Hq. TAF, Operational Directive No. 132, 23 Aug 43, in AFSDO; unit histories of units of TAF, Aug-Sep 43.
91. Hq. MAAF, Provisional Air Outline Plan for Operation "Avalanche," A-5/P.8 (final); Hq. MAAF, Provisional Air Outline Plan for Operations BUTTERBESS and BAYTOWNS, A-5/P.6 (final).
92. See pp. 61-63, this study.
93. OSS Paper "Air Attack Against Bridges and Marshalling Yards," 7 March 44, in AG/AS, Plans, European Br., "Italy" file.
94. The summary of the bombing effort against Italian targets during the period 18 August-2 September incl., is taken from Hq. MAAF, Air Intel. Weekly Sums Nos. 40-42; TAF Med Review No. 5; Hq. MAAF, Intops Sums Nos. 23-44; Hq. MAAF, Int/Oprums Nos. 130-146.
95. The Twelfth Air Force in the Southern Italian Campaign; TAF Med Review, No. 5.
96. CM-IM-16897, 12th AF to (?) [paraphrase], 27 Oct 43, in AG/AS, Plans, European Br.
97. Ltr., Gen. Spaatz to Gen. Arnold, 21 Sep 43, AAG 370.2-F.
98. TAF Med Review No. 5.
99. The attack on the Foggia complex may well have been a turning point in the air war in the Mediterranean, for after the attack losses of Allied bombers to enemy aircraft declined sharply.
100. Hq. MAAF, Provisional Air Outline Plan for Operations BUTTERBESS and BAYTOWNS, A-5/P.6 (final).
101. TAF Med Review No. 5; Hq. MAAF, Air Intel. Weekly Sums Nos. 41-43, 21 Aug-3 Sep 43; Hq. MAAF, Intops Sums Nos. 38-42, 26 Aug-1 Sep 43, incl.

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102. RAF Med Review No. 5; Hq. MAAF, Intops Sum No. 43, 2 Sep 43.
103. The ease with which the BAYTOWN landings were made showed the wisdom of this procedure.
104. Hq. MAAF, Air Intel. Weekly Sum No. 40, 14-20 Aug 43; Hq. NASAF, Intops Sums Nos. 27-30 incl., 17-20 Aug 43.
105. Hq. MAAF, Air Intel. Weekly Sum No. 41, 21-27 Aug 43; Hq. LASAF, Intops Sums Nos. 31-37, 21 and 27 Aug 43 incl.
106. This decline in German fighters in the Toe was noticeable as early as 20 August when intelligence reports indicated that less than 40 fighters were in the Toe and that such airfields as Crotone and Montecorvino were entirely abandoned. See Hq. MAAF, Air Intel. Weekly Sum No. 40, 14-20 Aug 43.
107. Hq. MAAF, Air Intel. Weekly Sum No. 42, 23 Aug-3 Sep 43; Hq. MASAF, Intops Sums Nos. 38-43, 28 Aug-2 Sep 43 incl.; "Flare Nostrum."
108. Hq. MAAF, Air Intel. Weekly Sums Nos. 40-43, 14 Aug-3 Sep 43; Hq. NASAF, Intops Sums Nos. 28-43, 18 Aug-2 Sep 43; "Flare Nostrum."
109. Ibid.
110. IAF Med Review No. 6.
111. Ltr., Spaatz to Arnold, 21 Sep 43, in AAG 370.2-F.
112. Hq. MAAF, Air Intel. Weekly Sum No. 42, 23 Aug-3 Sep 43.
113. The fact that Italy would announce its surrender on 8 September does not materially affect the Italian air potential as of 3 September, for there was no way for the Allies to know at that time how many of the Italian planes would be flown against BAYTOWN either by Italian fascists or Germans. It is true, however, that during the week from 3 to 9 September the greater part of the IAF was grounded, partly because of Badoglio's efforts to assist the Allies and partly because the Germans had denied fuel to most of the Italian planes.
114. RAF Med Review No. 5.

Chapter III

1. Field Marshal Sir Bernard L. Montgomery, Eleventh Army, El Alamein to the River Sangro, 123; RAF Med Review No. 5; Hq. MAAF, Air Intel. Weekly Sum No. 43; MATAF, Operation Avalanche; Hq. MATAF, Int/Opsums Nos. 146-147, 3-4 Sep 43.
2. Ibid.; Hq. MAAF, Operational Sum No. 195, 3 Sep 43; Hq. MASAF, Intops Sum No. 44, 3 Sep 43; RAF Med Review No. 6; CM-11-5181, Spatz to AGMAR signed Eisenhower, 4 Sep 43.
3. RAF Med Review No. 5, Oct-Dec 43.
4. The statement is based on a study of the events of AVALANCHE D-day and after.
5. RAF Med Review No. 5, Oct-Dec 43; Hq. MAAF, Air Intel. Weekly Sum No. 43, 28 Aug-3 Sep 43; Hq. MAAF, Opnl. and Intel. Sum No. 195, 3 Sep 43; Hq. MASAF, Intops Sum No. 44, 3 Sep 43. The discussion of ground and air operations on the Toe from 4 through 8 September, which follows, will be based upon the above-named sources, with any additional sources being properly listed.
6. CM-11-4121, Spatz to AGMAR signed Eisenhower, 5 Sep 43.
7. Hq. 12th AF, Operations and Statistics of Twelfth Air Force.
8. MAPRM, Detailed Interpretation Report No. D. S. 25, 17 Sep 43, E-34065, in A-2 Lib.
9. RAF Med Review No. 5; Hq. MAAF, Air Intel. Weekly Sum Nos. 42-43; Hq. MAAF, Opnl. and Intel. Sums Nos. 195-198, 3-6 Sep 43; MASAF Intops Sums Nos. 43-45, 3-5 Sep 43. See also cables, Spatz to AGMAR signed Eisenhower, dated 4-7 Sep 43, in ALSH0.
10. See also RAF Med Review No. 6.
11. See also MAPRM, Detailed Interpretation Report No. D. S. 25 and RAF Med Review No. 5.
12. RAF Med Review No. 5; Hq. MAAF, Air Intel. Weekly Sum No. 43; Hq. MAAF, Opnl. and Intel. Sums Nos. 198-201, 6-10 Sep 43 incl.; Hq. MASAF, Intops Sums Nos. 46-48, 6-9 Sep 43; Hq. 12th AF, Operations and Statistics of Twelfth Air Force; MAPRM, Detailed Interpretation Report No. D. S. 25; Hq. XII Bomber Command, "Salerno Operations"; Air Command Post, IAC to C. MASAF, 6 Sep 43, in MATAF Directive, Operation AVALANCHE, in ALSH0.
13. Ibid.

14. Ibid.
15. RAF Med Review No. 5; Hq. IIAAF, Air Intel. Weekly Summ Nos. 42-43; Hq. IIAAF, Opnl. and Intel. Summ Nos. 195-201, 2-10 Sep 43; Hq. IASAF, Intops Summ Nos. 43-48, 3-9 Sep 43. The 2d Bombardment Group claimed 14 of the Frascati victories. See Narrative Account, 2d Bomb Gr (H), Sep 43.
16. Ibid.; see also Reports by Operational Research Sec., Hq. PAF/AS RA, Mediterranean Air Operations During 1943, in AFSMO.
17. Ibid.; see also Hq. 12th AF, Operations and Statistics of Twelfth Air Force, 15 Sep 43.
18. Ibid.; see also Hq. MACAF, "Their Victory" and "Mare Nostrum."
19. Western Naval Task Force; memo from the Commandant, USMC to CG 1st Marine Amphibious Corps, Observations in the European Theater, Incl. A, 11 Nov 43, K-39866, in A-3 Lib (cited hereinafter as Commandant, USMC, 11 Nov 43).
20. CM-IL-6963, Eisenhower to AGWAR for COS, 8 Sep 43; CM-IL-6932, Eisenhower to AGWAR for COS, 9 Sep 43.
21. Operations Order No. 21, Hq. IIAF, 7 Sep 43; Operations Order No. 12, Hq. XII Bomber Command, 7 Sep 43, in IASAF Operations Orders, AFSMO. All fighters on the mainland were to fly to southern Sicily, while bombers, transports, etc. were to proceed to North Africa or western Sicily as decreed by their range. Aircraft on Sardinia were to go to North Africa; those on Greece and Albania to North Africa or Sicily, according to range; and those on the Dodecanese Islands to Cyprus. (Ibid.) Actually, very few of the IAF planes came in, the Germans having effectively immobilized them by denying them fuel for some days prior to the surrender. The Germans took over and used the better IAF planes. See Q. R. I. Weekly, 15 Sep 43.
22. Of the 289 units of the Italian fleet 223 reached Allied ports or the Balearics. Of the other 66 units, 59 fell into German hands and 7 were unaccounted for. Q. R. I. Weekly, 8 Sep, 6, 13 Oct, 29 Dec. 43.
23. Western Naval Task Force, pp. 9-12; Signals Rpt. on Amphibious Opns. in the Med from July to Sep 43.
24. Western Naval Task Force, pp. 9-12; Fifth Army History, Vol. I, p. 31.
25. Fifth Army History, Vol. I, pp. 29, 32; Commandant, USMC, 11 Nov 43.

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26. Fifth Army History, Vol. I, pp. 32-34; Western Naval Task Force, pp. 137-154, passim.
 27. Western Naval Task Force, p. 158.
 28. The Fleet Air Arm's Seafires, like the Sicily-based planes, were under operational control of XII ASG; however, their control was slightly different, being maintained through the fighter-direction facilities of HMS Ulster Queen which got instructions from the XII ASG control on USS Ancon.
 29. Hq. NATAF, Operation Avalanche; NAAF, Monthly Operations Bulletin No. 6, Sep 43; Current Reports from Overseas, No. 29, British War Office, 11 March 44, K-53394, in A-2 Lib.
 30. Western Naval Task Force, p. 196.
 31. Commandant, USMC, 11 Nov 43, Incl. "B."
 32. NAAF, Opnl. and Intel. Sum No. 202, 10 Sep 43; Current Reports from Overseas, No. 29, 11 Nov 43.
 33. NAAF, Monthly Operation Bulletin No. 6, Sep 43.
 34. Commandant, USMC, 11 Nov 43, Incls. "A" and "B."
 35. Western Naval Task Force, pp. 142-143.
 36. Hq. NATAF, Operation Avalanche; Hq. NAAF, Opnl. and Intel. Sums Nos. 201-202, 9-10 Sep 43; Hq. NAAF, Monthly Operations Bulletin No. 6, Sep 43; Hq. NAAF, Air Intel. Weekly Sum No. 43; RAF Med Review No. 5; Commandant, USMC, 11 Nov 43, Incl. "B"; "Note of a Meeting Held at the Admiralty on 20th October 1943 to Consider the Lessons Learnt from the Naval Air Operations in AVALANCHE," K-40722, in A-2 Lib.
 37. Western Naval Task Force, pp. 11-18; Hq. NAAF, Opnl. and Intel. Sums Nos. 201-202, 9-10 Sep 43.
 38. Western Naval Task Force, p. 18.
 39. Ibid., pp. 11-18; Hq. NAAF, Opnl. and Intel. Sums Nos. 201-202, 9-10 Sep 43.
 40. Ibid.; Hq. NATAF, Operation Avalanche.
 41. Western Naval Task Force, pp. 11-18; Hq. NATAF, Operation Avalanche.
 42. Hq. NAAF, Opnl. and Intel. Sum No. 202, 10 Sep 43; Hq. NATAF, Operation Avalanche; RAF Med Review No. 5, Oct to Dec 43.
 43. Commandant, USMC, 11 Nov 43, Incl. "B."
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44. Ibid.
45. Hq. Allied Central Med Force, "Air Support Control Arrangements for Operation 'Avalanche,'" 25 Jan 45, K-45440, in A-3 Lib.
46. CM-IN-7325, Eisenhower to AGMAR for CCS, 9 Sep 43.
47. All heavy, medium, and light bomber flights on D minus 1 and D-day had to be coordinated with the Navy, Troop Carrier Command and Coastal. On D-day all flights had orders to by-pass the Salerno area. See Air Command Post, MAC to CG NASAF, 6 Sep 43, in Directive, Operation AVALANCHE.
48. Hq. NAAF, Opnl. and Intel. Sums Nos. 201-202, 9-10 Sep 43; Hq. NAAF, Air Intel Weekly Sum No. 43, 4-10 Sep 43; RAF Med Review No. 5, Oct to Dec 43; Hq. 12th AF, Operations and Statistics of Twelfth Air Force; Hq. XII Bomber Command, "Salerno Operations"; Hq. NASAF, Intops Sum No. 49, 9 Sep 43.
49. Hq. NAAF, Opnl. and Intel. Sums Nos. 201-202, 9-10 Sep 43.
50. CM-IN-7325, Eisenhower to AGMAR for CCS, 9 Sep 43.
51. On the afternoon of the 9th Col. John G. Ayling, Chief of Staff of III Air Service Area Command (Sp) had landed on the airfield in a B-25 loaded with radio equipment. Colonel Ayling was apparently under the impression that the enemy had abandoned the field. As his plane rolled to a stop German 88-mm. shells smashed into it, setting it on fire and killing Colonel Ayling and his pilot. No further attempt was made to use the field until D plus 11 (20 September). See History of the Original XII AFSC, Hq. AAFSC/WFO.
52. Fifth Army History, Vol. I, pp. 34-37.
53. T.M, MAC Post G160 to NASAF and NATAF, 9 Sep 43, in Operations (So) Avalanche; CM-IN-9175, Eisenhower to AGMAR for CCS, 10 Sep 43.
54. Report by CG XII ASC, in Western Naval Task Force, p. 19.
55. This appears to have been the first use in the WFO of missiles of these two types. Both types were guided missiles, probably being directed by radio control from the dropping aircraft. Early estimates gave the bombs an 8-ft. wingspread, a weight of 250 kg. (550 lbs.) and a speed of 400, m.p.h. See CM-OUT-8285, Arnold to Eisenhower, 17 Sep 43, and CM-IN-9301, Eisenhower to AGMAR, 11 Sep 43, in AFSHO.
56. Western Naval Task Force, pp. 18-30; Hq. NAAF, Opnl. and Intel. Sums Nos. 202-204, 10-12 Sep 43; Hq. NAAF, Air Intel Weekly Sums Nos. 43-44; Hq. NATAF, Operation Avalanche; Current Reports from Overseas No. 29, British War Office, 11 March 44; Hq. NAAF, Monthly Operations

