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THE PART PLAYED BY THE ALLIED AIR FORCES IN THE  
 FINAL DEFEAT OF THE ENEMY IN THE MEDITERRANEAN  
 THEATRE, MARCH TO MAY, 1945.

*The following despatch was submitted to the Secretary of State for Air in September, 1946, by Air Chief Marshal Sir GUY GARROD, K.C.B., O.B.E., M.C., D.F.C., Commander-in-Chief, Royal Air Force, Mediterranean and Middle East, and Deputy Air Commander-in-Chief, Mediterranean Allied Air Forces.*

INTRODUCTION.

1. This despatch bears witness to the part played by the Air Forces in the final stages of the Mediterranean campaign. Their contribution was one of the deciding factors in the final victory in that Theatre. The despatch covers the period of my appointment as Commander-in-Chief, Royal Air Force, Mediterranean and Middle East, and as Deputy Air Commander-in-Chief, Mediterranean Allied Air Forces, from 16th March, 1945, when I assumed command from Air Marshal Sir John Slessor, until hostilities ceased in the Theatre—on 2nd May, 1945, for the Italian Sector, and 8th May, 1945, for the Balkan Sector.

2. The purpose of a despatch is to give a short and lucid account of the main events during the period of a Commander-in-Chief's appointment. This task may not present any major difficulty in the case of a Command such as Bomber Command, which is purely functional, with singleness of aim and resources. But in the case of a geographical Command such as MEDME, the task is more complicated. Not only did my Command contain within it the three main types of functional command—Strategic, Tactical and Coastal—so that I was responsible for a complete range of operational air activity, but it also presented a large

number of problems not directly operational in character, some of them purely air matters, such as questions of Transport Command bases, some of them of a political nature, such as my dealings with the Greek and Yugoslav governments.

3. Then again, MEDME command had an unusual structure, arising out of the development of the war in the Mediterranean, in that it contained as a sub-command the R.A.F. Middle East, whose chief problems in 1945 concerned internal security and training matters. It was desirable therefore that the A.O.C.-in-C. R.A.F. Middle East, though under my command, should exercise a large measure of autonomy.

4. Finally, the operations of the Royal Air Force in MEDME were inextricably bound up with those of the United States Army Air Force. An integration of Command had been achieved which was more complete than that to be found in any other Theatre. So it would be quite impossible to write a despatch dealing only with R.A.F. activities—it would be like trying to build a house with only two walls.

5. Under these circumstances, I have not attempted to deal with every subject which arose during my period of command, but only with outstanding events. I have given only as much detail as was necessary to present a balanced picture of these events. In particular, I have not attempted to cover the problems which arose in the Middle East, nor have I given a complete history of each of the R.A.F. formations under my command—their activities are covered only in so far as they participated in the main events described.

6. The period falls into two main parts. The first is from 16th March to 8th April, the time from my assumption of command to the beginning of the final ground offensive in Italy, and the second is from 9th April to 2nd May, in which the final Italian offensive took place.

7. There was one event, however, which was taking place during the whole of the period, and therefore cannot conveniently be dealt with in the arrangement of parts I have described; I refer to the offensive by Marshal Tito's Fourth Army in Yugoslavia. It began before the Allied offensive in Italy and continued a few days after the German surrender in Italy. Because of this, I have devoted an early part of the despatch entirely to this subject and this has enabled me also to describe, more fully than would otherwise have been possible, the special organisation of command of the Balkan Air Force, and the special problems with which it had to contend.

#### PART I.

### CONDITIONS IN THE MEDITERRANEAN THEATRE ON MARCH 16TH, 1945.

#### *The Ground Situation.*

8. The enemy ground forces in the Italian theatre consisted of the German 10th and 14th Armies comprising some twenty-five divisions, which were stretched along a line reaching roughly from Lake Comacchio on the Adriatic Coast through Vergato, South of Bologna, to Pietrasanta on the west coast. This was the line which had been finally stabilised after the Allied Offensive in the summer of 1944 had battered its way from Cassino up the Italian peninsula, and had only just failed to overflow into the Po Valley. The Fifth Army had been unable to reach Bologna before winter conditions had made operations in the mountains impossible, and the Eighth Army, when it reached the Po Valley on the East coast after long and hard fighting, found itself confronted by a series of formidably defended river lines which it was unable to pierce without sustaining very heavy casualties.

9. It did not prove possible to make any further progress during the winter. Both Allied Armies were very tired after a most exhausting campaign, while the enemy had managed to improve his supply position since he had been falling back on his dumps. Moreover, the Allied ground forces were weakened by the withdrawal of divisions to reinforce other theatres, with the consequence that a large number of anti-aircraft gunners had to be trained as infantry, and this required time.

|                                 | Infantry | Artillery |      |       | Tanks |       |
|---------------------------------|----------|-----------|------|-------|-------|-------|
|                                 |          | Hvy.      | Med. | Fld.  | Med.  | Light |
| 15TH ARMY GROUP ... ..          | 82,100   | 134       | 492  | 1,424 | 2,426 | 612   |
| 10TH AND 14TH GERMAN ARMIES ... | 74,500   | 25        | 250  | 771   | 200   | —     |

NOTE.—The above figures do not show the number of men manning the Artillery and the Tanks. Moreover, they do not include men and equipment not actually employed in a fighting rôle in the opening phases of the battle.

The American Fifth and British Eighth Armies comprised seventeen divisions and ten brigades of many nationalities—British, American, New Zealand, South African, Indian, Palestinian, Polish and Brazilian—while four Italian Gruppi also played an important part.

#### *The Air Situation.*

15. On March 16th the enemy in the Italian

10. It was decided at the beginning of January 1945 that the 15th Army Group would plan for an all-out offensive in the early Spring. The date of the attack would be at a time when good weather could be expected for air and armoured operations and when both armies could deploy their maximum strength against the enemy, having rested those divisions required for the assault and built up adequate reserves of supplies and a great superiority of tanks and guns.

11. To the Allies it was clear that the enemy would at all costs stand and fight where he stood. He was forced to adopt this attitude by the complete superiority of the Allies in the air\*. He dared not retreat since air action had deprived him of practically all means of transporting fuel from Germany into Italy, and any considerable withdrawal would have meant the expenditure of almost all of his slender fuel reserves. In any event he could not afford to abandon without a fight territory whose possession would have enabled us to move our bomber bases so much nearer to Germany itself. Furthermore, any large scale movement would have been extremely hazardous, as he would have laid himself open to intensive and continuous air attack both by day and by night.

12. By the beginning of April the Allied armies were ready once again to resume the offensive, rested and re-equipped. The enemy on the other hand, constantly harassed by air attack throughout the Winter and Spring, had had but little rest, and only a trickle of new equipment had come to him, so that he was forced to rely mainly on such of his old material as the Allied Air Forces had left him intact.

13. It was, of course, obvious to the enemy that the Allies intended to launch a major offensive in the near future. The disposition of his forces suggested that he was awake to the possibility of amphibious operations at the head of the Adriatic, combined with a frontal attack. He had split his mobile reserve of two divisions accordingly to deal with either or both eventualities. He also showed his appreciation of the vulnerability of the Argenta-Ferrara axis, and of the area West of Bologna where the Allies were in a favourable position to carry out an outflanking thrust towards Modena.

14. The following table gives some figures to illustrate the comparative strengths of the Allied and German resources employed in the opening phases of the offensive:—

theatre could put into the air at most 130 aircraft. The Allies could put 4,000. Such figures speak for themselves—the enemy was outnumbered in the air by approximately 30 to 1. Air superiority—which is nowadays the essential pre-requisite to victory on the ground—had been attained in North Africa and never again relinquished, for although enemy air

\* See paras. 15–17 below.

resistance flickered up in Sicily, the bid to regain superiority failed. The cumulative effect of our air strategy and fighting had been so to reduce his numerical strength and ability to hit back, that during the final Italian offensive enemy air action could be virtually disregarded as an effective factor.

16. Although the enemy's air force in Italy was a negligible quantity, he had in that country a formidable array of 1,000 heavy and 2,200 light flak guns as well as countless small arms in an anti-aircraft role. He was therefore capable of putting up a very strong defence at important targets, and the Tactical Air Force had been compelled to develop a fairly complicated system of anti-flak tactics in order to avoid undue losses.

17. The freedom of the air enjoyed by the Allies in the Italian theatre allowed the greatest flexibility in the use of air effort, resulting in a high degree of efficiency. Moreover, its effect upon the morale of the German troops was most depressing; it kept them constantly reminded of the great advantage in material and weapons enjoyed by the Allies.

#### *The Naval Situation.*

18. The Allied Navies in the Mediterranean were as much masters of the seas as the Allied Air Forces were masters of the air. There were no major enemy surface units left in the theatre, while submarines had been driven from it by the thoroughness and efficiency of our combined naval-air operations, and by the overrunning of their bases. The chief threat which remained was offered by small craft and midget submarines.

19. The major task of the Allied Navies was to maintain the assault on the enemy's few remaining coastal sea routes, whose importance increased as the Air Forces' policy of destroying the enemy's land communications achieved substantial successes. This assault was carried out by British and United States Coastal Forces and destroyers, operating from Naval Advanced Bases at Ancona, Leghorn and in the South of France. In addition a mixed force of French, British and United States cruisers and destroyers, under a French Admiral, was operating continuously in support of the seaward flank of the Allied Forces holding the Franco-Italian frontier, giving gun-support from the sea. This force, which was known as "Flank Force," was under constant threat of attack from the enemy's explosive motor boats and midget submarines.

20. The enemy had carried out a programme of intensive mining, both to protect his coastal convoy routes and to hamper naval operations in support of the coming offensive. As these mines could be easily and quickly laid from small craft of various types, and as he had an adequate stock of mines, the result was to produce a minesweeping problem greater than any which had previously confronted the Navy in the Mediterranean. It was estimated that some 7,000 mines had been laid in the Gulf of Genoa, and 12,000 in the Northern Adriatic, where the whole area was particularly suitable for mine laying. The enemy also prepared detailed plans for the denial of harbours by

demolitions, blocking and mining, in all of which work he had by this time had a great deal of experience.

#### *The Maintenance Aspect.*

21. By dint of the fine efforts of the R.A.F. Maintenance Organisation the degree of aircraft serviceability was high when the land battle started. The policy during the battle was to use our air forces to the maximum extent of which the aircrews and maintenance personnel were capable. It was confidently believed that the enemy could be defeated within 21 days, and the event proved that this estimate and the policy of an all-out effort was sound.

22. The same policy was followed by the Army, which had sufficient ammunition and supplies and reserves for only about 21 days of intense operations.

23. From the foregoing paragraphs it will be seen that we had all the necessary superiority in equipment—especially aircraft and tanks—to launch a successful offensive. Most important was our predominance in the air, which meant that our own army was safe from air attack and at the same time could be led forward and constantly assisted by the Air Force.

## PART II.

### THE ORDER OF BATTLE.

#### ORDER OF BATTLE ON MARCH 16TH, 1945.

24. The Mediterranean Allied Air Force was formed on December 10th, 1943. By March, 1945, it had already built up a fine reputation of accomplishment, and I was privileged to be in command during its highest peak of achievement and ultimate victory. The work of this integrated British-American Command has now finished, but let us hope that the lessons and advantages of co-operation which have been learned will be put to even better use in peace.

25. M.A.A.F. consisted of all operational units in the Mediterranean Theatre (which included Turkey, the Balkans, Central and South Western Europe, but excluded the Middle East); the main components were the Royal Air Force (including units of the Dominion Air Forces under its command) and the United States Army Air Forces. Operational control of all these units was exercised by the Air Commander-in-Chief, who was responsible through the Supreme Allied Commander to the Combined Chiefs of Staff. The Air C.-in-C. also held the appointment of Commanding General United States Air Forces, Mediterranean Theatre of Operations.

26. As Deputy Air Commander-in-Chief, M.A.A.F., I exercised such responsibilities in regard to the Allied Air Forces as might be delegated to me by the Air Commander-in-Chief. As Commander-in-Chief Royal Air Force Mediterranean and Middle East, I was responsible for all R.A.F. operations in the MEDME Theatre; responsible to the Air C.-in-C., M.A.A.F., for those in that part of MEDME falling within his province, and to the Chief of the Air Staff for those in the remainder of the theatre. When I took over from Air Marshal Sir John Slessor, K.C.B., D.S.O., M.C., on March 16th to become Deputy C.-in-C., M.A.A.F., and C.-in-C., R.A.F., MEDME,

Lieutenant-General Eaker had been in Command of M.A.A.F. since January 15th, 1944. He was succeeded by Major-General J. K. Cannon on March 28th, 1945.

27. By the beginning of April practically all the squadrons were based in Italy. An analysis shows that at this time the Air C.-in-C., M.A.A.F., had under his operational command a total of 258 Squadrons consisting of 155 American, 77 Royal Air Force and Dominion Air Force, 13 co-belligerent Italian, 5 French, 2 Yugoslav, 2 Polish, 3 Greek and 1 Brazilian. To man and maintain these squadrons there were 164,000 American personnel and 79,000 British personnel, besides many of our other Allies. I should like to mention here the fine contribution made to the British effort by the South African Air Force which, at this time, maintained a total of 23½ squadrons in the Mediterranean and Middle East Theatre.

#### HEADQUARTERS, MEDITERRANEAN ALLIED AIR FORCES.

28. The Air Commander-in-Chief's Allied Headquarters was a comparatively small one, consisting of integrated staff sections for planning, operations, intelligence and signals. The keynote of these sections was the inter-leaving of British and American personnel.

#### THE CHIEF FIGHTING FORMATIONS.

29. The chief fighting formations under the Command of the Air Commander-in-Chief were the Mediterranean Allied Strategic Air Force, the Mediterranean Allied Tactical Air Force, the Mediterranean Allied Coastal Air Force and the Balkan Air Force.

#### *Mediterranean Allied Strategic Air Force.*

(Major-General N. F. Twining, Commanding General.)

30. M.A.S.A.F. was predominantly an American organisation, and consisted of the United States 15th Air Force, and 205 Group of the Royal Air Force (Commanded by Brigadier J. T. Durrant, C.B., D.F.C., S.A.A.F.). There were 109 U.S.A.A.F. and 8 R.A.F. and Dominion Squadrons.

31. M.A.S.A.F. formed part of the team of Allied Strategic Air Forces in Europe, the other members being the United States Eighth Air Force and the Royal Air Force Bomber Command. The aim of these forces was the progressive destruction and dislocation of the German military, industrial and economic system, and the direct support of land and naval forces. All M.A.S.A.F. squadrons were based in South-East Italy, chiefly on the Foggia Plain.

#### *Mediterranean Allied Tactical Air Force.*

(Major-General J. K. Cannon, Commanding General.)\*

32. M.A.T.A.F. was composed of the United States 12th Air Force and the Royal Air Force Desert Air Force, which were roughly equal in size. The role of M.A.T.A.F. was to provide the air support required for the operations of Allied land forces in the Italian theatre. To perform this task it had 89 Squadrons, consisting of 42 U.S.A.A.F., 44 R.A.F. and Dominion, 1 Brazilian and 2 Polish.

33. There were four main operational formations within the organisation of M.A.T.A.F.—the Desert Air Force, 22nd Tactical Air Command, the 57th Wing (Medium bombers) and the 51st Troop Carrier Wing.

34. *The Desert Air Force*, commanded by Air Vice-Marshal R. M. Foster, C.B., C.B.E., D.F.C., consisted of a total of 43 squadrons, and was employed chiefly in support of the British Eighth Army. It was composed for the most part of Royal Air Force and Dominion squadrons (11 of which were South African Air Force) but it had also under its operational control three squadrons of American long range fighter-bomber aircraft in order to give it a flexibility not obtainable with the British types of aircraft at its disposal.

35. *The 22nd Tactical Air Command*, commanded by Brigadier-General Chidlaw, was employed chiefly in support of the American Fifth Army and consisted mostly of U.S.A.A.F. squadrons. It did, however, have under its operational control two R.A.F. tactical reconnaissance squadrons and four R.A.F. and Dominion short range fighter and fighter-bomber squadrons.

36. *The 57th Wing* was a purely American formation controlling twelve squadrons of B.25 medium bomber aircraft, and was employed anywhere within the Italian theatre as required. This wing played an outstanding part in the strangling of the enemy's communications.

37. *The 51st Troop Carrier Wing* was also a purely American formation, controlling twelve squadrons of C-47 transport aircraft. It performed a wide variety of functions, including airborne assaults if required, supply dropping, and air ambulance work.

38. Headquarters Desert Air Force and Headquarters 22nd Tactical Air Command were always located alongside Headquarters Eighth Army and Fifth Army respectively. Demands for air support were passed by each Army Headquarters to its fellow Air Headquarters.

#### *Mediterranean Allied Coastal Air Force.*

(Air Vice-Marshal J. Whitford, C.B., C.B.E., Air Officer Commanding)

39. The direction of M.A.C.A.F. was almost entirely an R.A.F. concern by March, 1945, by which date the formation consisted of seven R.A.F. and Dominion squadrons, four Italian squadrons, four French squadrons and two U.S.A.A.F. squadrons. The operational role of M.A.C.A.F. was the air defence of Allied shipping, the attack of enemy shipping, the air defence of the Italian peninsula (with the exception of the forward areas where the responsibility was M.A.T.A.F.'s) and finally the operation of Air Sea Rescue services in the Adriatic and the Western Mediterranean up to the area of responsibility of Air Headquarters, Malta. By the Spring of 1945 M.A.C.A.F.'s operational activities had been greatly reduced, and in fact it had all but finished its work, and had won a hard battle against what had once been great odds.

#### *The Balkan Air Force.*

(Air Vice-Marshal G. H. Mills, C.B., D.F.C., Air Officer Commanding.)

40. The functions and organisation of the Balkan Air Force are dealt with fully in Part III and here I shall deal only with its purely

\* Major-General Chidlaw from April 5, 1945.

Air Force aspects. It consisted of 29 Squadrons, 13 Royal Air Force, 2 U.S.A.A.F., 3 Royal Hellenic Air Force, 2 Yugoslav Air Force and 9 Italian Air Force. These forces were divided between Greece and Italy. B.A.F. also had operational control of part of a No. 216 Group Transport squadron located at Bari, which was used for special duties operations to Jugoslavia.

#### OTHER FORMATIONS UNDER THE COMMAND OF AIR C.-IN-C. M.A.A.F.

41. In addition to the four main fighting formations, the Air C.-in-C. M.A.A.F., also had under his control Air Headquarters Malta, No. 336 Photo Reconnaissance Wing, and the Mediterranean Air Transport Service.

#### *Air Headquarters, Malta.*

(*Air Vice-Marshal K. B. Lloyd, C.B.E., A.F.C., Air Officer Commanding.*)

42. Air Headquarters, Malta, had at one time formed part of M.A.C.A.F. but was placed directly under Headquarters M.A.A.F. in February, 1945. As the battle front moved northwards the importance of Malta as an operational base decreased. It still remained, however, a natural centre for the direction of oversea air operations in the Mediterranean. Since Malta was a permanent R.A.F. base, the A.O.C. Malta had responsibilities in two directions—his responsibility to the Air Ministry for the implementation of R.A.F. long-term policy, and his responsibility to the Air C.-in-C. for such war commitments as he was required to undertake. The latter consisted of the air defence of Malta and North Africa, the conduct of all anti-submarine operations within his operational area under the general co-ordinating direction of A.O.C., M.A.C.A.F., and air sea rescue services within his area. The air defence and anti-submarine requirements had almost completely disappeared, and A.O.C. Malta's chief commitment in this direction was the maintenance of a skeleton organisation which could be rapidly expanded should a new air or submarine threat arise.

43. The A.O.C. Malta had therefore under his command only one air sea rescue squadron in Malta, and one air sea rescue squadron and one French single-engine fighter squadron in North Africa.

#### *No. 336 Wing.*

44. This wing, which consisted of one twin-engined and two single-engined squadrons, had previously formed part of the Mediterranean Allied Photographic Reconnaissance Wing. The latter had, however, been dissolved before I assumed command when it became American policy to make each of their air forces as self-contained as possible. No. 336 Wing remained as a completely R.A.F. formation under the operational control of M.A.A.F. It met the photographic reconnaissance requirements of all three services—Navy, Army and Air Force—working on priorities allotted to it by the Mediterranean Photo Reconnaissance Committee, which also co-ordinated the work of the American photo reconnaissance elements of XIIth and XVth Air Forces.

#### *Mediterranean Allied Transport Service.*

(*Brigadier-General L. V. Beau, Commanding General.*)

45. M.A.T.S. was an integrated British-American organisation whose principal function was the co-ordination and direction of all air transport activities within the limits of the Command jurisdiction of the Air C.-in-C. M.A.A.F.

46. M.A.T.S. was responsible for co-ordinating those services which the R.A.F. Transport Command Group in MEDME (No. 216 Group), and the U.S.A.A.F. Air Transport Command operated within the Air C.-in-C.'s theatre.

47. In addition M.A.T.S. had under its immediate operational control a pool of American transport aircraft, which varied in strength, but which normally consisted of three squadrons.

#### R.A.F. FORMATIONS IN MEDME NOT UNDER COMMAND OF AIR C.-IN-C. M.A.A.F.

48. All the formations described above came under the operational control of the Air C.-in-C. and therefore as deputy Air C.-in-C. I had such responsibility with regard to them as was delegated to me by the Air C.-in-C. However, as Commander-in-Chief, R.A.F., MEDME, I was responsible for certain other formations which did not come within the jurisdiction of the Air C.-in-C. These were:—Headquarters R.A.F. Middle East and the Directorate of Maintenance and Supply.

#### *Headquarters, Royal Air Force, Middle East.*

(*Air Marshal Sir Charles E. H. Medhurst, K.C.B., O.B.E., M.C., Air Officer Commanding-in-Chief.*)

49. Headquarters R.A.F. Middle East was the basis from which the R.A.F. organisation in the Mediterranean had been created. It now had very few operational commitments and its chief functions were the provision of operational training and maintenance facilities, serving the requirements both of MEDME and Air Command, South East Asia. In March, 1945, it had only four squadrons under its command—one air sea rescue, one general reconnaissance, one photographic reconnaissance and one single-engined fighter.

50. There were located in Aden and East Africa six general reconnaissance squadrons, but these were under the operational control of Air Command South East Asia.