- Bulletin No. 6, Sep 43; CM-IX-9538, C-in-C, Med (Eisenhower) to AGWAR, 12 Sep 43; RAF Med Review No. 5.
57. Commandant, USMC, 11 Nov 43, Incl. "B."
58. "Note of a Meeting Held at the Admiralty on 20th October 1943 to Consider the Lessons Learnt from the Naval Air Operations in AVALANCHE"; Air Ministry Weekly Isum No. 220, 20 Nov 43.
59. Hq. NAAF, Monthly Operations Bulletin No. 6, Sep 43; Western Naval Task Force, pp. 20, 25.
60. Hq. XII ASC, App. No. 1, Administrative Order No. 2, 25 Aug 43, in File III-A, Reel 39, file 63, NAAF; Current Reports from Overseas No. 29, British War Office, 11 March 44; History of the Original XII Air Force Service Command, pp. 190-191, and 197, note.
61. The Engineers received some assistance from the ground echelon of the 33d Fighter Group which had come ashore on the 10th. See unit history, 33d Fighter Gp, Sep 43.
62. History of the Original XII Air Force Service Command, pp. 195-196; Current Reports from Overseas No. 29, British War Office; EXX, CG XII ASC (Adv) to 27th Bomb Gp et al, 0800 hours, 11 Sep 43, in Operations (Sp), Messages (Part III), 12th Fighter Wing (Prov).
63. Twelfth Air Force in the Southern Italian Campaign; Hq. NAAF, Monthly Operations Bulletin No. 7, Oct 43.
64. CM-IX-9538, C-in-C, Med [Eisenhower] to AGWAR, 12 Sep 43; Western Naval Task Force, p. 30; NAAF, Operation Avalanche.
65. See, particularly, Hq. NAAF, Monthly Operations Bulletin No. 7.
66. RAF Med Review No. 5; Hq. NAAF, Air Intel. Weekly Sums Nos. 43-44; Hq. NAAF, Opnl. and Intel. Sums Nos. 202-204, 10-12 Sep 43; NAAF, Detailed Interpretation Report No. D.S. 25, 17 Sep 43; Hq. XII Bomber Command, "Salerno Operations"; Hq. NAAF, Intops Sums Nos. 50-51, 10-11 Sep 43; Hq. NAAF, Int/Opsums Nos. 153-154, 10-11 Sep 43.
67. Hq. NAAF, Opnl. and Intel. Sums Nos. 202-204, 10-12 Sep 43.
68. Ibid.
69. Ibid.
70. RAF Med Review No. 5; Hq. NAAF, Opnl. and Intel. Sums Nos. 202-204, 10-12 Sep 43.
71. RAF Med Review No. 5; Hq. NAAF, Air Intel. Weekly Sum No. 44, 11-17 Sep 43; Hq. NAAF, Opnl. and Intel. Sums Nos. 202-204, 10-12 Sep 43.
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72. CM-IN-7325, C-in-C [Eisenhower] to AGMAR for CUS, 9 Sep 43; Western Naval Task Force, p. 5; RAF Med Review No. 5.
73. Because of the presence of German artillery in the hills back of the city of Salerno the port was open only at intervals until D plus 17. See Western Naval Task Force, p. 163.
74. Hq. MAAF, Opnl. and Intel. Sum No. 202, 10 Sep 43; Hq. MAAF, Air Intel Weekly Sum No. 44, 11-17 Sep 43; RAF Med Review No. 5.
75. History of the Original XII AFSG; unit histories, 27th Fighter-Bomber Gp and 33d Fighter Gp, Sep 43; Fifth Army History, Vol. I, pp. 37-40.
76. Fifth Army History, Vol. I, pp. 37-40.
77. On the 14th the situation was so serious that General Clark was making preparations for abandoning either the northern or the southern sector and concentrating VI and 10 Corps in one area. See Western Naval Task Force, p. 37.
78. Western Naval Task Force, pp. 3, 36, 39-41, 43, 231-232.
79. Ibid., p. 231. See also ibid., p. 46; Hq. MAAF, Monthly Operations Bulletin No. 7; CM-IN-19737, Commander, 8th Fleet (OPS) to (?), 21 Sep 43, in AG/AS, Plans, European Dr.
80. Hq. MAAF, Opnl. and Intel. Sums Nos. 204-205, 12-13 Sep 43. RAF Med Review Nos. 5 and 6.
81. Ibid.
82. T.M., MAC Post G 160 to MAAF and MAF, 9 Sep 43, in Operations (Sp) Avalanche.
83. T.M., CG XII ASG (Rear) to CG XII ASG (Adv), 1730 D hours, 11 Sep 43, in Operations (Sp), Messages (Pt. III), 12th Fighter Wing (Prov); T.M., Col. Kyle, CG 12th Fighter Wing (Prov) to Gen Doolittle, 11 Sep 43, ibid.
84. Hq. MAAF, Monthly Operations Bulletin No. 6.
85. Western Naval Task Force, pp. 32, 196-197; Current Reports from Overseas No. 29, British War Office, 11 March 44; Signals Rpt. of Amphibious Opns. in the Med from July to Sep 43, 22 Oct 43; RAF Med Review No. 5; Hq. MAAF, Monthly Operations Bulletin No. 7; Air Ministry Weekly Isun No. 220; CM-IN-15012, Spantz to AGMAR signed Eisenhower, 26 Sep 43; unit history, 33d Fighter Gp, Sep 43.

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86. Air Ministry Weekly Isum No. 230.
87. Signals Rpt. on Amphibious Opns. in the Med. from July to Sep 43; "Air Support Control Arrangements for Operation 'Avalanche,'" 25 Jan 44.
88. Hq. MAAF, Monthly Operations Bulletin No. 7.
89. Idid.; Hq. AGF, Observers Notes on the Italian Campaign, During the Period 25 August to 7 October 1943, incl., 5 Dec 43, in AIG 370.22-C.
90. RAF Med Review No. 5; Hq. MAAF, Air Intel. Weekly Sum No. 44; Hq. MAAF, Opnl. and Intel. Sums Nos. 204-205, 12-13 Sep 43; Hq. IASAF, Intops Sums Nos. 52-53, 12-13 Sep 43; MAFEM Detailed Interpretation Report No. D. S. 29, 17 Sep 43; Hq. XII Bomber Command, "Salerno Operations."
91. The original GIAPP I, prepared on the 12th, was set up to drop a combat team in the Capua area. It was canceled on the 13th, due to changes in the tactical situation.
92. For the course followed, see map, p. 137.
93. Hq. XII Troop Carrier Command (Prov), A Report of XII TCC Activities, Including the Italian Campaign; Outline History, 51st Troop Carrier Wing, 17 Aug-30 Oct 43; Outline History, 52d Troop Carrier Wing, Sep 43; Reports by Operational Research Sec., Hq. RAF Middle East, ME, Mediterranean Air Operations, 1943; Hq. MAAF, Monthly Operations Bulletin No. 7, Oct 43.
94. Idid.
95. Outline History, 51st TCC, 17 Aug-30 Sep 43; Outline History, 52d TCC, Sep 43.
96. Minutes, CCS, 120th Meeting, 24 Sep 43. Early in November the CCS announced that the 1st British Airborne Division (less one brigade) and the 82d U. S. Airborne Division (less one airborne artillery division) would be moved from MTO to UK for use in OVERLORD. The transfer would take place as late as possible in order to take care of any development in the Italian campaign which might require air-borne operations. See CM-004-1375, CCS to Eisenhower, 4 Nov 43.
97. History, 14th Fighter Gp, Sep 43.
98. Unit history, 310th Bomb Gp, Sep 43.
99. For details of the transfer of these and other units from the Ninth to the Twelfth, see various cables from Eisenhower and Spaatz to

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- AGWAR during September 1943, and see particularly CM-III-20612, Spaatz to AGWAR, signed Eisenhower, 29 Sep 43.
100. RAF Med Review No. 5; Hq. NAAF, Cpnl. and Intel. Suns Nos. 206-207, 14-15 Sep 43.
 101. CM-IF-12769, Spaatz to AGWAR, signed Eisenhower, 16 Sep 43.
 102. Hq. 12th AF, Operations and Statistics of Twelfth Air Force (Supplement); RAF Med Review No. 5; Hq. NAAF, Air Intel. Weekly Sum No. 44, 11-17 Sep 43; Hq. NAAF, Cpnl. and Intel. Suns Nos. 206-208, 14-16 Sep 43; Hq. NAAF, Intops Suns Nos. 54-55, 14-15 Sep 43; MAPRW, Detailed Interpretation Report No. D. S. 25, 17 Sep 43; Hq. XII Bomber Command, "Salerno Operations"; CM-IF-11726, C-in-C Eisenhower to AGWAR for CGS, 15 Sep 43; CM-IF-15923, IAC to (?), 21 Sep 43, in AFAMP; Hq. 12th AF, A History of the 42d Bomb Wing.
 103. Hq. 12th AF, Operations and Statistics of Twelfth Air Force (Supplement); CM-IF-15923, from IAC to (?), 21 Sep 43; CM-IF-11026, C-in-C Eisenhower to AGWAR for CGS, 14 Sep 43; ltr., Spaatz to Arnold, 21 Sep 43, in AAG 370.2-F.
 104. Although NAAF's bombing of the enemy in the salient was of great value it probably would have been even more valuable had there not been an absence of adequate training in mutual air-ground identification and visual signals which prevented the best use of close-contact air support. The CG of VI Corps found it necessary to designate a bomb-safety line well beyond the troops in contact during the most critical part of the operation. See ltr., CG AAF to CG AGF, 23 Sep 43, and 1st ind., in AAG 384-B.
 105. MAPRW, Detailed Interpretation Report No. D.S. 25, 17 Sep 43; Hq. NAAF, Cpnl. and Intel. Suns Nos. 204-208, 12-16 Sep 43; Hq. 12th AF, Operations and Statistics of Twelfth Air Force; RAF Med Review No. 5.
 106. CM-IF-12313, Eisenhower to AGWAR for CGS, 16 Sep 43.
 107. Ltr., Spaatz to Arnold, 21 Sep 43, in AAG 370.2-F.
 108. RAF Med Review No. 5; History, 12th Bomb Gp (II), Dec 43.
 109. History, 12th Bomb Gp (II), Dec 43.
 110. CM-IF-12122, Devers to Marshall, 16 Sep 43; CM-IF-11726, C-in-C Eisenhower to AGWAR for CGS, 15 Sep 43; CM-OUT-7196, JCS to Devers, 15 Sep 43; ltr., Baker to Arnold, 1 Oct 43, in AF-III-A-2, AFAMP. Between 21 September and 1 October the planes flew 191 sorties, dropped 406.6 tons of bombs, claimed 50 enemy aircraft destroyed.

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and lost 11 planes. On 1 October planes of the three groups participated in a raid against Wiener Neustadt (ltr., Baker to Arnold, 1 Oct 43, in WP-III-A-2, AFAEP), after which the groups returned to the UK, arriving there on 4 October. See unit histories of 44th, 93d and 389th Bomb Gps.

111. CM-IN-10974, Eisenhower to Marshall, 14 Sep 43.
112. Ltr., Maj. Gen. J. E. Doolittle, XII Bomber Command to Maj. Gen. B. H. Giles, C/AS, 19 Sep 43, in AAG 312-1-L.
113. Memo, Brig. Gen. H. A. Craig, AC/AS, CG&R to Gen. Upston, 15 Sep 43, in AAG 322-G.
114. CM-OUT-10325, Marshall to Eisenhower, 22 Sep 43.
115. Ltr., Giles to Doolittle, 9 Oct 43, in AAG 312-1-L.
116. Hq. NAAF, Opnl. and Intel. Sums Nos. 201-207, 9-15 Sep 43; Hq. NAAF, Air Intel. Weekly Sums Nos. 43-44.
117. Ibid.
118. Ibid.
119. Observers Notes on the Italian Campaign, During the Period 25 August to 7 October 1943 incl.
120. Hq. NAAF, Opnl. and Intel. Sums Nos. 201-207, 9-15 Sep 43; Hq. NAAF, Air Intel. Weekly Sums Nos. 43-44.
121. Hq. 12th AF, Operations and Statistics of Twelfth Air Force (Supplement); Hq. NAAF, Opnl. and Intel. Sums Nos. 204-208, 12-16 Sep 43; ltr., Spaatz to Arnold, 21 Sep 43, in AAG 370.2-F.
122. Memo for Joint War Planners Com., from Col. Joe L. Loutzenheiser, OPD, 6 Jan 44, and memo for CG XII Bomber Command from Col. Reuben Kyle, Jr., 22 Sep 44, in AFAEP, European Br., "Availability of Airfields" file; memo for Joint War Planners Com., Fighter Operations, in WP-III-1-10, AFAEP.
123. Ibid.
124. Hq. 12th AF, Operations and Statistics of Twelfth Air Force; Hq. NAAF, Opnl. and Intel. Sums Nos. 193-208, 1-16 Sep 43; Hq. NAAF, "Mare Nostrum," p. 11.
125. Hq. 12th AF, Operations and Statistics of Twelfth Air Force (Supplement); CM-IN-18863, Spaatz to Arnold, signed Eisenhower, 26 Sep 43; ltr., Brig. Gen. F. W. Harper to CG AAF, 28 Sep 43, in AAG 370.2-F; Hq. NAAF, Air Intel. Weekly Sums Nos. 40-44, 14 Aug-17 Sep 43; ltr., Spaatz to Arnold, 21 Sep 43, in AAG 354-3.

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126. RAT Med Review No. 5; Hq. NAAF, Cntrl. and Intel. Sums Nos. 204-208, 12-16 Sep 43.
127. Ibid.; Western Naval Task Force, pp. 33-34. The Allies further improved their position in the Tyrrhenian at about midnight on the 17th/18th when 147 U. S. troops took over the island of Ischia (off the Bay of Naples), without opposition. Possession of Ischia, Capri, Ventotene, and Procida islands gave the Allies control of all northern and southern approaches to Naples, and virtual control of the central approach; in addition, the islands served as observation posts and air warning stations.