#### *The Directorate of Maintenance and Supply.*

(*Air Vice-Marshal C. B. Cooke, C.B.E., Director of Maintenance and Supply.*)

51. The Director of Maintenance and Supply (D.M. & S.) was responsible for all Maintenance and Supply matters within MEDME Command. The maintenance organisation was a functional one, and D.M. & S. was responsible to me for the technical direction of all maintenance units and operational formations. His Headquarters, named Rear Headquarters, MEDME, was at Algiers, and he controlled three maintenance groups—No. 206 in Egypt, No. 214 in Italy, and No. 218 in North Africa. In my headquarters at Caserta, there was a small maintenance policy and planning staff, headed by the Command Maintenance and Supply Officer (C.M.S.O.), who was responsible for advising me on behalf of D.M. & S., and also for informing D.M. & S. of all policy decisions so that plans could be prepared to implement them.

52. A close liaison was maintained with the U.S.A.A.F. supply services, and where convenient, supplies of "common user" items were pooled to achieve maximum efficiency. A particular instance of this was 1,000 lb. bombs, of which there was a shortage in both services.

#### ORDER OF BATTLE FOR THE FINAL ITALIAN OFFENSIVE.

53. With but a few minor exceptions, the order of battle I have described above remained unchanged for the final Italian offensive, and in particular, no changes were made which would impair the effectiveness of M.A.S.A.F., M.A.T.A.F., or B.A.F. for giving support to the ground forces.

54. One change was the transfer of the two U.S.A.A.F. special duties squadrons from B.A.F. to M.A.T.A.F., in order to increase the effort available for supplying the Italian Partisans in Northern Italy.

55. On 16th March, I was informed by the Chief of the Air Staff that in view of the services overall manpower deficiencies, which had already arisen in the Royal Air Force, and which would increase still further in the next six months unless corrective action were taken, it was essential that there should be a reduction in the number of R.A.F. first line squadrons. The contribution that MEDME would be required to make was:—

(a) the rolling up of 6 heavy bomber squadrons of No. 205 Group at the rate of one per month, commencing in April;

(b) the rolling up of 3 light bomber squadrons of Desert Air Force immediately;

(c) the rolling up of 4 day fighter or fighter-bomber squadrons at the rate of one per month commencing in April;

(d) the transfer of 2 South African medium range general reconnaissance squadrons to A.C.S.E.A., when operational, so that two R.A.F. squadrons could be rolled up in that theatre;

56. The Chief of the Air Staff emphasised that he was prepared to consider alternative proposals provided that they produced no less saving in manpower.

57. I discussed this matter with my operational commanders, and decided that in view of the forthcoming offensive in Italy, it was most important that the fighter and fighter-bomber strength of M.A.T.A.F. should not be reduced, and that because of the preliminary success of Marshal Tito's offensive in Yugoslavia, the strength of B.A.F. should also be maintained as far as possible. On 22nd March, therefore, I replied to the Chief of the Air Staff, proposing an alternative programme of reductions, which would provide the same savings in manpower, and yet not affect the air power available for the direct support of the land forces. At the same time I strongly recommended that earnest consideration should be given to the possibility of postponing all reductions for this theatre until after the end of May, when it was expected that the operations then imminent would have passed their critical phase; and if that were not possible, that at least the postponement of the disbandment of 2 heavy bomber squadrons, and one light bomber squadron, which I had included in my programme, should be considered.

58. As a result of these representations, I was informed by the Air Ministry on the 2nd April that I should be required to reduce my strength in April by only 3 squadrons—one Beaufighter anti-shiping squadron, and 2 fighter or fighter-bomber squadrons. More extensive reductions were to follow from June onwards.

59. The three squadrons to be rolled up in April were found from M.A.C.A.F. and B.A.F., the former supplying the Beaufighter anti-shiping squadron and a fighter squadron engaged on the escort of air sea rescue aircraft, and the latter a fighter squadron based in Greece. Thus the striking power available for the direct support of the land forces was not affected.

60. As events turned out, the war in Europe had finished before the time had come to begin the reductions scheduled for June, and an alternative programme was put into effect.

#### PART III.

### THE BALKAN AIR FORCE AND AIR OPERATIONS IN SUPPORT OF THE JUGOSLAV FOURTH ARMY OFFENSIVE.\*

#### THE FORMATION OF BALKAN AIR FORCE AND ITS CO-ORDINATING RESPONSIBILITIES.

61. The situation in the Western Balkans, as the year 1944 progressed, was that considerable German forces were holding the principal towns and the communications between them in the face of numerous but ill-co-ordinated Partisan attacks. The Partisans were provided with Allied arms and equipment and were supported by small Allied raiding forces and by air and naval attacks. This support was, however, less effective than it might have been, because, while there was a measure of intelligence co-ordination which enabled the various air forces concerned to operate fairly successfully, there was during the first half of 1944 no Headquarters which provided operational co-ordination without need for constant reference to Allied Force Headquarters and M.A.A.F.

62. In order to provide such co-ordination, it was decided in May 1944 to apply to trans-Adriatic operations the principle of three co-equal Commanders of whom one was to be charged with the co-ordination of planning and execution of operations. This was not quite parallel to the system in force at A.F.H.Q., where the Supreme Allied Commander was a "commander" and not a "co-ordinator", nor to that in force in the Middle East where the three service commanders were co-equal. So far as the Balkans were concerned, moreover, it was appreciated that operations could not be divorced from politics and were closely inter-related also to "special" activities.

63. It was thus regarded as essential that some machinery of co-ordination should also be provided between the three service Commanders and the Foreign Office and State Department representatives in Bari, and between the three service Commanders and the Special Operations formation concerned with the Western Balkans.

\* As the final offensive in Yugoslavia started earlier than that in Italy, it will be convenient to trace it to its completion before dealing with events in the main theatre.

It was also agreed that as the air force would necessarily play the predominant role in trans-Adriatic operations, the co-ordinator should be the Air Force Commander.

64. In a directive dated 7th June 1944 from the Air Commander-in-Chief, M.A.A.F., a new composite group was formed known as Balkan Air Force. The operational units of Balkan Air Force consisted on an average of twenty-two squadrons excluding those employed on special supply operations. They operated fifteen types of aircraft, flown by air-crew of eight different nationalities (British, South African, Italian, Greek, Yugoslav, and for the supply dropping operations, American, Polish and Russian). It will be seen how "international" were the responsibilities of the A.O.C., B.A.F. as an Air Commander.

65. The responsibilities of A.O.C. B.A.F.\* as co-ordinator of trans-Adriatic operations were contained in a directive from the Supreme Allied Commander which became effective on the 15th June 1944. In this directive it was laid down that, apart from the air units coming under his direct command, the A.O.C. B.A.F. was also responsible for co-ordinating the planning and execution of trans-Adriatic operations by all the three services. The land forces affected were known as Land Forces Adriatic (L.F.A.), while the naval forces concerned were those under the command of Flag Officer, Taranto and Liaison with the Italians (F.O.T.A.L.I.). Other formations whose activities the A.O.C. B.A.F. was required to co-ordinate were:—

(a) No. 37 Military Mission (known as the Maclean Mission) which was attached to the Headquarters of Marshal Tito in Yugoslavia.

(b) Force 399, which was responsible for Military Missions in Albania and Hungary and, in a liaison capacity, for missions and special operations in Greece.

(c) Headquarters Special Operations (Mediterranean)—abbreviated title S.O.(M).—which was responsible for the co-ordination and general supervision of special operations throughout the Mediterranean.

66. It was, however, implicit in the directive that while the Air Officer Commanding Balkan Air Force was responsible for the co-ordination of trans-Adriatic operations, the Naval and Army Commanders were ultimately responsible to their respective service Commanders-in-Chief for the day-to-day conduct of operations.

67. The Commander-in-Chief, Mediterranean, had always been of the opinion that it was unnecessary to associate the Flag Officer, Taranto and Liaison with the Italians (F.O.T.A.L.I.) so closely with the other two service commanders as to necessitate moving his Headquarters from Taranto to Bari. From the point of view of naval strategy, too, it was desirable that his Headquarters should remain at Taranto. He was accordingly represented at Balkan Air Force Headquarters by a Naval Liaison Officer who filled the position more of an additional Chief of Staff than an actual Liaison Officer.

68. Located in the same building at Bari was the Rear Headquarters of the Maclean Mission. Force 399 was located partly in the R.A.F. building and partly elsewhere in Bari.

69. There was therefore set up in one building in Bari what amounted to a miniature G.H.Q. Major issues of policy were discussed at periodic conferences between the three commanders at which their political advisers and representatives of 37 Military Mission and Force 399 were present as required. Day-to-day inter-service discussions also took place at a morning War Room Conference and subsequently between operations and intelligence officers of the three services at a conference presided over by the Senior Air Staff Officer, B.A.F.

70. In order to deal with the various political problems which are inevitably produced by war in the Balkans, representatives in Bari of the British Resident Minister, Central Mediterranean, and of the U.S. Political Adviser, A.F.H.Q., were made the Political Advisers of the A.O.C. Balkan Air Force, and he presided over a Policy Committee which, besides the other two service Commanders, included his Political Advisers and the representatives of the Maclean Mission, Force 399 and H.Q., S.O. (M).

71. As part of the machinery of inter-service co-ordination and to effect the necessary liaison between the three services, the offices of the political representatives and the various "special" forces, an Inter-Service Secretariat was added to the staff of A.O.C., B.A.F.

72. Joint Planning and Joint Intelligence Staffs were also set up and the Intelligence Staff was given the task of providing Balkan intelligence on a wide scale to meet not only the requirements of B.A.F. and L.F.A. but for Force 399 and S.O. (M). A small joint Public Relations Office was also set up.

73. There was a Combined Signals organisation and a Chief Signals Officer (Army) B.A.F. was appointed who was responsible to the Air Officer Commanding in his capacity as co-ordinator of Balkan operations. Necessarily he worked in the closest touch with the Chief Signals Officer (Air) who was responsible for B.A.F. Signals.

74. The joint organisation worked well. Inter-service contacts were maintained all day and every day and the close relations which were established with the political and special forces represented in Bari were of the utmost value in handling the various politico-military problems of the Balkan war. So close was this day-to-day contact that in fact it was found possible to discontinue the meetings of the Committee which had been set up to deal with Special Operations matters.

75. Another feature of the joint organisation was that a system of inter-service command responsible to B.A.F., F.O.T.A.L.I. and L.F.A. was established on the island of Vis and subsequently on the mainland at Zadar, which became known as C.O.Z.A. (Combined Operations Zadar).

76. It was made clear in the A.O.C.'s directive that the primary object of trans-Adriatic operations was "to contain and destroy as many enemy forces as possible in the Balkans." From the Allied resources at that time employed against the Germans it was not to be expected there would be much to spare for operations in the Balkans. Moreover, it was the policy of the U.S. Chiefs of Staff that U.S. forces, apart from some special service units, should not be employed in an operational role in the Balkans.

\* A.V.M. Elliot was succeeded by A.V.M. Mills on 13th February, 1945.



**THE IMPLEMENTATION OF THE DIRECTIVE.***Introduction.*

77. Before proceeding to deal with Balkan operations, it is most important to note some of the main problems with which the Balkan Air Force was faced, in so far as they were special conditions which had hitherto not been met by previous air forces. On the purely combat side, implementation of the Directive called for two major tasks:—

(a) air support for the Partisans, or, as they were called from the beginning of 1945, the Yugoslav Army of National Liberation (J.A.N.L.),

(b) attacks on the enemy's road, rail and sea communications on which he was so dependent for the maintenance of his position in the Balkans, and where, when he had to move, he offered the best chance of being effectively engaged.

78. The degree and kind of support afforded to those Partisans operating in the liberated sections of Yugoslavia, did not differ from that given to Partisans operating in the zones still under the general control of the Germans. The boundary between the liberated and unliberated zones was at all times extremely uncertain.

*Support Operations.*

79. Operations in support of the Partisans were, throughout, seriously hampered by the guerilla nature of the forces, inadequate communications between them and Balkan Air Force, and the inability of the Partisan leaders to appreciate what the Air Force could, or could not, do for them. From the first, R.A.F. Liaison Officers with W/T links to B.A.F. were established with the Partisan Corps, but this sketchy W/T communication could not be maintained on a 24-hour basis. These facts, coupled with Partisan reluctance to disclose their plans or to frame time-tables to which it was possible for us to adhere, severely limited the opportunities for really close support. A further drawback was the reluctance of the Partisans to make an attack in daylight and the inability of our aircraft to attack at last light and return the 200 miles or more to their bases in darkness.

80. Added to this was the fact that the Partisans were primarily guerillas, and as such moved rapidly and frequently; some villages changed hands as many as fifty or sixty times, and areas that were Partisan controlled one day, were often over-run by the enemy on the next and vice versa. This made the task of keeping up-to-date situation maps a big one.

81. Operations under this heading, therefore, normally consisted of fighter-bomber, rocket projectile, or bomber attacks on communications leading up to, or strongpoints in, areas where the Partisans were engaging the enemy offensively or defensively on a considerable scale; or on strongpoints or enemy-held villages near which isolated Partisan formations were being hard-pressed. Beaufighters, in particular, became highly effective in specialised attacks of this nature.

82. For the Yugoslav Fourth Army offensive in Croatia in the Spring of 1945, these difficulties were considerably reduced by an increase in the number of Liaison Officers and an improvement in communications; for instance, for

long periods there was a direct telephone line from the Yugoslav 4th Army Headquarters to Balkan Air Force Advanced Command Post at Zadar. This allowed much better support to be given to the Partisans, though naturally it never reached the highest standard achieved between modern air forces and armies.

*Attacks on Communications.*

83. Apart from shipping attacks, operations against communications fell into three main categories:—

(a) attacks on large scale concentrations of Motor vehicles when the enemy moved in force. A typical instance was the German withdrawal from the Sarajevo salient in April, 1945. On these targets all types of aircraft were concentrated, and help was called for from other formations. The brunt of these attacks was, however, normally borne by fighter-bombers.

(b) armed reconnaissance of railways and roads. Railways provided profitable targets throughout. In the first days roads also gave good results, but later, unless large scale movements were afoot, few targets were seen and the main value of the reconnaissance lay in denying the use of the roads to the enemy by day and forcing him to use them by night, when they were always liable to Partisan attacks. These armed reconnaissances were almost entirely the task of Spitfires, Mustangs and P.39s.

(c) attacks on marshalling yards, rail tracks and bridges. These were mainly the task of the light bombers and R.P. Beaufighters, with incidental fighter-bomber attacks usually made when no other targets were offered on the particular stretch of road which was being swept. Apart from the actual casualties or damage inflicted upon personnel and material, these attacks occasioned sufficient damage to installations to prevent the enemy ever really catching up with repairs, and this had a definite effect in slowing up movement by rail.

*Attacks on Sea Communications.*

84. These were the task of the Rocket Projectile Hurricanes and, occasionally, Beaufighters. All enemy sea traffic up the Adriatic coast and amongst the islands was virtually stopped after the establishment of the advanced bases at Vis and Zadar brought it within effective range of the Hurricanes.

85. In addition to attacks on the actual craft themselves, attacks on enemy small naval craft bases in the Northern Adriatic played a major part in denying their use to the enemy and thus eliminating what was potentially a serious threat. R.P. Hurricanes and Beaufighters proved very effective for this work. Anti-flak support was normally given for these targets by Spitfires or Mustangs. Several attacks of this kind were made in co-operation with light Naval forces. Special mention should also be made of the highly successful attacks carried out by XV Air Force (U.S.A.A.F.) on Pola, Trieste and Fiume.

*Bases.*

86. Normally all except Special Operations aircraft operated from strips at Canne and Biferno, just south-east of Termoli, which is itself just north of the spur formed by the



Gargano peninsula. Special Operations aircraft operated from Brindisi and Lecce. On occasions, however, particularly when the Germans were withdrawing from Greece, Brindisi was used as an advanced base by all types.

87. In addition to bases in Italy, an advanced base was available on the island of Vis throughout B.A.F.'s period of operations. Owing to the shortness of the landing strip and bad approaches, this was normally only used by fighter-bombers, with a daily average of some 35 sorties. During 1945 it became more and more a special advanced base of the Italian Spitfire and P-39 squadrons. It was not suitable for Macchis.

88. From February onwards, an advanced landing ground was established at Prkos, near Zadar, and gradually developed until, by the end of April, No. 281 Wing, which by then comprised all single-engined squadrons except the Italians, was based there.

#### *Operational Conditions.*

89. The lack of adequate air bases on the east side of the Adriatic meant that a very great majority of sorties flown by Balkan Air Force involved a double sea crossing of at least 100 miles in each direction, and often much more, which added considerably to the strain on aircrew, particularly after facing heavy flak.

90. Added to this were the dangers inseparable from operations in mountainous country during the extremely cloudy weather conditions prevalent during the winter. Moreover, when aircraft reached the target area, the rugged mountainous nature of the country often made attacks difficult to carry out, as for instance, when targets were road or rail movement running through ravines, as was frequently the case.

91. These conditions combined with the nature of the work to make operations in the Balkans, particularly by fighter-bombers and Beaufighters, as tough as those normally carried out in other theatres in spite of the almost complete lack of air opposition. On the other side, however, was the compensating advantage that if shot or forced down in the Balkans there was always a good chance of falling into friendly hands and sooner or later getting back to Italy. Towards the end, missing aircrews would very often be back with their units within two or three days.

92. Another result of these conditions was that calls from the Partisans for support were very often impossible to meet. The difficulties were not always appreciated by the Partisans who, except when weather conditions obviously made an attack impossible, were apt to interpret the non-fulfilment of a task as an example of bad faith and non-co-operation.

#### *British Liaison Officers and Target Information.*

93. With friendly forces located throughout Yugoslavia and Albania, and with excellent information being passed by the British Liaison Officers attached to all main Partisan Headquarters, a wealth of data on German formations and enemy movement was always available. A vast amount of intelligence of all kinds was received at Headquarters, and collated and evaluated by the intelligence staffs of the three services.

94. In a very great number of cases however when Partisan Headquarters desired air attacks to be made on specific targets they did not pass adequate or detailed information on the target through the British liaison officers, and often requests to attack German garrisons in towns failed to give detailed aiming points. The obtaining of such vital information therefore led to delays before attacks could be carried out.

#### *Target Clearance.*

95. One of the major difficulties encountered in operating over Yugoslavia was the fact that targets could not be attacked without prior clearance from Partisan G.H.Q. This authority was delegated, as regards tactical targets, to Partisan subordinate Army H.Q.'s; but as far as major strategic targets were concerned, delays by Partisan G.H.Q. in giving clearance often seriously delayed or hindered attacks of considerable importance. On occasions, clearance was refused and attacks could not be made.

96. One could understand the reluctance of the Yugoslavs to clear targets in their own country for heavy air attack, with the inevitable damage to their towns and civilians, but often this permission was refused or withheld for long periods in spite of the fact that the enemy were obviously attaching great importance to the targets and possibly taking advantage of such "immunity." Thus Ljubljana marshalling yard, which had over 1,000 units of rolling stock in the later stages, was not cleared for attack. It is only fair to state, however, that permission was normally withheld only when targets lay in built-up areas.

97. Balkan Air Force was responsible for approving all targets in the Balkans selected for air attack. This was done by means of daily signals to all other air forces and by holding daily target conferences which were attended by Intelligence and Operations Officers of the XV Air Force, 205 Group and 37 Military Mission. A representative of B.A.F. also attended the daily target conference of M.A.S.A.F. In this way a most satisfactory liaison was kept up. Day attacks of the XV Air Force and 205 Group heavy bombers were closely co-ordinated with sweeps by B.A.F. fighters and those of Desert Air Force.

#### *The Bomb Line.*

98. Mention has already been made of the difficulty of maintaining up-to-date information on Partisan positions and intentions. This was increased when the Russians entered Yugoslavia and showed the same reluctance to give information as the Partisans, while their communications with the Mediterranean theatre were even more circuitous and inadequate. These factors led to the establishment of a bomb line which gave a very generous safety margin except when close tactical support had been called for by the Partisans. In the Russian case this was 80 miles ahead of their last known position, unless previous clearance was obtained through Moscow.

99. In spite of these precautions, instances unfortunately occurred of Partisan forces being attacked by Allied aircraft, due in most cases to their having moved without intimation. These, however, never led to serious repercussions.

*Operations with Light Naval Forces.*

100. The air force role in these operations was to silence the large coastal defence (C.D.) batteries (especially on Cherso, Rab, and Lussin islands) by intensive air attack so that Naval craft could bombard from close range in safety. These batteries consisted of guns up to 150 mm. in calibre, and with all aircraft often operating from the same airfield, Biferno, it was possible to carry out several very effective attacks.

101. Marauders and Baltimores attacked from medium level, while R.P. Beaufighters, with Mustangs as anti-flak escort, come in at low level in a co-ordinated attack. These batteries were also attacked from low level by Mustangs carrying Napalm fire bombs. As a result, at least four major C.D. batteries were silenced, thus permitting the Navy to bombard the anchorages and to operate their M.T.B.'s close inshore to disrupt the enemy's coastal shipping routes.

*Co-operation by M.A.T.A.F.*

102. When operations in Italy permitted, M.A.T.A.F. allotted a force of eight squadrons for operations over the Balkans, and this was supplemented by additional squadrons when weather conditions were unfavourable in Italy. They were normally given a specific area in which to sweep roads and railways. On occasions, Mustangs were asked to take on particular targets such as bridges, as B.A.F.'s own aircraft of this type could not carry 1,000 lb. bombs.

**THE OFFENSIVE BY THE JUGOSLAV FOURTH ARMY.***The ground position at the beginning of the offensive.*

103. The withdrawal of the German Army Group "E" from the Aegean, Greece and Albania had begun in late 1944. The movement of the German 21 Mountain Corps from Northern Albania and Montenegro into Croatia was one of the major parts of this withdrawal, and by the end of March, 1945, the Corps had reached Sarajevo and were in the process of withdrawing northwards towards Brod and thence to Zagreb. There had been a general thinning out of the German forces on the west coast, and following the Yugoslav Army's success in pursuing the retreating Germans, it remained to carry out a final offensive to clear the rest of Northern Yugoslavia of the enemy.

*Preparations for the Offensive.*

104. Consideration had at one time been given to the possibility of launching an ambitious operation from the Zadar area using considerable forces from the 15th Army Group, which would be aimed at Trieste and Ljubljana Gap and which would be made in conjunction with an offensive on the Italian front. However, when at the end of February, 1945, the Supreme Allied Commander had a long-postponed meeting with Marshal Tito no further mention of the proposal for this operation was made. The 15th Army Group had recently lost several divisions to the Western Front and, apart from any strategic considerations, there were no troops to spare for diversions across the Adriatic. Instead, it was agreed that a large scale offensive should be carried out in Dalmatia by units of the Yugoslav Fourth Army

under General Drapsin, which was composed of the former 8 Corps and 11 Corps of the Yugoslav Army of National Liberation. The first object of the operations was to clear the enemy from the Gospic and Bihac areas and then to liberate the whole of the northern Dalmatian coast and islands.