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Chapter IV

1. Fifth Army History, Vol. I, pp. 41-46; RAF Med Review No. 5; Hq. MAAF, Air Intel. Weekly Sums Nos. 45-46, 18 Sep-1 Oct 43.
2. Ltr., Gen. Spaatz to Gen. Arnold, 21 Sep 43, in AAG 370.2-F; RAF Med Review No. 5; Hq. MAAF, Opnl. and Intel. Sums Nos. 208-212, 16-20 Sep 43; Hq. MAAF, Air Intel. Weekly Sum No. 44; Hq. 12th AF, A History of the 42d Bomb Wing.
3. OI-III-13177, Spaatz to AGWAR, signed Eisenhower, 17 Sep 43, in AFSE0.
4. OI-III-12313, Eisenhower to AGWAR for CUS, 16 Sep 43.
5. Hq. 12th AF, Operations and Statistics of Twelfth Air Force (Supplement); RAF Med Review No. 5; Hq. MAAF, Opnl. and Intel. Sums Nos. 208-209, 16-17 Sep 43; Hq. MASAF, Intops Sums No. 56, 16 Sep 43; Western Naval Task Force, pp. 40-44.
6. Western Naval Task Force, pp. 47-48; Hq. MAAF, Air Intel. Weekly Sum No. 44.
7. RAF Med Review No. 5; Hq. MAAF, Air Intel. Weekly Sums Nos. 44-45; Hq. MAAF, Opnl. and Intel. Sums Nos. 209-212, 16-20 Sep 43; Hq. MASAF, Intops Sums Nos. 56-59, 16-19 Sep 43.
8. MAAF cannot claim all of the credit for the evacuation of the Foglia complex. The approach of the Eighth Army also contributed.
9. RAF Med Review No. 5; Hq. MAAF, Air Intel. Weekly Sums Nos. 44-45; Hq. MAAF, Opnl. and Intel. Sums Nos. 209-212, 16-20 Sep 43; Hq. MASAF, Intops Sums Nos. 56-59, 16-19 Sep 43.
10. Hq. 12th AF, Operations and Statistics of Twelfth Air Force (Supplement).
11. Western Naval Task Force, pp. 45-46, 48; RAF Med Review No. 5.
12. Hq. Allied Central Med. Force, "Air Support Control Arrangements for Operation 'Avalanche,'" 25 Jan 44.
13. Signals Rpt. on Amphibious Opns. in the Med from July to Sep 43.
14. Western Naval Task Force, pp. 47 ff.
15. RAF Med Review No. 5.

16. CM-II-15923, from HAO to (?), 21 Sep 43, in AFAP, European Br.; ltr., Spaatz to Arnold, 21 Sep 43, in AAG 370.2-F; Hq. 12th AF, A History of the 42d Bomb Wing; Hq. AGF, Observers Notes on the Italian Campaign, During the Period 25 Aug to 7 Oct 43 incl., in AAG 370.22-C.
17. RAF Med Review No. 5; Hq. MAAF, Air Intel. Weekly Sum No. 45; Hq. MAAF, Opnl. and Intel. Sums Nos. 212-217, 20-25 Sep 43; Hq. MASAF, Intops Sums Nos. 90-94, 20-24 Sep 43.
18. Ibid.
19. Ibid.
20. Observers Notes on the Italian Campaign, During the Period 25 Aug to 7 Oct 43.
21. RAF Med Review No. 5; Hq. MAAF, Air Intel. Weekly Sum No. 45; Hq. MAAF, Opnl. and Intel. Sums Nos. 212-217, 20-25 Sep 43.
22. CM-III-15539, C-in-C [Eisenhower] to AGMAR for CCS, 21 Sep 43.
23. See p. 147. The three groups which were sent down from UK were the 44th, 93d and 389th, each with approximately 20 planes. See CM-III-12128, Devers to Marshall, 16 Sep 43.
24. After the mission of the 24th the 2-24's were released to return to UK, but stayed over until after 1 October to share in an attack on the Vienna fighter factories. See CM-III-18007, Eisenhower to AGMAR for CCS, 24 Sep 43. Also, see p.187, this study.
25. On 4 October while the French and Patriots were closing in on Bastia 35 B-25's made a final attack on shipping in the harbor.
26. This account of MAAF's Corsican and evacuation route operations is based upon RAF Med Review No. 5; Hq. MAAF, Air Intel. Weekly Sums Nos. 45-46; Hq. MAAF, Opnl. and Intel. Sums Nos. 213-218, 21-26 Sep 43; Hq. MASAF, Intops Sums Nos. 61-66, 21-26 Sep 43; Air Ministry Weekly Isum No. 215; History, XII Fighter Command, June 43-1 Jan 44.
27. Ibid.; Hq. LACAF, "Mare Nostrum," pp. 26-27, 30.
28. See p. 181, this study.
29. For example, in the southern area "there were many red alerts during the day [18th] but fighters drove off the enemy before the attacks could develop." See Western Naval Task Force, p. 49.

30. During this period fighter cover over the assault areas normally was as follows: F-40's, continuous from first to last light; Spitfires, same as P-40's with additional four planes at 25,000 feet to intercept bombers carrying rocket bombs; P-38's and A-30's, over area to limit of endurance after executing fighter-bomber missions from Sicily.
31. RAF Med Review No. 5.
32. Western Naval Task Force, pp. 50-51, 55.
33. Ibid., pp. 56-65, passim; RAF Med Review No. 5.
34. Hq. MAAF, Air Intel. Weekly Sum No. 45.
35. Ibid.
36. Fifth Army History, Vol. I, pp. 44-48; RAF Med Review No. 5.
37. Ibid.; Hq. MAAF, Air Intel. Weekly Sums Nos. 45-46.
38. For examples, see unit histories of 14th Fighter Gp and 330th Bomb Gp, Sep-Oct 43; Hq. MAAF, Opnl. and Intel. Sum No. 217, 25 Sep 43.
39. Hq. 12th AF, A History of the 42d Bomb Wing; Hq. MASF, Intops Sum No. 65, 25 Sep 43; Hq. MAAF, Opnl. and Intel. Sum No. 217, 25 Sep 43.
40. CM-IT-19095, Spaatz to AGMAR, signed Eisenhower, 26 Sep 43; see also CM-IT-15539, G-in-C [Eisenhower] to AGMAR for CGS, 21 Sep 43. It was presently planned that no air force units would be installed on Sardinia until later in the year. See CM-IT-19286, Eisenhower to AGMAR, 23 Sep 43.
41. Hq. MAAF, Monthly Operations Bulletin No. 6; CM-IT-13910, Spaatz to AGMAR for Arnold, signed Eisenhower, 17 Sep 43, in AFHQ.
42. RAF Med Review No. 5; Hq. MAAF, Air Intel. Weekly Sum No. 46; Hq. MAAF, Opnl. and Intel. Sums Nos. 217-223, 25 Sep-1 Oct 43; Hq. MASF, Intops Sums Nos. 65-71, 25 Sep-1 Oct 43.
43. The 324th Fighter Group, which was in North Africa, engaged in training new pilots. The 99th Fighter Squadron was another example; it remained in Sicily until October. See unit histories, 324th Fighter Gp and 99th Fighter Sq.
44. RAF Med Review No. 5; History of the Original XII Air Force Service Command, p. 199; see also CM-IT-19035, Spaatz to AGMAR, signed Eisenhower, 26 Sep 43.
45. History of the Original XII AFSC, pp. 198-200.
46. Ibid.; Outline History, 51st TCG, 17 Aug-30 Sep 43. ~~CONFIDENTIAL~~

47. These fields continued to be used by HAAF until after the fields around Naples and Capua were available. Even then, Montecorvino remained in use for several months, primarily as a base from which fighters operated to protect shipping and the port of Salerno.
48. History of the Original XII AFSC, pp. 200-201.
49. Ibid., pp. 201-202; War Diary, 12th Weather Squadron, Sec. II, Activation to 31 Dec 43.
50. Hq. HAAF, Air Intel. Weekly Sum No. 46, 25 Sep-1 Oct 43; Hq. HAAF, Opnl. and Intel. Sums Nos. 216-224, 24 Sep-2 Oct. 43.
51. The figures, covering the first 18 days of the Salerno operation, are from Minutes of a Military Conference Between the USA, Great Britain, and the USSR, Teheran, 29 Nov 43.
52. In arriving at totals for September operations all available sources of information have been examined. The various sources nowhere jibe, although in general they are proportionately closer together than in most of the [daily] and period summaries presented above. The situation is further complicated by the fact that the sources are not always clear as to exactly what and who are covered by their statistics. The best that can be done, therefore, is to arrive at an approximation. In order to take care of this condition most of the figures presented will be qualified by the use of such words as "approximately" or will be given in round numbers. The writer freely admits that he cannot prove the accuracy of a single one of the figures which appear in the text but he believes that each of them is reasonably close to correct.
53. Hq. HAAF, Intops Sum No. 70, 30 Sep 43; Hq. HAAF, Operation Avalanche; History, XII Fighter Command, June 1943-1 Jan 44; data supplied by Statistical Control, Hq. AAF. Hq. 12th AF Operations of the Twelfth Air Force, 6 Nov 42-3 May 45. For a breakdown of HAAF sorties (and other activities) by types of planes see Annex No. 4.
54. Hq. HAAF, Operation Avalanche.
55. History of XII Fighter Command, June 43-1 Jan 44. Units of DAF flew 1,877 sorties and destroyed 12 enemy planes while losing 3. See Status Report on French Air Forces for Month of September 1943, Hq. 12th AF, Oct 43, K-40273, in A-2 Lib.
56. Hq. 12th AF, Operations and Statistics of Twelfth Air Force; data also supplied by Statistical Control, Hq. AAF.
57. Ibid.; Hq. HAAF, Monthly Operations Bulletin No. 6; Hq. HAAF, Air Intel. Weekly Sums Nos. 42-46.

58. Hq. MAAF, Monthly Operations Bulletin No. 6.
59. Ibid.; Hq. 12th AF, Operations and Statistics of the Twelfth Air Force; History of XII Fighter Command, June 43-1 Jan 44.
60. Hq. 12th AF, Operations and Statistics of the Twelfth Air Force; Hq. MASAF, Intops Sum No. 70, 30 Sep 43.
61. Hq. 12th AF, Operations and Statistics of Twelfth Air Force.
62. Hq. MAAF, Monthly Operations Bulletin No. 6; Hq. MASAF, Intops Sum No. 70, 30 Sep 43.
63. Hq. MAAF, Monthly Operations Bulletin No. 6; Hq. 12th AF, Operations and Statistics of Twelfth Air Force; Hq. MASAF, Intops Sum No. 70, 30 Sep 43; Hq. MASAF, Operation Avalanche; Hq. 12th AF, Operations of the Twelfth Air Force, 3 Nov 43-8 May 45.
64. Western Naval Task Force, pp. 169-170.
65. Ibid., pp. 206-210. In this report 12 ships are listed as damaged but the cause is not given.
66. Hq. MAAF, "Close Support of the Fifth Army," in AFSHQ.
67. Quoted in Western Naval Task Force, p. 3.
68. CM-11-15558, C-in-C [Eisenhower] to AGMAR for CDS, 21 Sep 43.
69. Quoted in Western Naval Task Force, p. 3.
70. But the successes also accentuated the difference of opinion as to the nature of future operations which existed between the U. S. Joint Chiefs of Staff and the British Chiefs. The Americans never changed from their firm belief that OVERLORD must always have first priority. But the British grew more insistent upon a concentration and extension of operations in the Mediterranean. They wanted to drive all the way to the Po Valley; later, when the Italian campaign bogged down, they wanted to initiate operations against the Balkans and in the Aegean, even at the expense of both OVERLORD and the Italian campaign. They went so far as to try to stop the movement of seven divisions from the Mediterranean to UI, and to get General Eisenhower to conduct operations in the eastern Mediterranean. The U. S. Joint Chiefs of Staff consistently opposed these anti-OVERLORD ideas, and with enough success that OVERLORD was never removed from its first priority nor seriously jeopardized. See various Minutes of Meetings of CDS and JCS, Aug thru Dec 43.

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Chapter V

1. For an idea of the limitations imposed on MAAF during October by the weather, see Hq. MAAF, Opnl. and Intel. Sums Nos. 223-253, 1-31 Oct 43; Hq. MASAF, Intops Sums Nos. 71-101, 1-31 Oct 43; unit histories of 340th Bomb Gp (H), 320th Bomb Gp (H), 319th Bomb Gp (H), 3d Bomb Gp (H), 12th Bomb Gp (H), 82d Fighter Gp. The following figures will serve to illustrate the reduction in activities caused by bad weather: 320th Bombardment Group (H)--September, 488 sorties and 746 tons dropped--October, 284 sorties and 406 tons dropped; 310th Bombardment Group (H)--September, 824 sorties and 1,067 tons dropped--October, 428 sorties and 486 tons dropped. See unit histories for Sep and Oct 43, 320th and 310th Bomb Gps (H).
2. CM-III-1260, Eisenhower to AGMAR for COS, 3 Oct 43.
3. RAF Med Review No. 5; History, 321st Bomb Gp (H), Oct 43; Narrative, 14th Fighter Gp, Oct 43; History, 310th Bomb Gp (H), Oct 43.
4. Narrative, 14th Fighter Gp, Oct 43.
5. RAF Med Review No. 5; Hq. MAAF, Air Intel. Weekly Sums Nos. 46-47; Hq. MAAF, Opnl. and Intel. Sums Nos. 223-231, 1-9 Oct 43; Hq. MASAF, Intops Sums Nos. 71-78, 1-8 Oct 43. Good data on these and many other October missions may be found in the October 1943 unit histories of the 12th, 310th, 319th, 320th, and 340th Bomb Gps (H), the 47th Bomb Gp (L), and the 14th, 79th, and 82d Fighter Gps.
6. Ibid. The figures include a number of small missions by B-25's of EAF, mostly against road junctions. In several of these missions bad weather over the target forced the mediums to return without having dropped their bombs.
7. Ibid. See also unit history of 79th Fighter Gp, Oct 43.
8. Ibid.
9. Ibid.; Air Ministry Weekly Isum No. 222.
10. Ibid.
11. Ibid.; Hq. MACAF, "Mare Nostrum."
12. Air Ministry Weekly Isum No. 215.
13. Outline History of the Corsica Air Sub Area.
14. RAF Med Review No. 5; Hq. MAAF, Air Intel. Weekly Sum No. 43; Hq. MAAF, Opnl. and Intel. Sums Nos. 231-235, 9-13 Oct 43; Hq. MASAF, Intops Sums Nos. 79-82, 9-12 Oct 43.