105. In his talks with Marshal Tito, the Supreme Allied Commander promised that the maximum air support should be given by B.A.F. for this operation, subject to its other commitments in the Balkans, that Allied naval craft should co-operate as far as possible, and that the maximum quantity of supplies should be sent to the various Yugoslav formations concerned in the operation.

106. The plans for the original ambitious operation from the Zadar area had included the establishment of an air base there. The plan for the setting-up of this air base was called Operation "Accomplish," and was completed by the 7th February after protracted and difficult negotiations with the Yugoslavs. In the meantime, by the end of January, a refuelling and rearming party had been sent to Prkos airfield at Zadar, mainly with the object of providing for Allied aircraft which landed there in distress.

107. When the plan for an offensive by the Yugoslav Fourth Army was decided upon, arrangements were at once made for providing the maximum air support possible. An Air Adviser was attached to General Drapsin's Headquarters, and R.A.F. liaison officers were attached to each of the Partisan Corps concerned in the offensive in order to supplement the work of the ordinary British liaison officers. I did not consider it advisable, however, to build up the Air Forces at Zadar itself as had been envisaged under Operation "Accomplish," even though this would have been very desirable, because of the danger of an attack against the base by German land forces.

108. However, when the offensive started on 19th March, it very soon became evident that it was going very well and that the risk of incursion by German land and sea forces had considerably diminished. Accordingly, on 22nd March I pressed the Supreme Allied Commander to approve a modified form of Operation "Accomplish" named Operation "Bingham," and he agreed that this operation should take place at the earliest possible date. It was therefore started on the 2nd April, and as a result No. 281 Wing, which comprised all the short range single-engined fighter squadrons in B.A.F. except the Italian ones, was fully established at Zadar by the end of April. The effect of this was to enable B.A.F. to give an increased and closer Air Support to Marshal Tito's forces.

109. A naval agreement had been signed in Belgrade in January which permitted the use of Zadar as a base for light naval craft. In the middle of February units of L.F.A., including one squadron of the Long Range Desert Group, and one squadron of the Special Boating Service, were sent to Zadar. The establishment of an air base there resulted in a rather complex problem of inter-service co-ordination, which was solved by the creation of a headquarters to control raiding operations involving all three services, called Combined Operations, Zadar (C.O.Z.A.).

*Air Operations in support of the Offensive*

110. Active air operations in support of the Fourth Army commenced on the 19th March and continued with unabated vigour until the end of hostilities on the 8th May 1945. At the same time a considerable effort was maintained against the enemy in the Sarajevo area, and against his communications throughout Yugoslavia to prevent reinforcement of his forces in front of the Fourth Army.

111. The detailed description of air operations in support of the Yugoslav Fourth Army offensive follows in the next section of this part. It is never a simple task to give a compact and lucid account of air operations in support of a land battle, because of the constant necessity to relate those operations to events on the ground and to the overall picture of the battle. In this particular case, the task is far more difficult than usual, simply because a clear picture of exactly what was happening on the ground was, more often than not, not available to the air forces. Some of the difficulties of co-operating with the Partisans have been indicated in earlier paragraphs,\* and though these were reduced for this particular offensive, the degree of liaison and close co-operation achieved never approached that which existed between the Armies and Air Forces in Italy. Because of this, there could be only a minimum of advance planning, and air operations were therefore, of necessity, much more of an ad hoc nature. This fact is reflected in the account of the air operations which follows. Moreover, political developments following the cessation of hostilities made impossible an accurate assessment of the value of the operations by Balkan Air Force, since the Allies were not allowed to examine targets, to have discussions with the Yugoslavs themselves, or to interrogate their prisoners.

*Operations during the Offensive.**The first phase—capture of Bihac*

112. On the 19th March, Marauders and Baltimores heralded the opening of the Yugoslav Fourth Army's attack on Bihac with intensive bombing of strongpoints south-west of the town. From then until the 25th, when Bihac was entered, uninterrupted aid was given to the land forces by tactical support and attack on communications in the enemy's rear.

113. Simultaneously, attacks were mounted against Gospic, Senj and Ogulin and throughout the same period practically the whole of the road and rail system of North Yugoslavia was subjected to strafing and bombing. Aircraft of M.A.S.A.F. and M.A.T.A.F. added weight to this concentrated and widespread effort. Mustangs of D.A.F. gave special assistance by highly successful attacks on road and rail bridges.

114. The Fourth Army successfully completed the first phase of its offensive with the capture of Bihac on the 28th March. They claimed to have killed 4,000 enemy and taken 2,000 prisoners.

*Second Phase—clearing of Islands and advance to Fiume*

115. Determined to hold the Northern Adriatic coast at all costs, the enemy continued

his policy of strengthening the coast and inland defences, but the toll taken by B.A.F. and the Royal Navy of his shipping, apart from the threat of invasion, was causing him much embarrassment and he finally evacuated them.

116. No summary of the operations during March would be complete without mention of the outstanding work of the Long Range Desert Group patrols established in Istria, and on the Island of Rab. These patrols were set up in enemy-held territory and were frequently located by them. Nevertheless, they continued to send out most valuable information for the R.A.F.

117. April was the climax of B.A.F.'s effort in support of the Yugoslav Fourth Army, and indeed, to the whole of its operations over Yugoslavia during the past year. Flying well over 3,000 sorties, fighters, fighter-bombers and medium bombers destroyed or damaged during this month approximately 800 M.T., 60 locomotives, and 40 naval craft.

118. On the 4th of April, a co-ordinated attack was put in against the island of Pag, the coastal garrison of Karlobag and the town of Gospic, and by the 6th all three objectives had been cleared of the enemy. In quick succession followed the fall of Rab, Krk, Lussin and Cherso.

119. The task of the ground and naval forces was lightened immeasurably by the air support given by B.A.F., so much so that little or no interference was experienced from the formidable defences during the actual assaults. Along the coastal road, under cover of our fighters, Fourth Army forces also moved up without air or ground opposition, and by the 15th the coastline had been cleared up to and including Kraljevica.

120. In the hinterland, however, the enemy appeared momentarily to have stabilised the situation, but B.A.F. kept up the attacks on communications. In anti-shipping strikes over the Northern Islands R.P. Hurricanes and Spitfires reaped a good harvest, disabling and sinking several vessels.

121. Between the 20th and 27th April, a large number of close support attacks was put in against gun positions when the Fourth Army were held at the outskirts of Fiume, and attacks were maintained on shipping.

*Third phase—link-up with 15th Army Group and clearing of Northern Yugoslavia*

122. During the final week of April the Yugoslav Fourth Army made a break-through in North Istria to the River Isonzo and near Monfalcone met the advanced spearheads of the British Eighth Army. This left the Germans with a number of isolated and ill-garrisoned strongpoints running from Novo Mesto (on the road from Karlovac to Ljubljana) to Gorizia.

123. The final assault on Fiume was made on April 30th; the drive to Trieste met with comparatively little opposition.

124. Evidence that the enemy realised the hopelessness of his position in the Istrian Peninsula and elsewhere was shown on 1st May—a week before hostilities ceased—when approximately 25 vessels of all types surrendered to

\* 79-82 and 94.

R.P. Hurricanes in the Gulf of Trieste. Mustangs and Spitfires remained at readiness throughout the week for support of the 4th Yugoslav Army, but few requests were made.

125. By the 6th May the enemy's withdrawal in Slavonia was rapidly reaching its end. Koprivnica (S.E. of Varazdin) and Bjelovar (E. of Zagreb) fell to the 3rd Yugoslav Army, and with the capture of Kocevje (S. of Ljubljana) by VII Corps the German position was further imperilled in the Novo Mesto area. General'ski Stol was taken and Karlovac threatened. The end of the day saw the enemy pocket north-west of Fiume surrender, and the following day B.A.F. flew its last six sorties.

126. Among the enemy formations caught in Yugoslavia were 15 Mountain Corps, 21 Mountain Corps (including 118, 22 Divisions, and 11 G.A.F. Division) and 91 Corps (including 104 Jaeger, 7 S.S. and 41 Divisions). Elements of 7 S.S. Division succeeded in reaching Central Austria.

127. Outside the borders of Yugoslavia, 188 Mountain Corps, 237 Infantry and remnants of 392 Germano-Croat Divisions, cut off northwest of Fiume, surrendered to Yugoslav forces, but were subsequently allowed to make their way north into Austrian territory.

#### Summary.

128. Altogether, more than 7,000 sorties were flown by Balkan Air Force during the Fourth Army offensive, between March 19th and 3rd May. More than 100 static targets were attacked, including gun positions, strongpoints, headquarters, barracks, troop concentrations, railway stations, dumps and bridges.

129. So concluded air operations in the Balkans. The task of Balkan Air Force was completed and on 8th May instructions were issued by the Supreme Allied Commander that the A.O.C. should cease to exercise co-ordinating functions in respect of trans-Adriatic operations. Until its final disbandment on 15th July, 1945, Headquarters, Balkan Air Force, therefore continued as an ordinary R.A.F. Headquarters with responsibility only for the control of its various Wings and units.

#### SPECIAL OPERATIONS.

130. Apart from the normal air operations, considerable effort was expended on Special Operations. Large quantities of ammunition, food and clothing were landed and dropped throughout the country for the Yugoslav Army, utilising a highly developed system of landing grounds and dropping points. Very large numbers of wounded Partisans, together with women and children, were evacuated to Italy from the most seriously threatened areas, their presence in Yugoslavia being a serious embarrassment to the Yugoslav Army. By the end of the war in Europe 36 landing strips had been prepared in Yugoslavia.

131. During the period I was in Command, a Special Operation was carried out involving the evacuation of approximately 2,000 refugees from Slovenia. Marshal Tito had requested this especially as they were in danger of being killed by the Germans withdrawing through the area.

132. The extent of these Special Operations can be seen from the fact that from the formation of B.A.F. until May, 1945, 11,632 sorties were flown to Yugoslavia and 16,469 gross tons

of stores were dropped or delivered to the country. By means of Pickups (landing operations) approximately 2,500 personnel were sent in and approximately 19,000 brought out.

#### CONCLUSIONS.

133. I have divided this section into two parts, the first part dealing with conclusions from the operational point of view, and the second part dealing with conclusions concerning the Balkan Air Force as a whole.

#### Conclusions (Operational).

134. A scientifically accurate assessment of the value of the operations by Balkan Air Force in the Balkans has been impossible, as political developments have almost entirely prevented examination on the spot, discussion with the Jugoslavs themselves, and interrogation of prisoners. Even so, from the meagre evidence available from Liaison Officers, congratulatory messages from Partisan Commanders, and from the fact that they were always keen to call for air support, it is certain that our aircraft gave decisive material, and even more moral, assistance to the Partisans.

135. For the reasons given above, the effectiveness of attacks on communications cannot be assessed with precision. The fighter-bombers did not carry cameras, but there is ample evidence that claims for damage to M.T. were on the conservative side and there can be no doubt that these attacks very seriously hindered the enemy's power of movement. Possibly the claims against railway engines were over-optimistic and many more were damaged than destroyed. There is evidence that in attacks on marshalling yards and railway tracks serious damage was inflicted in one third of the attacks. What effect this had cannot be assessed, but from photographic evidence it is fair to say that the damage inflicted slowed up enemy movements effectively, and caused considerable congestion.

136. At sea there is no doubt that the attacks on shipping, which virtually stopped all traffic by day, seriously hindered the enemy and probably convinced him of the impossibility of holding the Northern Adriatic Islands since the adjacent coastline on the mainland had been liberated by the Partisans. The effect of air attack on the enemy's midget craft bases has already been mentioned.

137. There is evidence from photographs, confirmed in some cases from examination on the spot, that the numerous attacks on the enemy's coast defence guns on the Northern Adriatic Islands, particularly on Rab and Krk, neutralised these defences and prevented their effective use against the Partisan forces which took the islands. It would be too much to claim, however, that these attacks did more than cut down losses, as the Partisans were usually careful not to stage an attack until they had reliable information that the enemy had decided to abandon an island.

138. Finally, the air was kept clear for Special Operations aircraft who were able to take in supplies and evacuate personnel by day without interference. This very greatly increased the material aid given to the Partisans. This was achieved even though the enemy knew what was going on, were often within easy reach of the landing strips, and at times bombed them. Our fighters, however, prevented any effective interference at any time.

139. In addition, the extremely rapid German withdrawal northwards was, to a large extent due to his realising that a properly organised and equipped Yugoslav Army, supported by tanks and aircraft, was facing him. He first felt the weight of this on the Karlobag-Gospic-Bihac line, where combined Air/Ground attacks quickly broke up his forward positions. This fact, together with the overall effect of our aircraft in "keeping the enemy's head down" was a decisive contribution to the rapid Yugoslav advance and the over-running of many of his supply dumps and isolated garrisons.

#### *Conclusions (General).*

140. Balkan affairs have always been of a complicated nature and this was especially so during the second World War. At the beginning of 1943 there were a variety of Navy, Army and Air formations engaged in various activities connected with Balkan affairs with influence and controls stretching from London to Caserta, Bari and Cairo.

141. It became increasingly clear that with the growing strength of the Resistance movements in the Balkans, together with the overall effect on the war in Italy, it was most important to co-ordinate these activities in one place and on a proper inter-service integrated basis. The fact that the only feasible way of carrying on the war in the Balkans was by air indicated that an Air Officer should be appointed as the Co-ordinator.

142. The Commanders, Navy, Army and Air, their efforts co-ordinated by the Air Commander, had at their disposal staff sections composed of officers who were specialists in their particular task.

143. Thus, any problems which arose could be dealt with quickly and efficiently by the integrated section, on an inter-service basis, whether it was a question of operations, intelligence, signals, or plans; and a co-ordinated solution could be presented to the Commander. A most important advantage, too, was the way in which each service learned to appreciate the others' points of view. The spirit of co-operation and understanding brought about by the physical proximity of the various services and sections facilitated the solution of the most difficult problems. The actual operational air units of the Balkan Air Force were small in number and of various types, but the results achieved were most satisfactory.

144. As a venture in "Combined Operations" it was an experiment which subsequent events proved to have been an outstanding success and an example which could well be followed in future similar circumstances. For these happy results great credit is due to Air Vice-Marshal W. Elliot who commanded the Balkan Air Force from its formation in June 1944 until February 1945, and to Air Vice-Marshal G. H. Mills who succeeded him in command until the Force was dissolved in July 1945.

#### PART IV.

### AIR ACTIVITIES PRIOR TO THE FINAL OFFENSIVE IN ITALY.

#### INTRODUCTION.

145. When I assumed command of the Royal Air Force in MEDME in mid-March, 1945,

it was obvious that the German War was drawing rapidly to a close. On the Western Front, the enemy had been pushed back to the east bank of the Rhine, and a bridgehead of great strategic importance had been gained at Remagen. By the end of the month, the last great offensive, across the Rhine and into the heart of Germany, had begun, which was to end in the final capitulation on the 8th May of all enemy forces opposed to the Allied Armies in the west.

146. On the Eastern Front, the Russians were engaged in the capture of the East Prussian ports of Danzig, Gdynia and Koenigsberg on their northern flank; they had reached the Oder at Kuestrin, which gave them a good jump-off point for their coming offensive for the capture of Berlin; to the south, they had reached the area of Breslau; and further south still, they were fighting to the west and north-west of Budapest, and were very soon to push on to capture the Bratislava Gap and Vienna.

147. In the Italian theatre, the front was quiet, while the Allied Armies made their preparations for the final offensive which was to start in April and to lead to complete victory. In Yugoslavia, the offensive by Marshal Tito's Fourth Army was just about to start, and was not to stop until it had reached Trieste.

148. This then was the background against which M.A.A.F. was to continue its air warfare in the seven weeks which remained until the war in Europe had ended.

#### OPERATIONAL DIRECTIVE FOR THE PERIOD 16TH MARCH-8TH APRIL.

##### *Mediterranean Allied Strategic Air Force.*

149. During March the overall mission of the Mediterranean Allied Strategic Air Force remained to carry out its portion of the aim of the Allied Strategic Air Forces in Europe, i.e. "the progressive destruction and dislocation of the German military, industrial and economic systems, and the direct support of land and naval forces."

The strategic objectives in order of priority were:—

(a) The reduction of the enemy's sources of fuel, particularly petrol, his most critical military supply.

(b) Destruction of lines of communication in Germany, and of facilities for the production, assembly and repair of armoured fighting vehicles.

(c) Attacks in support of land operations. To meet the needs of an urgent tactical situation, temporary diversions of the effort of the M.A.S.A.F. from its primary function could be ordered by the Supreme Allied Commander. Moreover whenever weather or other conditions prohibited operations under (a) or (b) above, elements of M.A.S.A.F. could be made available to augment the Tactical Air Force effort in Italy or Yugoslavia, or to support Russian operations.

(d) Attacks on important industrial areas, when weather or tactical conditions were unsuitable for operations against any of the objectives given above.

(e) Counter air force attacks. These were adjusted so as to maintain the air superiority which had already been gained. No fixed

priority was therefore assigned to such attacks and in practice they were normally limited to attacks on jet-propelled fighter installations.

(f) Attacks against communications outside Germany. Attacks against these targets included the following, the priority of which was determined by reconnaissance and other intelligence and which was specified by special instructions from Headquarters M.A.A.F.

- (1) Railway communications between S.E. Germany and the Danubian Plains.
- (2) Railway communications between South Germany and Austria, and Italy.
- (3) Communications in Yugoslavia.
- (4) Communications in Italy.

#### *Mediterranean Allied Tactical Air Force.*

150. The general commitments of the Tactical Air Force for March remained basically the same as in the previous two months. Their priority and scope were:—

- (a) the disruption of enemy lines of communication;
- (b) the destruction of enemy supplies and dumps;
- (c) the support of ground operations by air attacks;
- (d) reconnaissance duties;
- (e) counter air force operations and provision of air protection over the forward areas;
- (f) the dropping of supplies to Italian Partisans and other Special Duties operations.

151. The Commanding General, M.A.T.A.F., was responsible for the selection of targets for offensive air operations in Italy, and no targets in Italy were to be attacked by other formations except upon his request or approval. He maintained at H.Q., M.A.S.A.F., and H.Q., M.A.C.A.F., a list of targets from which individual objectives could be selected by them when an opportunity for attack occurred. If M.A.T.A.F. required priority assistance from M.A.S.A.F., a request was made to Headquarters M.A.A.F. for approval.

152. Owing to the negligible effort of the German Air Force, the counter air force operations and air protection for our forward areas were only minor activities. The major objective was to reduce the enemy army's ability to fight by attacks on his lines of communications and supply dumps. Reconnaissance work was a constant need and was handled by the specialised squadrons concerned.

#### *The Balkan Air Force.*

153. The function of Balkan Air Force during March was primarily to give all possible air support to Marshal Tito's Yugoslav Army of National Liberation, in both bombing and Special Duties operations. Details of this have been given in Part III, which deals specifically with the subject. In addition, B.A.F. was responsible for the selection of targets for air operations in Yugoslavia, and the communication of this list to M.A.S.A.F., M.A.T.A.F., and M.A.C.A.F. When the other air forces found an opportunity to operate against previously accepted targets in Yugoslavia consistent with their other priorities, they confirmed with B.A.F. that the targets selected were still

cleared for attack. If B.A.F. desired either to solicit additional assistance from M.A.S.A.F. or to obtain a higher priority on accepted targets, it forwarded a request to Headquarters M.A.A.F. for decision.

#### *Mediterranean Allied Coastal Air Force.*

154. The primary task of the Mediterranean Allied Coastal Air Force continued to be the protection of our own shipping, the attacking of enemy shipping of all types and the provision of air sea rescue facilities. In addition to this, tactical sorties were flown, giving assistance to Balkan Air Force activities in Northern Yugoslavia, and to M.A.T.A.F.'s programme of interdiction in the western part of the Po Valley.

#### OPERATIONAL EFFORT PRIOR TO THE ITALIAN OFFENSIVE.

155. An analysis of the bombing effort of the Command during March and early April shows that there were four broad objectives.

- (a) The completion of the destruction of the enemy's oil resources.
- (b) Attacks on communications in South-East Europe in order to aid the Russian drive into Austria and Northern Yugoslavia.
- (c) Interdiction of the enemy's communications, leading into, and inside Italy, and the destruction of his supply dumps and installations, in preparation for the army's final offensive.
- (d) Support for the offensive of the Fourth Yugoslav Army.

The first three tasks are dealt with in detail below, while the fourth has been dealt with in Part III.

#### *Oil Targets.*

156. By the middle of March, 1945, the air campaign against enemy oil targets had achieved almost complete success. Begun nearly a year before, as a co-ordinated offensive with Bomber Command and the VIIIth Air Force operating from the United Kingdom, it had, assisted by the advances of the Russian armies, so nearly completed its task, that there were by March, 1945, only six known active plants within range of M.A.S.A.F. Of these the most important was that at Ruhland, seventy miles south of Berlin and over 700 miles from M.A.S.A.F. bases. In the third week in March, it was attacked three times by M.A.S.A.F. Fortresses with over one thousand tons of bombs, and successfully neutralised. In March also, attacks were made on the already damaged refineries in the Vienna area, and on two small refineries in the Western Hungarian oil region.

157. These raids brought the offensive to a successful conclusion, for on March 26th, the petrol output of refineries still in enemy hands and within range of M.A.S.A.F. was estimated to be, for all practical purposes, nil; and during April, it was judged to be a waste of effort to make any further raids on oil targets from Italian bases.

158. The overall result of the Anglo-American two-way bombing and of Allied ground advances by the end of March, even allowing for some small production from new underground plants, was to reduce the enemy's production of liquid fuels and lubricants to less



than 20 per cent. of the April, 1944, level, and of petrol to about 10 per cent. It can be truly said that the attacks on the enemy's fuel production constituted one of the most successful air offensives ever waged.

#### *Assistance to the Russians.*

159. In November, 1944, it became evident that the advance of the Soviet forces through Hungary was destined to be one of the decisive thrusts of the war. It was equally clear that an excellent opportunity was presented to M.A.S.A.F. of using its striking power to aid our Russian Ally, by limiting the supply and reinforcement of the defending Axis troops south of the Tatra mountains. To achieve this aim, the air offensive had to dislocate the enemy's railway systems in Austria, Western Hungary, and Northern Yugoslavia. Although considerable damage had already been inflicted on vulnerable points of these systems, a far more comprehensive programme of air attacks was now necessary, but before this could be implemented, an exact picture had to be drawn up of the whole flow of enemy traffic to the south-eastern front. Before the end of 1944, by means of constant photographic reconnaissance and reports from ground agents and prisoners of war, the necessary information had been obtained and collated.