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15. Fifth Army History, Vol. II, pp. 15-37.
16. The 319th Bomb Gp (II) considered its part in the Alife raid as its most successful mission of the month. See unit history, 319th Bomb Gp (II), Oct 43.
17. RAF Med Review No. 5; Hq. IMAAF, Air Intel. Weekly Sums Nos. 48-49; Hq. IMAAF, Opnl. and Intel. Sums Nos. 235-237, 13-15 Oct 43; Hq. IASAF, Intops Sums Nos. 83-84, 13-14 Oct 43.
18. Near the end of the month one airfield in the Heel was allotted for use of aircraft mounting special operations in aid to guerillas in the Balkans. See GI-IR-12966, Eisenhower to AGMAF for CGS, 21 Oct 43.
19. RAF Med Review No. 5; Hq. IMAAF, Air Intel. Weekly Sums Nos. 48-49; Hq. IMAAF, Opnl. and Intel. Sums Nos. 237-245, 15-23 Oct 43; Hq. IASAF, Intops Sums Nos. 85-92, 15-23 Oct 43; unit histories, 57th, 79th and 82d Fighter Gps, Oct 43.
20. Unit history, 82d Fighter Gp, Oct 43; AFHQ, G-3, "Employment of Allied Forces," 3 Oct 43, P/109 (final) (corrected copy), in Operations Record Book, MAC, Feb-Sep 43 incl. See also GI-IR-3460, Air Command Post to Marshall for Giles, signed Spaatz, 5 Dec 43, in AFSELO.
21. RAF Med Review No. 5; Hq. IMAAF, Opnl. and Intel. Sums Nos. 245-254, 23 Oct-1 Nov 43; Hq. IASAF, Intops Sums Nos. 93-101, 23-31 Oct 43.
22. Hq. IASAF, Note on the Employment of Tactical Bomber Force, signed E. C. Hudleston, Air Commodore, in AFSELO. Against targets which TBF was not capable of attacking effectively, and in the event of an emergency, SBF would be used for operations in the tactical area. Ibid.
23. This was due primarily to more days of good flying weather, especially around the 21st and 22d.
24. The historian of the 42d Bomb Wing (B-26's) claimed that the wing "led the way in the experimentation which was later to culminate in the introduction of a new philosophy of railway interdiction through the cutting of bridges." See A History of the 42d Bomb Wing.
25. For the movement of mediums and fighters to Italy; see, for example, the Administrative History of the Twelfth Air Force, Pt. III, Vol. I, and unit historical material for September and October of the 321st and 340th Bomb Gps (II), 62d Fighter Wing (which includes data on the movement of the wing units), 31st, 33d, 57th, and 82d Fighter Gps. All of the material is in AFSELO files.

The 321st Bomb Group (II) was the first medium group to be based on the mainland; the 33d was the first of the fighter groups.

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The B-25's began their move to Sardinia late in October, most of the move taking place in November. See unit history, 319th Bomb Gp (H), Oct-Nov 43, and A History of the 49d Bomb Wing.

It should be noted that during the month of October a number of MAAP's groups were nonoperational as far as combat was concerned, being in process of changing from one type of plane to another or having been pulled out of combat for training. The need for additional training usually came from evidence that a group was bombing inaccurately or flying its formations badly or because of inadequate training before leaving the XI. In the latter connection, for example, General Spatz noted that many crews were being brought over by boat and air transport while their planes were flown over by ferry crews; he felt that because of the limited training received by crews and their lack of knowledge of their particular aircraft they should ferry over their own planes as a means of acquiring additional training. For the above, see unit histories of the 324th and 325th Fighter Gps and the 17th Bomb Gp, Oct 43; CI-IL-12999, Spatz to AGMAR, signed Eisenhower, 17 Sep 43.

26. CI-CUI-13348, Marshall to Eisenhower, 29 Oct 43. General Marshall's message was based upon a memorandum prepared on 27 October by General Kuter which stated that the destruction of 11 bridges on 9 major railroads in northern Italy and 5 bridges on a line approximately Pisa-Ancona would "starve" the Germans south of the Po into withdrawing into the Po Valley. See memo for CG AAF from Brig. Gen. L. S. Kuter, 27 Oct 43, Application of Air Power in Italy, in ARLEP, Office Services Br., WP-III-F-5, Italy. Subsequently, a memorandum on the subject of bridge bombing was prepared for the President. See memo for the President, Application of Air Power in Italy, in AFAAF, Office Services Br., WP-III-F-5, Italy.
27. As a preliminary to its bridge-smashing program MAAP took a final crack at I/Y's on the 16th when 36 B-25's escorted by 34 F-35's pounded the Ancona yards with 32 tons of bombs.
28. For example, the 2d Bomb Group (E-17's) considered its attack on the bridge southeast of Orvieto as its "best job of precision bombing" during the month. See Outline History, 2d Bomb Gp (H), Oct 43.
29. Unit history, 349th Bomb Gp (H), Oct 43.
30. MAAP's light bombers and fighter-bombers had been operating from Italian bases since late September and early October. See, for example, the unit histories of the 47th Bomb Gp (L) and the 27th Fighter-Bomber Gp, and Hq. MAAP, Tables of Organization, 13/14-20 Nov 43, K-43563, in A-2 Lib.
31. See History of 47th Bomb Wing, 25 Feb-1 Dec 43.

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32. High controlled all railway traffic entering Bulgaria from Central Europe, except for a slight flow via Bucharest; it also lay on the main line from Central Europe to Greece, via Belgrade.
 33. This was the first attack on an Albanian target by an Italian-based USAAF unit. See History of 47th Bomb Wing, 25 Feb-1 Dec 43.
 34. AC/AS, Intel. to Gen. Arnold, 1 Dec 43, "Current Items of Air Intelligence," in AAG 337-9.
 35. Data on IIAF's strategic operations (and supplementary operations by IAF) during the last half of October is from RAF Med Review No. 5; Hq. IIAF, Air Intel. Weekly Sums Nos. 49-51; Hq. IIAAF, Opnl. and Intel. Sums Nos. 237-254, 15 Oct-1 Nov 43; Hq. IASAF, Intops Sums Nos. 85-101, 15-31 Oct 43; Air Ministry Weekly Isums Nos. 217-218.
 36. Hq. IIAF, Opnl. and Intel. Sums Nos. 245-254, 23 Oct-1 Nov 43.
 37. During the first two-thirds of October the defense of ports in Italy was as follows: (1) West Coast, the 64th Fighter Wing under XII ASG provided day and night defense of Naples; (2) East Coast, IAF No. 236 Wing defended Bari, Brindisi, and Taranto by day and its No. 416 Squadron defended them at night. (See FAX, Coningham [IIIAF] to C-in-C [IAC], 10 Oct 43, in Abs:10.) About the 20th, Coastal took over from the 64th Wing the protection of all shore installations south and east of Camranella Point (Sorrento Peninsula). See FAX, CG XII ASG to CG IIAAF, 20 Oct 43, in Abs:10.
 38. RAF Med Review No. 5; Hq. IIAF, Air Intel. Weekly Sums Nos. 49-50; Hq. IIAAF, Opnl. and Intel. Sums Nos. 237-254, 15 Oct-1 Nov 43; Hq. IASAF, Intops Sums Nos. 85-101, 15-31 Oct 43; Air Ministry Weekly Isums Nos. 217-218; "Mare Nostrum," p. 6.
 39. See the unit histories of various bombardment and fighter groups for Oct 43.
 40. For example, the 33d Fighter Group had no encounters during the month but lost three planes to AA fire while escorting and bombing; the 540th Bombardment Group (H) had 17 of 24 planes damaged by flak over Capua on the 4th; and other units--notably the 47th Bombardment Group (L) and the 310th Bombardment Group (M)--noted in their unit histories the frequency and severity of the German AA fire. See unit histories of these and other 12th AF units for Oct 43.
 41. Data is based on information from the following sources: Statistical Control, Hq. AAF; Hq. 12th AF, Operations of the Twelfth Air Force, 6 Nov 42-8 May 45; Air Ministry Weekly Isums Nos. 215-218; Hq. IIAAF, Monthly Operations Bulletin No. 9, Dec 43; History, XII Fighter Command, 1 June 43-1 Jan 44; "Mare Nostrum," pp. 6, 10.
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42. History of the 52d Troop Carrier Wing, Oct 43.
43. Historical Data, Mediterranean Air Transport Service, 25 May 43-31 May 44.

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Chapter VI

1. Fifth Army History, Vol. II, pp. 39-59, Vol. III, pp. 7-47.
2. For the creation and activities of Engineer Command, see p. 250, this study.
3. XII AFSC was affected principally through the loss of its old II Air Service Area Command (Sp) to the Fifteenth Air Force on 3 December, when II ABAC became XV AFSC. See History of the Original XII AFSC, pp. 214-215; G.O. No. 99, Hq. 12th AF, 3 Dec 43.
4. At the Casablanca Conference (January 1943) the Eighth Air Force's program of daylight bombing had been endorsed by the CCS and the POINTBLANK offensive against German industry had been recognized as the major Allied air objective of the year. Subsequently, POINTBLANK was formalized into the Combined Bomber Offensive, and specific strategic targets were assigned to the Eighth and to the RAF Bomber Command. Up to the fall of 1943 these two elements had carried the CBO, for the heavies of the Twelfth and Ninth Air Forces were operating against enemy airfields and communications--with a few exceptions such as the Floesti raid of 1 August 1943.
5. Minutes, CCS, 106th Meeting, QUADRANT, 14 Aug 43.
6. Meeting of JCS with President Roosevelt and Secretary Stimson, 10 Aug 43.
7. Minutes, CCS, 106th Meeting, QUADRANT, 14 Aug 43. See also memo for JCS from CG AAF, To Assure the Most Effective Exploitation of the Combined Bomber Offensive, 9 Oct 43.
8. OI-IN-14271, Eisenhower to Marshall, 19 Sep 43.
9. As Brig. Gen. C. F. Born put it: "The basic reason for the creation of the Fifteenth Air Force was to give the US a striking force against strategic targets--the industrial, economic and communications systems of Germany so that we could strike both from bases in the UK and Italy." See Interview with Brig. Gen. C. F. Born, AC/S, A-3, 15th AF, 2 June 41, in History of 15th AF, Vol. II.
10. JCS 524, 9 Oct 43.
11. Ibid., App. "B." See also memo, signed S/Sgt. G. V. Martin, "Thoughts on the Formation of the Fifteenth Air Force," in personal file of Lt. Col. James Parton, Hq. AAF (cited hereinafter as "Formation of the 15th AF"). The figure "13" should have been "15," as a total of 21 groups was proposed.

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12. Ltr., Maj. Gen. I. H. Edwards to Lt. Gen. Ira G. Baker, no date, quoted in "Formation of 15th AF."
13. Draft signal to EAMBLE, Washington, from Air Ministry, Whitehall (incl. to ltr., AVM Lorman Pottomley to Lt. Gen. Ira G. Baker), 19 Oct 43, quoted in "Formation of the 15th AF."
14. CI-OUT-6433, Spaatz to Eisenhower, 14 Oct 43.
15. There was some difference of opinion on the question of Foggia's advantage in number of operational days. A paper, "The Weather Factor in Bombing Germany from British Bases as Compared with that of Italian Bases," (15th AF file, AEAAP, European Br.) stated that only a few more operational days per month could be expected by heavies operating from Italy, but that base conditions there (absence of fog, for example) would be better than in UK.
16. CI-111-7113, Doelittle and McDonald signed Eisenhower to Spaatz care of Arnold, 12 Oct 43, in A-320.
17. JCS 534/1, 16 Oct 43.
18. CI-OUT-6433, Spaatz to Eisenhower, 14 Oct 43.
19. Minutes, CCS, 124th Meeting, 22 Oct 43.
20. CI-OUT-9934, CCS to Eisenhower, 23 Oct 43.
21. Draft reply to EAM 254 (incl. to ltr., ACM Sir Charles Portal to Lt. Gen. Ira G. Baker, 24 Oct 43), quoted in "Formation of the 15th AF."
22. Ltr., Lt. Gen. Ira G. Baker to Lt. Gen. Jacob L. Devers, CG APOUSA, 25 Oct 43, quoted in "Formation of the 15th AF."
23. Interview, Col. C. A. Young, AG/S, A-2, 15th AF, 27 May 44, in History of 15th AF, Vol. II.
24. Ltr., ACM Arthur T. Harris to Maj. Gen. Ira G. Baker, quoted in "Formation of the 15th AF."
25. Interview, Col. C. A. Young, AG/S, A-2, 15th AF, 27 May 44, in History of 15th AF, Vol. II.
26. Minutes, CCS, 125th Meeting, 29 Oct 43.
27. Memo, Brig. Gen. C. P. Weyland to Gen. Craig, 29 Oct 43, in AAG 323-I.
28. Ltr., S/W to CG LAMO, 30 Oct 43, in AAG 323-I; Ltr. and CI-OUT-13903, both ACOMAR to CG LAMO, 30 Oct 43, in AEAAP, European Br.

29. CM-III-18272, Spaatz signed Eisenhower to AGMAR for Arnold, 30 Oct 43, in AFSbO.
30. Ibid.
31. CM-OUT-14308, Arnold to Eisenhower for Spaatz, 31 Oct 43.
32. CM-III-3117, Eisenhower to AGMAR for Arnold, 5 Nov 43, in AFSbO. Activation was per G.O. No. 121, Hq. SACUSA, 1 Nov 43 and G.O. No. 82, Hq. 12th AF, 1 Nov 43.
33. History of 15th AF, Vol. I; G.O. Nos. 1, 2, 16, Hq. 15th AF, 1 Nov, 5 Dec 43.
34. History of 15th AF, Vol. I."
35. Ibid.
36. Ibid.
37. S.O. No. 1, Hq. 15th AF, 1 Nov 43, in History of 15th AF, Vol. I.
38. History of 15th AF, Vol. I.
39. CM-III-312, AHRM to MAR, 1 Nov 43 (paraphrase), in AFAMP, European Br.
40. CM-III-18094, Eisenhower to AGMAR for COS, 29 Oct 43, in AFAMP, European Br.
41. These figures were considerably above the average heavy bomber effort which had been recorded from 31 August to 30 November 1943. During that period the average sortie rate per month per plane in the theater was 4.8; the average sortie rate per month per plane ready for combat was 8.7, and the sortie rate per month per crew was 6.1. See Statistical Control Report, 20 Nov 43, in 15th AF file, AFAMP, European Br.
42. Ltr., Maj. Gen. J. H. Doolittle to CG AAF, 19 Nov 43, in AAG 332-1-II. General Spaatz concurred on 6 December 1943 in 1st ind. to above.
43. Ibid. In January 1944 Brig. Gen. J. H. Devans, AG/AS, Personnel informed Maj. Gen. H. F. Twining (then CG of the Fifteenth) that present plans were to build up the heavy bomber units of the Fifteenth to 96 crews per group "at the earliest practicable date"; that by February the replacement flow of heavy bomber crews would be 32% and of fighter crews 20%; and that the Twelfth and Fifteenth now had first priority on filler and replacement personnel for ground force units. Due rotation rate of one-half per cent, however, could not be increased. See ltr., Brig. Gen. J. H. Devans, AG/AS, Personnel to Maj. Gen. H. F. Twining, 13 Jan 44, in AAG 332-1-II.