160. The first requirement of the Russian High Command was the dislocation of the railways from Linz and Vienna to Zagreb and the connecting lines to North-East Italy. This phase lasted approximately from the beginning of 1945 to 23rd February, 1945. Thereafter an additional commitment was the destruction of Western Hungarian marshalling yards and railway targets in Northern Yugoslavia, in order to dislocate the enemy troop movement northwards across the Drava river.

#### *The Main Targets.*

161. Before considering the implementation of the plan to aid the Russian armies, it is necessary to give a brief survey of the principal communication targets involved.

162. The key target of the whole railway network was the complex of marshalling yards immediately to the south-east of Vienna. Before the air offensive began in earnest, most of the military supplies and material from the Reich and Czechoslovakia were handled in these yards, which had ample facilities for the purpose. Of slightly lower priority, but equally large and complex, was the railway centre at Linz, further to the west. And between the two were the spacious yards at Amstettin, capable of dealing with all military traffic and unhampered by industrial commitments.

163. Southwards on the line from Vienna to Zagreb were four important railway centres at Wiener Neustadt, Bruck, Graz and Maribor, which had large classification yards with full facilities and repair depots.

164. East of the Vienna-Zagreb route the lines from the Austrian capital to Budapest were serviced by the Bratislava and Ersekujvar centres, north of the Danube, and those at Hegyeshalom and Komarom to the south of the river.

165. Further south, a number of minor lines branched east from Wiener Neustadt and Graz, passing through the centres at Sopron and Szombathely.

166. Complementary to the major targets were minor yards and sidings along the various lines, while rail traffic offered tempting targets to M.A.S.A.F. fighters.

#### *The Air Effort in March.*

167. In January and February well over 13,000 tons of bombs were dropped in meeting this commitment, and March saw a further stepping up of the effort. In that month, some 18,000 tons were dropped on Austrian, Bavarian, Hungarian and Yugoslav railway communications in order to aid the Red Army drive into Austria and Yugoslavia.

168. On about one third of the day missions, visual bombing was possible and the accuracy achieved was exceptional. Night bomber raids by No. 205 Group added to the disruption caused by the Fifteenth Air Force attacks.

169. In addition to the continued policing of the Vienna-Graz-Zagreb route, in answer to Russian requests, M.A.S.A.F. now intensified its attacks on the western Hungarian marshalling yards and northern Yugoslav railway targets so as to dislocate the enemy's northward movement across the Drava.

170. In neutralising the Germans' forward marshalling yards in western Hungary nearly 2,500 tons of bombs were dropped at Hegyeshalom, Komarom, Sopron, Szombathely and Ersekujvar (Nove Zamky). A further 132 tons were dropped on the Bratislava yards, just inside Czechoslovakia.

171. Meanwhile, in completing the disruption of the railway communications in Austria, southern Germany and northern Yugoslavia, M.A.S.A.F. dropped some 15,000 tons of bombs.

172. Of the fifteen bombing attacks delivered against the Vienna-Graz-Zagreb line the most important were five directed against Wiener Neustadt which, except for Bruck, was the only remaining railway centre on the line with a large and relatively intact marshalling capacity. The 1,743 tons of bombs dropped on this target left the yards severely damaged and completely blocked. Three heavy attacks were also made on the crowded yards at Amstettin, which had become the main centre for the sorting of traffic after the previous month's crippling attacks on Linz and Vienna, and these likewise resulted in the destruction of installations and the blocking of the yards with the wreckage of rolling stock.

173. Meanwhile, the air offensive was continued against railway targets at Vienna, Linz and Graz at high intensity. Among the many other railway targets attacked the strongest efforts were directed against those at Wels, Villach, Bruck, Steyr, Gmund, St. Veit, Klagenfurt and St. Polten in Austria; at Muldorf and Landshut in Bavaria; and Maribor, Zagreb and Dobova in northern Yugoslavia.

174. No. 205 Group again supplemented the havoc wrought by the United States day bombers by effective night attacks.

During the first seventeen days of March, also, M.A.S.A.F. fighters flew 333 effective sorties on strafing missions, which met with excellent results, particularly in the destruction of locomotives.



*The air effort in April.*

175. In April the need to help the Allies' last assault in northern Italy (considered later) called for a vastly increased M.A.S.A.F. effort in the area and the commitment of disrupting the enemy's communications supporting the south-eastern front was relegated to second place. Nevertheless, the latter targets still felt a very appreciable weight of M.A.S.A.F. bombs.

176. Main targets in the first week of the month were the constantly attacked Maribor railway bridge, the less visited Dravograd railway bridge, also in Yugoslavia, and the Graz, St. Polten and Krems marshalling yards. In particular, the blocking of the two latter yards cut Linz from Vienna at a very critical stage in the battle for the Austrian capital. No. 205 Group meanwhile hit the Nove Zamky marshalling yards by night and the Strategic fighters operating over a wide area destroyed nearly 100 locomotives and numerous units of rolling stock.

177. With Vienna virtually isolated, the Red Army increased the speed of its advance: from 7th to 13th April bitter street fighting occurred in the capital, culminating in its complete occupation.

178. While the heavy bombers were switching their effort to the Italian theatre, the Strategic fighters continued the work, effectively dive-bombing Austrian bridges and straffing rail traffic in southern Germany. Results of the latter activity during the week ending 15th April included 227 locomotives and 354 units of rolling stock destroyed or damaged.

179. Features of the final assaults were the complete destruction of the Rattensburg railway bridge; the Strategic fighters' continued dive-bombing and straffing effort; the night bombing of the Freilassing marshalling yards, and the severe damage inflicted on the Linz marshalling yards, the last major Austrian traffic centre on the Linz—Budejovice—Prague railway, which after the fall of Vienna, became the enemy's last important lateral communication line behind the rapidly closing eastern front, and an objective of American troops advancing from the southern end of the western front.

*General results.*

180. It has not proved possible to assess in detail the effects of M.A.S.A.F.'s four month's attacks on railway communications to help the Red Army's advance into Austria. The evidence of photographic reconnaissance, ground reports, and aircrew observations, however, examined in the light of experience gained in investigations in France and Roumania, is sufficient to give a general picture of the effect of the offensive.

181. The air attacks were always ahead of the enemy's programme to repair his battered railway centres, and troop and supply movements to the south-eastern front were seriously limited and delayed. Furthermore, the elimination of marshalling facilities in Austria and Western Hungary forced the Germans more and more to adopt the unsatisfactory practice of making up unit trains far in the rear, so that further handling before arrival at the battle area could be avoided. Additional disruption was caused by the destruction of

moving trains. A conservative estimate of units of rolling stock destroyed or severely damaged is 18,000 (including more than 1,600 locomotives). Many of the destroyed wagons were laden with supplies, and tank cars were filled with oil products. Further destruction of tanks and ordnance was effected at loading points. The cumulative effect was to cripple completely the enemy's land operations against the Russians in this area.

*THE INTERDICTION OF ITALIAN COMMUNICATIONS*

182. When it became evident, at the beginning of 1945, that it would be impossible to launch a major offensive until the Spring came, and that until that time, holding operations only were possible on the ground, the Air Force's chief task as far as the Italian theatre was concerned became the reduction of the enemy's fighting capacity on land to the greatest degree possible. To do this, it was necessary, above all, to deny him freedom of movement. Without such freedom, he would be unable to achieve the build-up of supplies and reinforcements required to withstand a major offensive.

183. But, equally important, the enemy would also be unable to adopt the alternative of withdrawing large land forces and using them to reinforce other fronts, where they were urgently required. It would indeed place him on the horns of a dilemma—he would not be able to use his troops effectively where they were, and would not be able to withdraw them for more effective use elsewhere.

184. A third consequence, rather more strategic than tactical, would be to prevent the Germans from exporting foodstuffs, industrial products, and loot generally from Italy, and from importing raw materials and coal for use in the North Italian industrial areas.

185. By far the most important of the enemy's lines of communication into Italy, especially in view of the campaign being waged against his oil resources, were the railways. These, because of the mountainous nature of the terrain on the northern borders of Italy, were limited in number, and so their interdiction did not present a task which was beyond the capacity of the resources at the disposal of the Air C.-in-C.

186. The Commanding General, M.A.T.A.F., was responsible for the execution of the interdiction policy, and from January until the ground offensive began in April, he used by far the greater part of his effort on this task. Supplementary aid was provided by M.A.S.A.F., when weather or other considerations prevented the heavy bombers from being used to attack targets higher in priority in the strategic effort, and also to a limited extent by M.C.A.F.

*Interdiction of Railway Communications.*

187. There were eight main routes leading into Northern Italy from the rest of Europe. Of these, the two from France were no longer available to the enemy, while in March an economic agreement with the Swiss Government was concluded which vetoed the passage on the two lines through Switzerland of war material between Italy and the Reich.

188. Of the remaining four routes, which were the ones to which the main weight of the interdiction programme was applied, the most important was the Brenner line running south from Innsbruck via Trento to Verona. The remaining three routes ran across Italy's north-eastern frontier. They were:—

(a) the Tarvisio route running from Tarvisio to Udine and on to Treviso;

(b) the Piedicolle route via Jugoslavia, which joined the Tarvisio route at Udine; and

(c) the Postumia route, also via Jugoslavia.

189. Though the four routes mentioned above were the most important from the point of view of the interdiction policy, attention was also given to the moderately dense network of railways serving Northern Italy.

190. The interdiction was carried out in a series of zones. The Brenner route was attacked along its whole length from Innsbruck to Verona, while the three north-eastern frontier lines were attacked in the frontier zone, and also along the Tagliamento, Livenza, Piave, Brenta and Adige River zones, to the south-west across the Venetian Plain. Lastly the routes in the Po Valley were attacked at the crossings of the Po River and its tributaries. The whole system provided a series of good targets in the way of bridges, viaducts, marshalling yards and sidings.

#### *Air Effort in January and February.*

191. The interdiction programme began in earnest on 10th January, 1945, and from then until the ground offensive began on 9th April, M.A.T.A.F. devoted some 75 per cent. of its total effort to this task. Previously, M.A.T.A.F. had operated primarily in the Po Valley, but during January and February air operations against the frontier railway zones were given top priority, and action against the more southerly communications leading to the battle area became a secondary consideration.

192. The 57th Wing concentrated mainly on the Brenner Pass route, assisted by the XXIIInd Tactical Air Command, while the Desert Air Force attacked the north-eastern frontier routes. In the less important Po Valley, XXIIInd T.A.C. operated against communications west of Vicenza, while D.A.F. concentrated on the Imola-Budrio-Medicina-Molinello area east of Bologna. The Strategic Air Force heavy bombers gave assistance with some 5,000 tons of bombs, most of which were dropped on marshalling yards, and of which some 3,000 tons were on the Brenner route.

193. This heavy effort showed immediate results. In January, the Brenner route was definitely blocked to through traffic for fifteen days, and probably for another five; in February, at no time was the route open to continuous through traffic. On the north-eastern frontier routes, through rail traffic was denied the Germans for the whole of January, and although it was possible on a few days during the early part of February, the state of interdiction during the latter half of the month was the most complete achieved up to that time.

194. This success quickly had the effect of obliging the enemy to lean more and more

upon the roads for his communications. Thus in January, heavy road movement at night was reported along the Adige Valley and down both sides of Lake Garda, and photographic reconnaissance and ground reports showed that there was little rail activity south of Trento. The transport of supplies and heavy equipment clearly presented a great problem to the enemy, though the movement of troops could still be accomplished, albeit with a great time lag. Petrol was by then a very scarce commodity indeed, and quite insufficient for large scale motor transport movement, quite apart from the continual hazards of Allied air attacks.