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44. History of 15th AF, Vol. I.
45. RAR, AG/AS, Plans to Sec/AS, 13 Oct 43, and ltr., Arnold to Baker, 23 Oct 43, in AAG 312-1-L.
- It is interesting to note that about this time General Spaatz came forward with an idea which would have speeded the build-up. He proposed to convert his three B-26 groups to B-17's and to change four groups of B-26's and one of A-20's to A-26's. These changes would have eliminated the mediums, and made the Fifteenth purely a heavy bombardment air force and the Twelfth essentially a close-support air force. The suggestion was disapproved by AG/AS, Plans because the transfer of one medium group and two fighter-bomber groups from North Africa to China was already proposed and because three groups of P-47's were scheduled to be shifted from LTO to UK. See memo for Brig. Gen. O. P. Weyland from Col. R. H. Kelly, Chief, Allocations Br., 18 Oct 43, in AAG 322-H.
46. Ltr., Col. H. P. Dellinger, Chief, Supply and Maintenance Br., AG/AS, MA&D to CG ASOPFO, 23 Oct 43, in AAG 332-E.
47. CM-OUE-1519, Arnold to Eisenhower for Spaatz, 3 Nov 43, in AFSAO; see also CM-IN-15993, Algiers to (?), 21 Aug 43 (paraphrase), in AFALP, European Br.
48. See unit histories of the several groups.
49. MP-III-E-3 (Mod.), AFALP. No date or other information is on the document.
50. RAR, Col. E. S. Metzler, Chief, Military Personnel Div. to AG/AS, CG&R, 6 Nov 43, in AAG 322-I.
51. RAR, AG/AS, CG&R, Program Div. to AG/AS, CG&R, Theater Commitment and Implementation Br., 23 Nov 43, in AAG 332-J.
52. History of 15th AF, Vol. I. The 305th Wing never became operational, its personnel staying on D/S at Hq. Fifteenth Air Force.
53. History of 15th AF, Vol. I; interview with Maj. Gen. Nathan F. Twining, 5 June 44, in History of 15th AF, Vol. II; CM-OUE-10117, Giles to Arnold, 24 Nov 43.
54. Memo, AG/AS, OFD to AG/AS, CG&R, 2 Dec 43, and memo, AG/AS, CG&R to AG/AS, Plans, 23 Nov 43, in "Mod. General" file, AFALP, European Br.; chart, HAAF Operational Control, prepared by 23d SOGCU, 24 Oct 43, in AFSAO.
55. CM-OUE-12538, (?) to 15th AF, 28 Oct 43, in AFALP, European Br.; memo, Col. J. L. Loutzenheiser, OFD to Gen. Craig, AG/AS, Plans, 8 Dec 43, in MP-III-F-12 (North Africa No. 2), AFALP.

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56. CM-III-123, Algiers to MAR, 1 Nov 43 (paraphrase), AFAP, European Br.
57. Memo, Col. J. L. Loutzenheiser, OFD to Gen. Craig, AG/AS, Plans, 8 Dec 43, in WP-III-7-12 (North Africa No. 2), AFAP.
58. History of 15th AF, Vol. I.
59. Ibid.; History of the Original XII AF; G.O. Nos. 1 and 2, Hq. AAF/MTO, 1-2 Jan 44.
60. History of 15th AF, Vol. III. It should be noted that the build-up of the air forces in MTO and of the ground troops necessary to maintain them was at the expense of the Fifth and Eighth Armies. See Minutes of Military Conference Between the USA, Great Britain and the USSR, Tanager, 29 Nov 43.
61. History of 15th AF, Vol. I. The transfers were per G.O. No. 64, No. 12th AF, 3 Nov 43, and MAAF (Adv) Cable OP-450, 1 Jan 44, as cited in History of 15th AF, Vol. I. See also unit history, 47th Bomb Wing, 25 Feb-1 Dec 43.
62. The Twelfth's administrative control extended not only to its own units but to those of the Fifteenth. Control over the latter was terminated on 21 December 1943.
63. In February 1944, pursuant to orders from CCS, the 53d Troop Carrier Wing was transferred to MTO. This was done as a part of the build-up to meet the requirements for OVERLOAD. See Minutes, JCS, 114th Meeting, 14 Sep 43, and CCS, 280/8, 14 Sep 43; see also Twelfth Air Force Administrative History, Pt. I.
64. Organizational charts, MAAF (6 Nov 43) and 15th AF (31 Oct and 21 Nov 43); 15th AF Administrative History, Pt. I.
65. For the operations of the Fifteenth during November and December, see p. 265ff, this study.
66. CCS 217/2, 5 Nov 43.
67. CM-III-5020, Spaatz and Baker signed Eisenhower to Arnold, 9 Nov 43.
68. Ibid.
69. CM-III-13414, Arnold to Giles, 22 Nov 43; CM-III-15394, Arnold to Giles, 25 Nov 43; CM-OUE-361, Arnold to Baker, 1 Dec 43; Diary, AG/AS, OCS&R, 18 Nov 43, in AFSMO.

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70. History of 15th AF, Vol. II. This order of priority differed somewhat from one which General Spaatz had sent to General Arnold on the 10th, and which gave IIAAF's main objectives in the following order: to support the army in the Italian campaign by close support and interruption of lines of communication; to contribute to POLITICAL: to weaken the German position in the Balkans and the Aegean. See OI-III-7340, Spaatz signed Eisenhower to AGWAR for Arnold, 10 Nov 43.
71. History of 15th AF, Vol. II.
72. Minutes, GCS, 131st Meeting (S-LIAAF), 26 Nov 43.
73. History of 15th AF, Vol. II; OI-III-7340, Spaatz signed Eisenhower to AGWAR for Arnold, 10 Nov 43.
74. See interview, Col. C. A. Young, AG/S, A-2, 15th AF, 27 May 44, in History of 15th AF, Vol. II.
75. This use of IIAAF's heavies had also been typical of operations during the Tunisian and Sicilian campaigns. In addition, they had also been used for close support, as at Kasserine and Salerno.
76. OI-III-7340, Spaatz signed Eisenhower to AGWAR for Arnold, 10 Nov 43.
77. Hq. IIAAF, History of IIAAF, Dec 43-1 Sep 44; interview, Col. C. A. Young, AG/S, A-2, 15th AF, in History of 15th AF, Vol. II.
78. History of IIAAF, Dec 43-1 Sep 44.
79. History of IIAAF, Dec 43-1 Sep 44.
80. Id.; 15th AF Historical Summary, First Year of Operations, 1 Nov 44.
81. History of IIAAF, Dec 43-1 Sep 44.
82. Id.; 15th AF Historical Summary, First year of Operations, 1 Nov 44.
83. History of the 15th AF, Vol. II; see also OI-III-7340, Spaatz signed Eisenhower to AGWAR for Arnold, 10 Nov 43.
84. History of the 15th AF, Vol. II.
85. AG/AS, Intel. to Gen. Arnold, "Current Items of Air Intelligence," 11 Oct 43, in AAS 537-0.
86. AG/AS, Intel., "Oil Installations Within Bombing Range of Italian Bases," 5 Oct 43, in APAMP, European Br., "Oil Installations, etc." file.
87. See also Report of Committee of Operations Analysts, 8 March 43.

88. History of MAAF, Dec 43-1 Sep 44.
89. CM-III-7540, Spaatz signed Eisenhower to AGWAR for Arnold, 10 Nov 43.
90. CM-OUT-8601, Giles for Arnold, 22 Nov 43.
91. For the creation of MAAF, see Chap. VIII.
92. Data on personnel and number of aircraft supplied by Statistical Control, Hq. AAF.
93. Ltr., Craig for Giles to Spaatz, 19 Nov 43, in AAC 312-1-M.
94. AFMFR, Policy files, 12th AF, Vol. I.
95. "The French Air Force in MAAF, A Preliminary History," in AFSDO. See also AFMFR, European Br. "EAF" file, in WP-III-F-13 (North Africa No. 2); Weekly Report of Status of Aircraft and Combat Crews, MAAF, 23 Nov 43, prepared by 23d SORU, X-39656, in A-2 Lib. During this period French pilots were being trained in the United States at the rate of 50 per month and gunners at the rate of 20; they received an average of 100 hours of training. See CM-OUT-7255, Arnold to Spaatz, 18 Aug 43, in AFSDO.
96. CM-OUT-6755, Arnold to Spaatz, 17 Aug 43; CM-IL-9007, Spaatz signed Eisenhower to Arnold, 11 Sep 43; ltr., Maj. Gen. B. M. Giles, C/AS to CG 12th AF, 8 Oct 43, in AAC 312.1; Division Digest, MAAF, 13 Sep 43; interview, Col. C. A. Young, AG/S, A-2, 15th AF, 27 May 44, in History of 15th AF, Vol. II; unit histories, 512th Sq and 375th Bomb Co (H), Nov, Dec 43.
97. Hq. IAG to CG MAAF, Operations on the Italian Mainland, in Opns. Record Book, IAG, App. "V," Feb-Sep 43, incl.
98. For details of the movement see various unit histories, 12th and 15th AF's, Nov-Dec 43. See, especially, histories of the 2d, 17th, 97th and 376th Bomb Gps. The latter was the first heavy group to move to Italy.
99. CM-IN-12751, 12th AF to MAF, 20 Dec 43 (paraphrase), in AFMFR, European Br.; CM-IN-18114, Eisenhower to AGWAR, 28 Dec 43.
100. Memo for CG MAAF from AG/S, A-4, Hq. 12th AF, 24 Oct 43, in "Report on Airdromes" file, AFMFR, European Br.; Brig. Gen. D. A. Davidson to Lt. Gen. F. E. Morgan, Development of Airfields in Corsica, 8 Nov 43, in WP-III-F-13 (North Africa No. 2), AFMFR; memo from Col. J. L. Loutzenheiser, OPD for Gen. Kuter, 9 Nov 43, in "Availability of Airfields" file, AFMFR, European Br.; history of the Original XII AFSDO, pp. 204-205; A History of the 43d Bomb Wing;

memo for CG MAAF from Col. C. L. Booth, AG/S, A-4, IMAF, 25 Oct 43, in WP-III-F-12 (North Africa No. 2), AFAAF.

101. Hq. AAFEG/LEO (Prov), History of Policies Affecting Aviation Engineers in the Mediterranean Campaigns, 20 Jan 45; Command History, XII Air Force Engineer Command (Prov), Activation to 1 Jan 44.
102. *Ibid.*; memo for Gen. Kuter from Col. Joe L. Loutzenheiser, OPD, 9 Nov 43, in "Availability of Airfields" file, AFAAF, European Br.; Hq. AAFEG/LEO, The Handling and Consumption of Aviation Gasoline in the Mediterranean Theater of Operations, 3 Nov 42-1 July 44, p. 15.
103. Hq. AAFEG/LEO (Prov), History of Policies Affecting Aviation Engineers in the Med Campaigns; Hq. AAFEG/LEO, History of AAFEG/LEO, 1 Jan-30 June 44, p. 95 ff; Hq. AAFEG/LEO, The Handling and Consumption of Aviation Gasoline; CM-III-16345, Algiers to SAR, 25 Nov 43; The Outline History of the Corsica Air Sub-Area; Hq. AAFEG/LEO, History of the Original XII AAFEG; Brig. Gen. D. A. Davidson to Lt. Gen. F. E. Morgan, Development of Air fields in Corsica, 8 Nov 43, in WP-III-F-12 (North Africa No. 2), AFAAF; memo for Gen. Kuter from Col. J. L. Loutzenheiser, OPD, 9 Nov 43, in "Availability of Airfields" file, AFAAF, European Br.
104. Hq. AAFEG/LEO, The History of Adriatic Depot Under AAF Control; Hq. AAFEG/LEO, History of AAFEG/LEO, 1 Jan-30 June 44, p. 364 ff.
105. The Outline History of Corsica Air Sub-Area; Hq. AAFEG/LEO, History of the Original XII AAFEG, p. 203 ff.
106. Hq. AAFEG/LEO, History of the Original XII AAFEG, p. 205 ff; Hq. AAFEG/LEO, History of AAFEG/LEO, 1 Jan-30 June 44, pp. 117-122.
107. Hq. MASAF, "Plan for Movement of Expanded MASAF to the Italian Theater," 16 Sep 43, in "Italian Bases for Strategic Air Force" file, AFAAF, European Br.
108. General Eisenhower said at the end of November that MAAF "based in Italy was twice as effective as if it had remained in Tunisia." See Minutes, CDS, 131st Meeting (SIXTYEIGHT), 23 Nov 43.
109. Based largely on a discussion in Hq. MAAF, Air Intel. Weekly Sum No. 49.
110. For the effect of the weather on November and December operations, see Hq. MAAF Comd. and Intel. Sums and unit histories of the 17th, 28th, 319th, and 320th Bomb Gps. Actually, the weather did not prove to be appreciably worse than the AAF's Weather Division had predicted it would be, insofar as tactical operations were concerned.

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According to the Division's estimate TAF's operating days from 15 October through 31 December would be as follows:

1. Foggia Area (east of the Apennines)--Good--30 days; Possible, with restrictions--37 days; and not possible--21 days.
 2. Naples Area (west of the Apennines)--Good--14 days; possible, with restrictions--33 days; and not possible--32 days.
- See, Hq. AAF, Weather Div., "Estimate of Tactical Aircraft Operations, Italian Theater, 15 October 1943-1 January 1944," in "Report on Airdromes" file, AFAP, European Br. As brought out later in this study (in a discussion of TAF's operations in November and December) it was SIF, far more than TAF, which suffered from the weather.

- III. Beginning near the end of October, XII Bomber Command had set up a full training program for all its units. The program ranged all the way from bombing practice to instructions in ditching procedure. See Operations Memo No. 3-1, Hq. XII Bomber Command, 27 Oct 43, in AFHQ. At the same time several fighter groups began going through the 30- to 60-day training program necessary to shifting from P-40's to P-47's. See unit history, 325th Fighter Gp, Nov-Dec 43.

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Chapter VII

1. Basic data for the operations of TAF and SAF during November come from the following sources: TAF Med Review No. 5; Hq. TAAF, Air Intel. Weekly Sums Nos. 51-55; Hq. TAAF, Opnl. and Intel. Sums Nos. 254-284, 1 Nov-1 Dec 43; Hq. TAAF, Int/Opsums Nos. 205-234, 1-30 Nov 43; History of the 15th AF, Vol. II. All other sources of data and information are properly noted in footnotes.
2. See No. 242 Group Operational Instruction No. 10, 31 Oct 43, in AFSHO.
3. History of 15th AF, Vol. III.
4. To give only a single illustration: the 319th Bombardment Group (H) planned 18 missions during November; 10 of these were canceled and 3 more rendered abortive by weather. See unit history, 319th Bomb Gp (H), Nov 43.
5. History of 15th AF, Vol. II; interview, Col. G. A. Young, AG/S, A-3, 15th AF, 27-May 44, and interview, Brig. Gen. C. F. Born, AG/S, A-3, 15th AF, ibid.
6. Diary, AG/AC, O&R, 25 Nov 43, in AFSHO.
7. History of 15th AF, Vol. II.
8. This was the first mission by the new Fifteenth Air Force. It took place during the day of 1 November. See Historical Summary, First Year of Operations, 15th AF, 1 Nov 44.
9. See also memo for Gen. Arnold from Maj. Gen. B. H. Giles, C/AS, 15 Nov 43, in AMC 385-D.
10. Minutes, JCS, 130th Meeting, 25 Nov 43.
11. German single-engine fighter production had increased from around 400 per month in July 1942 to 600 per month in July 1943. Most of the increase came from three ML-109 complexes at Wiener Neustadt, Regensburg, and Leipzig. The former was within range of TAAF's heavies; from future bases around Toggia all three would be within range. See Hq. TAAF, "Air Power in the Mediterranean," App. C, pp. 2-3, in AFSHO.
12. See also CM-IN-3205, 13th AF to JAR, 5 Nov 43, in AFSHO; History of 15th AF, Vol. IV; unit history, 2d Bomb Gp (H), Nov 43.
13. Ibid.

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14. Interview, Brig. Gen. O. F. Born, AG/S, A-3, 15th AF, 2 June 44, in history of 15th AF, Vol. II.
15. RAF Med Review No. 5.
16. CM-OUT-2323, Arnold to Spaatz, 6 Nov 43, in AFSAO.
17. Memo for Gen. Arnold from Maj. Gen. S. M. Giles, G/AS, 15 Nov 43, in AAG 386-D.
18. Minutes of Military Conference Between the USA, Great Britain and the USSR, Teheran, 29 Nov 43.
19. Ibid.
20. See, especially, History of 15th AF, Vol. II.
21. See unit history, 319th Bomb Gp (H), Nov 43.
22. Planes on the return trip from missions to northern Italy or southern France frequently reached Sardinia or Corsica with engines out, gasoline low, or with severe battle damage. On such occasions the two islands were invaluable. See, for example, unit histories, 2d Bomb Gp (H), Nov-Dec 43.
23. CM-OUT-10388, CDS to Eisenhower, 25 Oct 43. For General Eisenhower's initial plans see CM-IE-6136, Spaatz signed Eisenhower to AGMAR for Arnold, 10 Nov 43, and CM-IE-4993, Eisenhower to AGMAR for CDS, 13 Nov 43.
24. See also Air Ministry Weekly Issues Nos. 221-222; CM-OUT-5998, Sexton to Lt. Col. McCarthy for Arnold, 15 Nov 43.
25. See, for example, unit history, 82d Fighter Gp, Nov 43.
26. Minutes, CDS, 131st Meeting (SECRET), 26 Nov 43.
27. History of 15th AF, Vol. II. For further details see AFSAO Study "Propaganda and Partisan Supply Operations of the AAF in the European Theaters."
28. Hq. 14CAF, "Mare Nostrum," pp. 8-9, 26; Air Ministry Weekly Issues Nos. 219-223; History, XII Fighter Command, 1 June 43-1 Jan 44.
29. As has been noted previously the CAF bomber effort in the Mediterranean was not limited to attacks on Italy and the central Mediterranean; actually, its largest operations were against the British who were trying to hold the Aegean islands of Leros and Samos.

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30. Hq. IAAF, Air Intel. Weekly Sum No. 53.
 31. Ibid. and No. 54.
 32. Based principally upon ltr., Col. G. O. McDonald, A-2, 13th AF to Maj. Gen. Clayton Bissell, AC/AS, Intel., 16 Nov 43, in AAG 000-500A, and upon estimates in Hq. IAAF, Air Intel. Weekly Sums Nos. 51-54.
 33. By the end of November the increase in air-sea rescue operations--made necessary by IAAF's growing activities over the Adriatic, the Aegean, and the northwestern Mediterranean--caused the AAF to send Coastal a new air-sea rescue squadron of 9 PBY-5's. See CM-CUT-1040E, Arnold to Spaatz, 26 Nov 43, in AIAAF, European Br.
 34. Statistics for November are based on the following: Hq. IAAF, Monthly Operations Bulletin No. 3, Nov 43; Hq. IAAF, Monthly Statistical Summary of IAAF, No. 1, Nov 43; Air Ministry Weekly Sums Nos. 219-223; History of 15th AF, Vol. III; History, XII Fighter Command, 1 June 43-1 Jan 44.
 35. CM-IN-10616, 13th AF to AC/AF, 17 Nov 43, in AFSAO.
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Chapter VIII

1. Fifth Army History, Vol. III, pp. 30-47; RAF Med Review No. 6.
2. The story of tactical and strategic operations during December is based on RAF Med Review No. 6; Hq. MAAF, Air Intel. Weekly Sums Nos. 56-59; Hq. MATAF, Int/Opsums Nos. 233-236, 1-31 Dec 43; History of 15th AF, Vol. II. Other sources of operational data are properly listed in footnotes.
3. Hq. MACAF, "Ware Nostrum," p. 14.
4. COS 425, 4 Dec 43. The increased support to the Partisans also was in keeping with COS 397/3, 3 Nov 43. For details of these operations see AFHQ Study "Propaganda and Partisan Supply Operations of the AAF in the European Theater."
5. CI-II-3460, Air Command Post signed Spaatz to Marshall for Giles, 5 Dec 43, in AFHQ; Hq. MAC, Outline Signal Plan for IAF Communications, 19 Dec 43, in AAG OOO.800-A.
6. "Air Attacks on Rail and Road Communications," Zuckerman Report, 23 Dec 43, in AFHQ.
7. MAAF, AC/AS, WLD, Air Ordnance Officer to AC/AS, Training, 29 March 44, in AAG OOO.800-A.
8. The effect of the operations of the Eighth and Fifteenth Air Forces against ball-bearing plants was somewhat nullified when Germany was able to obtain an increased number of bearings from Sweden. See Division Digest, AFHQ, 31 Dec 43.
9. History of 15th AF, Vol. II.
10. Hq. MAAF, A-2 Sec., Special Intel. Report No. 64, cited in History of MAAF.
11. Ibid.
12. The attacks on the 14th came immediately after a raid on Bari by German long-range bombers operating from across the Adriatic and may have been for the purpose of restricting such activities by the enemy in the future.
13. Hq. MAAF, A-2 Sec., Special Intel. Report No. 65, 23 Dec 43, quoted in History of MAAF.
14. Arnold to CG 15th AF, Priority FOUR, 27 Dec 43, in AFHQ.

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15. Ltr., Maj. Gen. B. H. Giles, O/AS to Gen. Spaatz, 27 Dec 43, in AAC 512-1-N and P-III-F-2 (Med), AAAF.
16. Ibid.
17. Division Digest, AAAF, 21 Dec 43.
18. See also CM-III-5976, MAAF to AGWAR et al., 9 Dec 43, in AAAF, European Br.; "Mare Nostrum," pp. 27-28.
19. CM-CUI-2132, Book Message, 6 Dec 43, in AAAF, European Br.
20. "Mare Nostrum," p. 28.
21. Air Ministry Weekly Isums Nos. 233-237; Hq. MAAF, Air Intel. Weekly Sums Nos. 55-59.
22. Ibid.; "Mare Nostrum," p. 28; History of XII Fighter Command, 1 June 43-1 Jan 44.
23. RAF Med Review No. 6; Hq. MAAF, Air Intel. Weekly Sums Nos. 55-59.
24. CM-CUI-2132, MAAF to MR et al., Book Message, 6 Dec 43, in AAAF, European Br.; Hq. MAAF, Air Intel. Weekly Sums No. 59.
25. For the major attacks, see above, this study.
26. Hq. MAAF, Air Intel. Weekly Sums Nos. 57-63.
27. It is interesting to note that in the period from 22 October 1943 to 22 January 1944 it required an average of 423 tons of bombs dropped for every complete blockage of an I/Y, whereas only 196 tons had to be dropped for every bridge interdicted. See OSS paper "Air Attack Against Bridges and Marshalling Yards," in AAAF, European Br. "Italy" file.
28. Hq. MAAF, Monthly Operations Bulletin No. 9, Dec 43; Monthly Statistical Summary of MAAF, No. 2, Dec 43; Air Ministry Weekly Isums Nos. 234-237 incl.; History of 15th AF, Vols. II-III; RAF Med Review No. 6; Operations of the 19th AF, 8 Nov 43 through 8 May 45; History of XII Fighter Command, 1 June 43-1 Jan 44.
29. Hq. MAAF, "Air Power in the Mediterranean," App. C, pp. 1-4, in AFSAO. According to this document, from 9 September 1943 to 3 December 1944 the ground forces' casualty rate (killed, wounded, missing in action--combat and noncombat) averaged 6.33% per month per 1,000 men, whereas the air forces' rate was 7.60%.
30. History of XII Fighter Command, 1 June 43-1 Jan 44.

31. This unified command, established during December but not operative until January 1944, would be known as the United States Strategic Air Forces in Europe (USSAFE) and would be under General Spaatz. From its headquarters in UK it would direct and coordinate the efforts of the Eighth and Fifteenth for the furtherance of the Cso-- which meant that the Fifteenth's primary mission would be directed by USSAFs and not by MAAF, although the theater commander could use the Fifteenth in the event of an emergency. Because USSAFE did not become operative until after 1 January 1944 the story of its creation is not included in this study.
32. OCS 357, 3 Nov 43.
33. Ibid.
34. OI-III-4198, Doolittle signed Eisenhower to Arnold for Spaatz, 7 Oct 43, in AFSAO.
35. The recommendations were embodied in OCS 367.
36. Minutes, OCS 131st Meeting.
37. Minutes, OCS, 135th Meeting, 5 Dec 43; OCS 357/3, 5 Dec 43.
38. OCS 357/3, 5 Dec 43.
39. OI-CUI-9353, Marshall to Eisenhower and Royce, 22 Dec 43.
40. G.O. No. 67, Ho. AFHQ, 30 Dec 43, X-44505, in A-2 Lib.
41. OCS 357/3, 5 Dec 43.
42. This possibility and the reasons why no real conflict ever developed are discussed in History of MAAF, Dec 43-1 Ser 44, Vol. 1.
43. OI-CUI-7103, Arnold to Devers for Portal, 18 Dec 43.
44. OI-CUI-7103, Arnold to Devers for Baker, 13 Dec 43.
45. OI-III-12181, Eaker signed Devers to Arnold, 19 Dec 43. General Eaker further said that if the final decision was for General Doolittle to take the Eighth and General Twining the Fifteenth, then he wanted General Edwards as his administrative deputy. This was the arrangement which was finally made.
46. OI-III-12615, Devers to Arnold, 20 Dec 43.
47. OI-CUI-7695, Arnold to Eaker, 20 Dec 43.
48. OI-CUI-8243, Ullo to CG MAHO, 22 Dec 43; OI-CUI-8544, Ullo to CG MAHO, 22 Dec 43.

49. CM-OUT-10938, Marshall to Devers, 28 Dec 43.
50. Message, AGWAR to MCOUSA & Algiers, 28 Dec 43, in History of MAAF, Vol. II.
51. 12th AF Administrative History, Vol. I, Pt. III; CM-IN-14359, Spaatz to AGWAR for Arnold, 22 Dec 43, and CM-IN-14751, Eisenhower to AGWAR, 28 Dec 43, in AFSAO.
52. History of MAAF, Dec 43-1 Sep 44, Vol. I. Another reason for not immediately disbarring MAAF was that the warrant for general courts-martial for Northwest Africa was currently in the name of the Deputy Air Commander of MAAF, and a new warrant suitable to MAAF's wider jurisdiction had not been issued. See CM-IN-326, Adv. Hq. MAAF, signed Eisenhower for AGWAR et al., 31 Dec 43, and CM-IN-13928, Air Command Post to Air Ministry et al., 22 Dec 43, in AFSAO.
53. Organizational Memo No. 1, Hq. MAAF (Adv), quoted in History of MAAF, Vol. II; CM-IN-326, Adv. Hq., MAAF signed Eisenhower for AGWAR et al., 31 Dec 43.
54. History of MAAF, Vol. I; CM-IN-6256, Spaatz signed Eisenhower to Arnold, 9 Dec 43, in AFSAO. It should be noted that the number of RAF combat planes actually assigned to combat units was only about 1,000, the rest being held in reserve. As General Spaatz put it in this message, the RAF "with a greater number of airplanes than MAF in the Theater has less than half AAF strength in combat units."
55. Organizational chart, Hq. MAAF, 27 Dec 43, in AFSAO. The titles MAAF and MAAF, MASAF and MASAF, etc. appear to have been used interchangeably and indiscriminately for several weeks after MAAF was established.
56. Hq. MAAF, "Air Power in the Mediterranean," p. 1.
57. History of MAAF, Vol. I.
58. Except that, on 3 December, II AFSAO (sp) was officially assigned to the Fifteenth and became XV AFSAO. See History of the Original XII AFSAO and 12th AF Administrative History, Vol. I, Pt. III. The transfer was per G.O. No. 93, Hq. 12thAF, 3 Dec 43.
59. Memo, Hq. 12th AF, 21 Dec 43, as cited in 12th AF Administrative History, Vol. I, Pt. III.
60. G.O. No. 1, Hq. AAF/INTO, 1 Jan 44.
61. 12th AF Administrative History, Pt. I; History of the Original XII AFSAO, p. 200; Hq. MAAF (Adv), Organization Memo No. 3, 7 Jan 44, cited in History of MAAF, Vol. II.

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- 62. CM-IV-6374, Eisenhower to AGMR, 10 Dec 43, in AFRSO.
- 63. Per G.O. No. 5, Eq. LMS, 31 Dec 43.
- 64. Historical Data, LMS, 25 May 43-31 May 44.

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BIGOT "BARRACUDA" - SECRET
(Equals British MOST SECRET)

HEADQUARTERS NORTHWEST AFRICAN AIR FORCE

OPERATIONS INSTRUCTION NO. 1

INFORMATION

1. "BARRACUDA" is the code name for an operation to land a force in the NAPLES area, to seize the port of NAPLES and establish a firm bridgehead, under the following circumstances:
 - a. No serious German opposition is to be expected in the NAPLES area.
 - b. The conditions favoring the operation may arise quickly, and if advantage of these circumstances is to be taken, the period of time necessary to mount a fully-prepared assault will not be available.
2. An element of risk must therefore be accepted, and it has been decided that the necessary steps be taken immediately to enable the assault convoy to sail at seven days' notice.
3. The operations will be undertaken by the American Fifth Army, and one division is being prepared so that it can sail from ORAN direct to NAPLES, assault loaded, on seven days' notice. The 82nd Airborne Division will be available to assist in the operations, up to the limit of the available troop carrier lift.
4. A brief outline of the assault plans will be issued in the near future. The assault convoy is now being brought to a state of readiness at ORAN, and it is estimated that it will be at seven days' readiness from today.

TASK OF THE AIR FORCES

5. The Allied Air Forces must be brought immediately to the necessary degree of readiness, and the appropriate administrative action must be taken to enable them to provide the fullest protection and support the operation. This must be done without reducing the efficiency of the Air Forces in current operations.
6. The tasks of the Allied Air Forces in Operation BARRACUDA are as follows:
 - a. To neutralize the enemy air forces, or reduce to the maximum extent possible their ability to intervene in the operations.
 - b. To provide protection for the assault convoys, the Port of NAPLES, and the area occupied.

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- c. By the attack of communications, known concentrations, etc., to prevent any effective opposition by enemy forces in the NAPLES area and to prevent or retard the reinforcement of these forces by German forces located in Northern and Southern ITALY.
- d. To exploit initial success to the fullest extent to ensure the annihilation of any German forces South of the NAPLES area, and if possible, the annihilation of any German forces in the remainder of ITALY.

PLAN OF AIR OPERATIONS

- 7. Should circumstances become favourable for the execution of Operation BARRACUDA, the main effort of the heavy and medium bomber forces will be switched to the attack of German Air Forces in the NAPLES area, and within effective range of the NAPLES area. Should the German land forces attempt to retire into Northern Italy, every effort will be made to prevent or retard that retirement by attacks on communication focal points, on road columns and on concentrations.
- 8. Fighters, night fighters, and fighter-bombers must be flown into the NAPLES area as soon as airfields have been occupied and are ready for use. The situation may be such, i.e., a rapid deterioration in the German position in ITALY, that airfields can be occupied and defended by Airborne Troops with the active assistance of the Italians, in which case we must be prepared to fly in fighters and fighter-bombers, together with essential supplies, before the military forces have landed.

PRELIMINARY ACTION TO BE TAKEN

9. The following action is to be taken forthwith to bring the Allied Air Forces to the necessary degree of readiness to undertake Operation BARRACUDA. The day on which the warning order is issued will be referred to throughout this Instruction as "X Day" (i.e., X Day is the day on which the Commanding General, Fifth U. S. Army, is instructed to embark and sail within seven days.)

Tactical Air Force.

- 10. The 31st Fighter Group is to be brought to the following degree of readiness:-
 - a. The Combat Echelon to be prepared to fly from SICILY to the NAPLES area from X plus 9.
 - b. The Air Echelon of the 31st Fighter Group to be at readiness to proceed to the NAPLES area by air transport with the combat echelon, and with a three days' level of technical supplies. The airfield from which they will proceed and the number of G-47s required to effect the move are to be signalled to this Headquarters.
 - c. The Ground Echelon of one squadron of the 31st Fighter Group is to be prepared to embark with its vehicles and equipment at PALERMO from X plus 7, taking a ten days' level of technical supplies for the Group. The remaining ground echelons to be prepared to embark at PALERMO on or before X plus 15.

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- d. The Service Group Forward Detachment now in SICILY with the 31st Fighter Group is to be prepared to proceed to PALERMO with vehicles and equipment to embark from X plus 15. It will be required to service both the 31st Fighter Group and the 27th Fighter-bomber Group during the initial period (if both are sent to NAPLES). It should carry a ten days' level of supplies for the A-36 Group and the Spitfire Group, and for one half P-51 Recce Squadron.

Disembarkation at NAPLES will be through the Port.

11. Eight R.A.F. Spitfire squadrons are to be nominated and brought to a state of readiness to fly into the NAPLES area from X plus 9. The servicing arrangements to be as follows:

- a. One Servicing Commando to be selected, reduced in size, and prepared to proceed by air to NAPLES with the combat units. It should carry essential tools and light spares for four Spitfire squadrons for one week. The airfield from which it will proceed and the number of C-47s required to effect the move are to be signalled to this Headquarters. A second Servicing Commando is to be prepared to embark at PALERMO from X plus 7. It should carry essential tools and light spares for four Spitfire squadrons for one week.
- b. The "A" Parties of these squadrons are to be prepared to move to PALERMO for embarkation, together with their equipment and vehicles, from X plus 15. They should carry a seven day level of technical supplies.
- c. The "B" Parties of these squadrons are to be prepared to embark at PALERMO from X plus 18, and to carry a seven day level of technical supplies.

12. The 27th Fighter-Bomber Group is to be brought to the following degree of readiness:

- a. The Combat Echelon to be prepared to fly from SICILY to the NAPLES area from X plus 9.
- b. The Air Echelon of the 27th Fighter-bomber Group to be at readiness to proceed to the NAPLES area by air transport with the combat echelon, and with a three days' level of technical supplies. The airfield from which they will proceed and the number of C-47s required to effect the move are to be signalled to this Headquarters.
- c. The Ground Echelon of one squadron of the 27th Fighter-bomber Group is to be prepared to embark with its vehicles and equipment at PALERMO from X plus 7, taking a ten days' level of technical supplies for the Group. The remaining Ground Echelons to be prepared to embark at PALERMO from X plus 15.

Disembarkation at NAPLES will be through the port.

13. The 111th Recce Squadron is to be brought to the following degree of readiness:

- a. Half the Combat Echelon to be prepared to fly from SICILY to the NAPLES area from X plus 9.

- b. Half the Air Echelon of the 11th Recce. Squadron to be at readiness to proceed to the NAPLES area by air transport with the combat echelon, and with a three days' level of technical supplies. The airfield from which they will proceed and the number of C-47s required to effect the move are to be signalled to this Headquarters.
- c. Half the Ground Echelon of the 11th Recce Squadron to be prepared to embark with its equipment and vehicles at PALERMO from X plus 7, taking a ten days' level of technical supplies for the half squadron.

Disembarkation at NAPLES will be through the port.

14. No. 40 Tac/R Squadron is to be brought to the following degree of readiness:

- a. Half the Combat Echelon to be prepared to fly from SICILY to the NAPLES area from X plus 9.
- b. The "A" or "B" Party, or the essential personnel for the maintenance of the half squadron, to be prepared to embark with equipment and vehicles at PALERMO from X plus 7.

15. Preparations are to be made to ensure that day and night fighter protection can be provided to the assault convoy between SICILY and NAPLES, and in the NAPLES area, until such time as fighters are operating from the NAPLES airfields. The division of responsibility for this commitment, as between Coastal Air Force and Tactical Air Force, is to be arranged direct between the Headquarters of those Commands. Three Groups of P-38s will be made available to assist in this task. The airfields to be used for refuelling and rearming the P-38 Groups are to be notified to this Headquarters and Headquarters, Strategic Air Force, by signal.

16. Arrangements will be made to ship to PALERMO as many long-range tanks for P-38s and Spitfires (90 gallons) as necessary. Stocks of P-40 tanks in SICILY should prove sufficient to meet requirements.

17. Be prepared to escort Troop Carrier aircraft on transportation flights and on day or night operations with Airborne Forces to the NAPLES area.

18. Nominate and alert two GCI/COLs and four Light Warning Sets, and prepare them to move to PALERMO for embarkation by X plus 7. Alert the GCI/COL mounted in L.S.T. No. 305 to be prepared to proceed immediately to BIZERTA or PALERMO, as required. Sailing instructions will follow. If considered necessary, alert additional Light Warning Sets to proceed to PALERMO by X plus 10. Whether U.S. and/or RAF light Warning Sets are used will depend upon the nature of the Forward Fighter Control organization established in the NAPLES area.

19. Select and alert the necessary additional units to provide communications and fighter control in the NAPLES area, to proceed to PALERMO by X plus 7. The Air Formation Signals unit for R.A.F. communications will proceed with the assault convoy loading at BIZERTA.

20. Select the officers to join the Headquarters Ship, to be flown back to Northwest AFRICA on receipt of the warning signal. Select and alert the Headquarters Staff to control operations in the NAPLES area. This staff to be ready to embark at PALERMO by X plus 7.

21. Prepare half the Combat Echelon of No. 600 Squadron, R.A.F., so that it can be brought to a state of readiness to proceed to the NAPLES area from X plus 7. Prepare the minimum number of ground elements for the efficient operation of the half squadron, so that they can proceed by Troop Carrier aircraft from X plus 7. Notify this Headquarters by signal the airfield to be used for departure, and the number of C-47s required to meet this commitment.

22. It is not expected that it will be possible to despatch all the combat units enumerated above in the early stages, or that the Troop Carrier aircraft will be available to meet all the transportation requirements. The arrangements are intended to allow choice between fighters or fighter-bombers, and to cover the possibility of a situation which can be rapidly exploited.

Service Command

23. Make arrangements to load immediately at ORAN, sufficient POL, SAA, bombs and other supplies to cover operations by the above forces at Intensive Effort for 14 days. Arrange follow-up shipments to keep the forces supplied at Intensive effort.

24. Make available for shipment at short notice:

- a. A 14-days' pack-up for eight R.A.F. Spitfire squadrons, and half a Night Fighter (Beaufighter) squadron.
- b. A ten-days' level of technical supplies for one U.S. Fighter Group (Spitfires), and one Fighter-Bomber Group (A-36s), and half a P-51 Recce Squadron.

Arrangements to be made to ship these supplies on an early convoy from Northwest AFRICA to NAPLES. Make follow-up arrangements to keep the forces supplied.

25. Arrange for one Quartermaster Truck Detachment to be loaded in the assault convoy. Detachment to consist of 22 vehicles and 50 personnel.

26. Arrange to ship immediately to SICILY as many Spitfire 90 gallon and P-38 long-range tanks as possible, up to the following totals:
300 90 gallon Spitfire tanks.
250 P-38 tanks.

27. Prepare one company of Aviation Engineers for embarkation in the assault convoy, either in Northwest AFRICA or PALERMO as convenient.

Troop Carrier Command

28. Be prepared to concentrate all available Troop Carrier aircraft by X plus 7, for airborne operations in the NAPLES area. Thereafter be prepared to despatch aircraft to SICILY to transport Air Force units and equipment to the NAPLES area.

216 Group, R.A.F.

29. Be prepared to concentrate all available aircraft at seven days' notice to proceed to SICILY to transport Air Force units and equipment to the NAPLES area.

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Strategic Air Force

30. Be prepared to concentrate all heavy bomber effort on to air-fields and communications in the NAPLES area as directed, and all medium bomber effort onto communication targets South of NAPLES. Prepare three P-38 Groups for despatch to SICILY by X plus 7 on call forward, to operate on an advanced landing ground basis under the operational control of the A.O.C., Tactical Air Force during the assault phase.

Coastal Air Force

31. Be prepared to escort convoys to PALERMO and to cover them from PALERMO to the limit of effective range. The division of responsibility for this commitment as between Tactical Air Force and Coastal Air Force to be arranged direct between the Headquarters of those Commands.

32. Nominate and prepare for embarkation at BIZERTA within four days of receipt of this instruction, one Port Balloon Detachment formed to establishment MED/44.

33. Be prepared to reinforce the Coastal Air Force units in SICILY at six days' notice to replace fighter units withdrawn by Tactical Air Force.

34. Make arrangements, in conjunction with H.Q., Tactical Air Force, to extend the Air/Sea Rescue organization to cover the area between SICILY and NAPLES.

General

35. Detailed examination of the requirements is proceeding and further instructions will be issued in the near future. In the meantime, action as outlined above is to proceed forthwith.

36. The Warning Order will consist of a signal "BARRACUDA ALERT". This will be followed immediately by further instruction and information.

37. Acknowledge by signal the receipt of these instructions.

By command of Lieutenant General SPAATZ:

E. P. CURTIS,
Brigadier General,
Chief of Staff

OFFICIAL:

/s/ T. J. Brogan
T. J. BROGAN
Colonel, AGD,
Asst. Adjutant General

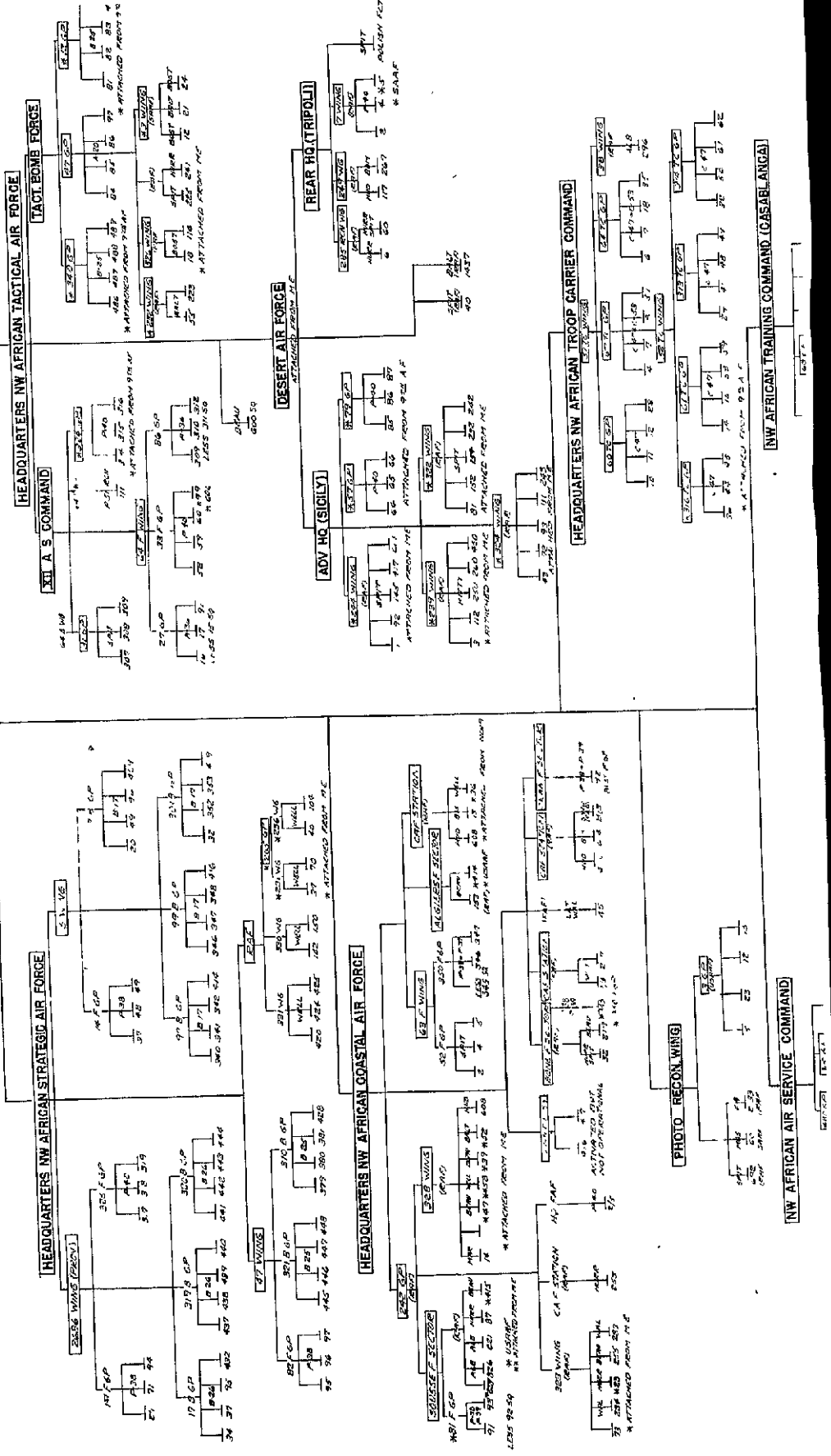
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NORTHWEST AFRICAN AIR FORCES

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AIR UNITS



Annex No. 3*

9 September 1943

MEMORANDUM FOR: A.G. of S., G-3,
Allied Force Headquarters

SUBJECT : Mission to ROME.

1. In compliance with verbal orders from AFHQ and the Fifteen Army Group, Brigadier General Maxwell D. Taylor and Colonel W. T. Gardiner, A.C., left Palermo for Rome at 0200 September 7 for the purpose of completing arrangements in Italy for the execution of Operation GIANT TWO. Transportation was by a British P.T. boat to Ustica Island where the party was transferred to a waiting Italian corvette. Rear Admiral Maugeri, Chief of Naval Intelligence, received the American officers on board and remained with them until their arrival in Rome. The corvette put into Gaetast 1950 where the party was quickly put in a Navy sedan, taken to the outskirts of town and transferred to a Red Cross Ambulance. The trip up the Appian Way to Rome was uneventful. Few German troops were seen and the visible defenses along the route were unimpressive. The party entered Rome just at nightfall and was taken to the Palazzo Caprara opposite the War Office (intersection of V. Firenze and V. 20 Settembre) where accommodations had been prepared.

2. Colonel Salbi, Chief of Staff to General Carboni, the General's Aids, Lt. Lanza and Major Marchesi received the officers. No conferences had been scheduled for that evening but, at the insistence of the Americans, interviews were hastily arranged with General Carboni, Commanding the Army Corps about Rome (concurrently Chief of Intelligence since August 20) and General Rossi, Deputy Chief of the Supreme General Staff. For reasons shown subsequently the interview with Rossi did not take place.

3. Interview with General Carboni.

General Carboni arrived at 2130. He immediately launched upon an expose of his views of the military situation in the Rome area. Since the fall of Mussolini (he said), the Germans had been bringing in men and supplies thru the Brenner Pass and also thru Resia and Tarvisio, with the result that their forces near Rome had greatly increased. There were now 12,000 Germans principally parachutists in the valley of

* From Outline History, 51st Troop Carrier Wing, 17 August-30 September 1943.

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the Tiber who have heavy equipment including 100 pieces of artillery, principally 88 mm. The Panzer Grenadier Division had been raised to an effective strength of 24,000 men with 50 light and 150 heavy tanks. In the meantime the Germans had ceased to supply the Italians with gas and munitions so that their divisions were virtually immobilized and had only enough ammunition for a few hours of combat. General Carboni's estimate of the situation was as follows:

If the Italians declare an armistice, the Germans will occupy Rome, and the Italians can do little to prevent it. The simultaneous arrival of U. S. airborne troops would only provoke the Germans to more drastic action. Furthermore the Italians would be unable to secure the airfields, cover the assembly and provide the desired logistical aid to the airborne troops. If it must be assumed that an Allied seaborne landing is impossible North of Rome, then the only hope of saving the capital is to avoid overt acts against the Germans and await the effect of the Allied attacks in the south. He stated that he knew that the Allied landings would be at Salerno, which was too far away to aid directly in the defence of Rome. He stated that General Roatta shared his views.

4. It was apparent to the American officers that regardless of the soundness of General Carboni's information and views, he displayed an alarming pessimism certain to affect his conduct of operations in connection with GIANT TWO. General Taylor proposed that they request an immediate interview with Marshal Badoglio to permit General Carboni to present his recommendations and receive the decision of the Head of the State. The interview was requested and granted.

5. The delegation reached Marshal Badoglio's private villa at about midnight, where the household was awake as the result of an air alarm. General Carboni was received at once by the Marshal while the American officers waited in the antechamber. After about fifteen minutes they were admitted and greeted cordially by the Marshal. Throughout the ensuing interview he made frequent expressions of his friendship for the Allies and his desire to enter into effective cooperation.

6. Interview with Marshal Badoglio.

General Taylor explained the late visit, saying that General Carboni had raised questions so grave that the immediate decision of the Head of the State was required. Was Marshal Badoglio in accord with General Carboni in considering an immediate armistice and the reception of airborne troops impossible of execution? The Marshal replied that he agreed with Carboni and repeated much the same arguments. General Taylor asked if he realized how deeply his government was committed by the agreements entered into by the Castellano mission. He replied that the situation had changed and that General Castellano had not known all the facts. The only result of an immediate armistice

would be a German supported Fascist government in Rome. He was asked if he feared the possible occupation of Rome by the Germans more than the renewed attacks of the Allied Air Forces which would certainly come if he rejected the armistice. He answered with considerable emotion that he hoped the Allies would not attack their friends who were only awaiting the right moment to join forces. If any bombing is to be done let it be on the Northern rail centers serving the German troops.

In reply to the question as to how he expected the Allied Chiefs to react to these charges he expressed the hope that General Taylor would return and explain the situation. The latter declined to accept any responsibility for the Italian interpretation of the situation but offered to act as a messenger if so instructed by the Allied authorities. The urgent business was to send to Algiers a definite statement of the Italian views over Badoglio's own signature.

7. The Marshal accepted this proposal and drafted the message which is appended as Inclosure 1. General Taylor prepared another message at the same time (Inclosure 2) recommending the cancellation of GIANT TWO, and requesting instructions for himself and Colonel Gardiner. The visitors withdrew and returned to the Palazzo Caprara where the two messages were turned over to General Carboni for transmission. At 0800 the next morning, word was received of their reception in Algiers.

8. In order to present a clearer picture of the local situation, General Taylor with the concurrence of General Carboni and Colonel Gardiner sent off the message attached as Inclosure 3. At 1135, as no acknowledgement of the message recommending the cancellation of GIANT TWO had been received, the code phrase "Situation Innocuous" (Inclosure 4) was sent off. This had not been sent initially as its use had been reserved for the case of an Italian refusal to transmit a request for cancellation. It was used in this instance to save time as the encoding of longer messages was taking as much as three hours.

9. The Italians showed great concern over the possible reaction of the Allied Chiefs to their reversal of position on the armistice. The American officers reinforced their apprehension by emphasizing the gravity of the situation in which the Badoglio government found itself. The Italians repeatedly urged the American officers to return and plead their case whereas the latter declined to be anything other than messengers. It was then decided that some senior officer should return with the Americans. The name of General Roatta was first proposed then withdrawn as he was considered indispensable in dealing with the Germans. (He had been military attache to Germany.) General Rossi, Deputy Chief of the Supreme General Staff, was eventually selected and message No. 4 (Inclosure 5) was dispatched.

10. The American officers expressed a desire to see General Ambrosio, Chief of the Supreme General Staff who was reported to be out of the City.

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This interview was arranged eventually for 1830 but never took place as the officers were ordered back to Tunis by a message arriving about 1500. Although no authorization for their visit had been received, General Rossi and Lt. Tagliavia (interpreter) joined the American officers who were again put in an ambulance and driven to the Centocelle airfield. The party took off at 1705 in a tri-motor Savia-Marchetti bomber which flew straight to El Aouina, Tunis, arriving at 1905. The officers were driven from here to "Fairfield" where the Americans reported to the Commander in Chief.

11. Conclusion.

While the Castellano mission was committing the Bodoglio government to active military cooperation, the Germans were building up their strength in the Rome area and throttling the flow of munitions and gasoline to the Italian troops. Although their fear of the Germans was mounting daily, the Italian leaders allowed themselves to become deeply committed to the Allies in the belief (so they said) that the major landings would be near Rome. By the time General Taylor and Colonel Gardiner arrived this illusion dispelled and the Italians knew for certain that AVALANCHE would strike in the Salerno area. While this produced a profound pessimism and a realization of their over commitments, they were allowing matters to drag without redefining clearly their position to the allies. The arrival of the American officers, their insistence on the imminence of events and the importance of action brought matters to a head and stopped an operation (GIANT TWO) which was near being launched into a situation which invited disaster.

MAXWELL D. TAYLOR,
Brigadier General, U.S. Army

W. T. GARDINER,
Colonel, Army Air Forces.

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Inclosure 1

Message of Marshal Badoglio to Allied Commander in Chief

Translation

Due to changes in the situation brought about by the disposition and strength of the German forces in the Rome area, it is no longer possible to accept an immediate armistice as this could provoke the occupation of the capital and the violent assumption of the government by the Germans. Operation GIANT TWO is no longer possible because of lack of forces to guarantee the airfields. General Taylor is available to return to Sicily to present the views of the Government and awaits orders.

Badoglio.

Inclosure 2

SECRET

Message No. 1

8 September

In view of the statement of Marshal Badoglio as to inability to declare armistice and to guarantee fields GIANT TWO is impossible. Reasons given for change are irreplaceable lack of gasoline and munitions and new German dispositions. Badoglio requests Taylor return to present government views. Taylor and Gardiner awaiting instructions. Acknowledge.

Taylor Time signed 0121

Inclosure 3

SECRET

Message No. 2

8 September

Summary of situation as stated by Italian authorities. Germans have 12,000 troops in Tiber valley. Panzer Grenadier Division increased by attachments to 24,000. Germans have stopped supply gasoline and munitions so that Italian divisions virtually immobilized and have munitions only for a few hours of combat. Shortages make impossible the successful defense of Rome and the provision of logistical aid promised airborne troops. Latter not wanted at present as their arrival would bring an immediate attack on Rome. Source of these views Marshal Badoglio and General Carboni.

Taylor

Time signed 0820

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Inclosure No. 4

~~SECRET~~

Message No. 3

8 September

Situation innocuous.

Taylor

Time signed 1135

Inclosure No. 5

~~SECRET~~

In case Taylor is ordered to return to Sicily, authorities at Rome desire to send with him the Deputy Chief of the Supreme General Staff, General Rossi, to clarify issues. Is this visit authorized?

Taylor

Time signed 1140

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STATISTICS ON AF AND RAF OPERATIONS IN ILO
(Including: Middle East) Feb-Dec 1943

Year	No.	Sorties			Bomb Tonnage (Short Tons)			Aircraft Inventory			Personnel		
		RAF	TOTALS	RAF	RAF	TOTALS	RAF	TOTALS	RAF	TOTALS	RAF	TOTALS	
1943	Feb	1332	10730	14,094	1773	832	2,605	--	--	71337	136108	199,075	
	Mar	6478	16894	13,372	3773	3754	5,527	--	--	79649	137322	207,176	
	Apr	12665	22248	35,321	6042	3332	8,374	--	--	79436	133381	209,144	
	May	12734	12295	28,029	7436	2978	10,414	--	--	81330	133344	211,004	
	Jun	13248	13146	25,394	8408	2938	11,347	4146	4978	92239	130344	223,147	
	Jul	24339	52700	47,069	13250	4888	18,138	4268	5110	95044	167333	267,570	
	Aug	21532	17352	29,190	12400	5430	17,830	4315	5355	97020	170419	267,438	
	Sep	20659	10720	31,379	12941	4787	19,723	3002	6013	115350	170900	294,316	
	Oct	14124	13710	27,836	8915	2829	11,744	3673	6091	119374	161339	300,613	
	Nov	15856	13123	29,782	7238	2370	9,608	379	6449	128933	161924	310,887	
	Dec	18948	13632	32,580	10183	1001	11,184	3180	8255	131013	184427	315,440	
TOTALS		104,322	322,170,534	372,537	92,040	33,917	125,957	--	--	--	--	--	

NOTE: All figures are month-end figures. Personnel figures for USAAF are those of the 15th AF until the establishment of the 15th AF in ILO; thereafter, figures are for 15th & 15th AF

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