#### *Air Effort in March.*

##### *The Brenner route.*

195. March witnessed a still greater air effort against this vital line, in particular by the medium bombers of the 57th Wing, who dropped some 3,000 tons of bombs on it in the course of 1,600 sorties—some 60 per cent. of their total effort for the month. Bridges and diversions along almost the entire route remained the main objectives, with targets at Ora and San Michele, in the central Brenner zone, receiving the chief attention. Other targets heavily attacked were at Ala, San Ambrogio and San Margherita, on the lower Brenner line, and Campo di Trens on the upper Brenner line.

196. Simultaneously, XXIIInd T.A.C. maintained heavy pressure on the central and lower portions of the route by day, while night intruder aircraft did the same by night. In these attacks, not only were the blocks created by the medium bombers further enlarged, but additional bridges were destroyed, tracks cut, and traffic both bombed and strafed.

197. The M.A.S.A.F. bombers again co-operated by dropping some 1,300 tons of bombs on Verona marshalling yards. In addition their disruption of the Austrian railway system was having its effect on communications further south.

198. In spite of the enemy's desperate repair efforts, and of a spell of bad weather from 26th to 29th March, through traffic on the Brenner route was again impossible for the whole of the month. The interdiction, in fact, reached the highest level yet attained. Ten or twelve blocks on the route at one time was a common occurrence and on one occasion there were at least fifteen blocks on the stretch between Bolzano and Verona.

##### *The north-eastern routes.*

199. The main burden of the attacks on these lines again fell on the Desert Air Force, which concentrated chiefly on the Tarvisio-Udine line. In addition, the 57th Wing flew 364 sorties against bridges and diversions in the five river zones in the Venetian Plain, while XXIIInd T.A.C. fighter-bombers, and the night intruders, attacked targets primarily in the Casarsa area. M.A.S.A.F. aircraft co-operated by dropping 700 tons of bombs, with the Treviso and Padua marshalling yards as the main targets.

200. These attacks caused the three north-eastern frontier routes to be blocked for the whole of the month, and, moreover, little traffic was able to pass over the more southerly stretches of the lines across the Venetian Plain.

*The Po Valley and North-West Italy.*

201. The switching of the main air effort northwards against the frontier routes implied that more freedom of movement than formerly was permitted the enemy in the Po Valley. During the period of static ground operations, however, this was considered of minor importance. Nevertheless, a considerable M.A.T.A.F. effort was continued against the principal lines of communication immediately behind the battle area, especially when bad weather prevented operations further afield. During the period, sorties were flown against the Po River zone and in the Mincio, Oglio and Adda river zones, branching northwards from the Po River. Particular attention was paid to the disruption of lines leading to Milan, Turin, and Genoa in order to hinder the transportation of looted industrial and agricultural products bound for the Reich. Also in March, the night intruder effort was increased considerably, particularly in the form of a greater number of attacks on damaged bridges and diversions to demoralise the enemy's repair gangs. Generally, both the day and night attacking aircraft in the Po valley were increasingly concerned with destroying rail and road traffic and rolling stock in marshalling yards rather than the wrecking of the railway system itself.

*Air Effort in April.*

202. In April M.A.T.A.F. maintained the interdiction of communications between Italy and the Reich until the 9th, when its main effort was switched to the close support of the 15th Army Group's offensive. During the first eight days of the month, the various elements of M.A.T.A.F. continued to attack the same targets as during March. In particular, the medium bombers flew nearly 400 sorties against the Brenner Line, their main targets being the bridges. By the 9th of April the route was blocked in eleven places. Desert Air Force meanwhile continued to attack the lower reaches of the north-east frontier routes and the lines across the Venetian plain. On the eve of the Allied offensive, the north-east frontier zone remained well disrupted, and no through traffic was possible across the Venetian plain. The state of interdiction in the Po Valley itself was also very satisfactory. The XXII T.A.C. fighter-bombers paid a considerable amount of attention to the east-west lines north of the Po and their connecting lines, while the medium bombers made fairly constant attacks on bridges.

203. M.A.S.A.F.'s April effort against the enemy's railway communications in northern Italy was further increased. During the four days prior to the opening of the Army's offensive on the 9th April the heavy bombers dropped 2,000 tons of bombs on bridges and marshalling yards on the Brenner Pass route and also attacked bridges, marshalling yards and locomotive depots on lines to the west of the route and a marshalling yard on the Piedicolle route. Even after the offensive started, M.A.S.A.F. continued to bomb the Italian railway system, in addition to providing close support to our advancing troops.

*Enemy Repair Organisation.*

204. The enemy's chief means of combating the interdiction programme was a large and very efficient repair organisation.

205. He showed extraordinary energy in effecting repairs and much resourcefulness in reducing the vulnerability of targets. Troops which were held up by the breaks were pressed into the repair gangs; bridges were sometimes replaced in 48 hours and craters were filled in in far less time. In spite of frantic efforts at repair work and brilliant organisation, the enemy was never able to counter our air attacks sufficiently to make an appreciable difference to his desperate situation. The whole area was sterilized and the German Army was becoming more and more impotent because of the impossibility of movement—even by night.

206. During the latter part of 1944 the enemy resorted to deception to supplement his repairs and it certainly became a very clever and much used means to increase the flow of traffic. At Calcinato, a span of the bridge was constantly seen to be out during air reconnaissance, but accumulated evidence proved that traffic was passing over at night. In fact, when a night reconnaissance was flown, the missing span was revealed in place. This particular bridge at Calcinato became known as the first "night operational" bridge.

207. As our attacks increased in number, so the number of "night operational" bridges increased also. During April eleven of these bridges were noted; ten of them were attacked and put out of service for varying lengths of time.

208. Another method of deception used by the enemy was to maintain the unserviceability of selected bridges when there was no immediate need for their use. Certain damaged bridges were repaired up to a certain point—left so that they looked quite impassable—yet could be made passable in a few hours.

209. Full maintenance of the interdiction depended on the weather. Good weather made it possible to achieve complete success, but in periods of bad weather prohibiting flying, repairs were rapidly carried out by the enemy and supplies adequate for some days hurriedly passed through. In spite of these weather difficulties, the railways (as has been shown) were blocked almost continuously.

*Interdiction of road communications.*

210. Road movement was also dealt with in a systematic way. The whole area of enemy occupied Italy was divided up into a number of areas and regularly patrolled by aircraft of Tactical Air Force both by day and by night. In this way, it was possible to keep an accurate check on all enemy road movements and to attack road transport wherever it was found. However, German road movements were strictly limited because of the shortage of oil fuel. Oxen were used to tow lorries, and so valuable had even small quantities of petrol become that members of the German 98th Division were offered a reward of a thousand cigarettes if they returned from a patrol with a tin of captured petrol.

*Interdiction of water communications.*

211. As a result of the attacks on his other forms of communication the enemy made an increasing use of waterborne traffic. Shipping travelling by night carried supplies from Trieste and the Istrian ports, while barges were used in the waterways of North-East Italy to support

front line troops. Consequently barges were attacked wherever found and lock gates linking rivers with canals were effectively put out of action by bombing. Attacks were also made on shipping and harbour installations at Trieste and other Istrian ports, and on one occasion on shipping in Venice harbour.

*Attacks on dumps and installations.*

212. As a complement to that part of the interdiction programme which aimed at stopping the flow of supplies into Italy for the enemy ground forces, a campaign was also undertaken against his dumps, supply points and installations, in a further effort to reduce his strength and ability to withstand an Allied offensive. This campaign reached its climax in March when over 2,000 sorties were flown against such targets; 42 ammunition, 19 fuel and 3 other supply dumps were destroyed, while 18 factories were destroyed and 16 damaged.

213. This effort was continued during early April prior to the Army offensive and a new feature was added by attacks against the enemy's methane gas plants. Twenty-five such targets were destroyed or damaged, again restricting the enemy's fuel supplies since this gas could be used as a substitute for petrol.

214. In April M.A.S.A.F. further increased its effort in the campaign against supplies, and in particular dropped 860 tons of bombs on Italian armament works and 768 on stores targets.

*The results of the interdiction policy.*

215. The claims made by M.A.T.A.F. against enemy communications in the first three months of 1945 are an indication of the success achieved by the interdiction policy. In that period, 242 road and railway bridges were destroyed; 416 damaged; 4,155 road blocks and rail cuts were made; 2,249 M.T. and armoured vehicles were destroyed, 2,255 damaged; 267 locomotives were destroyed, 982 damaged; 10,244 units of rolling stock were destroyed or damaged; 126 vessels and small boats were sunk, 466 damaged.

216. Though I should be the first to admit that bare figures such as these do not necessarily prove that the interdiction policy achieved its aims, the statements of responsible prisoners-of-war show that it did prevent the enemy building up his strength sufficiently to withstand our ground offensive in April, and most seriously impeded his troop movement. For instance, General von Senger, Corps Commander of the German XIV Panzer Corps, stated:—"The effect of Allied air attacks on the frontier routes of Italy made the fuel and ammunition situation very critical." Again, General von Vietinghoff, German Supreme Commander, Italian Theatre, stated:—"Rail traffic was struck in the most protracted fashion by the destruction of bridges. Restoration of bridges required much time; the larger bridge sites were detoured, or the supplies were reloaded. With the increasing intensity of the air attacks, especially on the stretch of the Brenner, the damaged sections were so great and so numerous that this stretch, despite the best of repair organisation and the employment of the most powerful rebuilding effort, became ever worse and was only locally and temporarily usable."

217. The interdiction policy was also largely successful in its other objective—that of preventing any large scale withdrawal from the Italian front. In an attempt to provide reinforcements for the Western front, the enemy did in fact withdraw three divisions by the end of March, but it must have been a heartbreaking affair for him. The distance they had to travel from the front to Austria was about 150 miles and given uninterrupted facilities, this should have taken them about five days. The first, the 356th, Division, took three weeks; the second, the 16th S.S. Division, took a month; while the third, the 715th Division, also took a month. Perhaps the most significant fact was that these divisions left much of their heavy equipment behind them.

218. It can be stated with complete confidence that the success of the interdiction policy was a major factor contributing to the defeat of the enemy in the Italian theatre. Air power had successfully accomplished the task of preparing the way for the Army's offensive.

## PART V.

### THE FINAL OFFENSIVE IN THE ITALIAN THEATRE.

#### INTRODUCTION.

219. This Part of my despatch covers the period from April 9th to May 2nd—the twenty-four days in which German power in the Italian theatre was completely destroyed. It falls into three main parts; a section on the planning for the offensive, a section on the use of air power during the battle, and a section on the battle itself.

220. In my description of the battle, I have attempted to relate the air activities to the particular activities on the ground to which they pertained. In some cases, it has been possible to do this by a day to day narrative, taking air and ground activities together. In other cases, a day to day narrative, to be clear, would require to be more detailed than is desirable for the purposes of this despatch, and in such instances, I have taken a complete phase of the ground activities over a period of days and then followed it by a description of the air effort connected with it.

221. Using this treatment, the description of the battle falls into five parts:

(a) The Eighth Army battle from 9th to 14th April, which breached the Senio and Santerno River lines. This is described day by day.

(b) The Fifth Army battle from 14th to 20th April, in which the Fifth Army fought its way to the Po Valley. The initial part of this is treated day by day, and the latter part as a complete phase.

(c) The Eighth Army battle from 15th to 20th April, in which a route was forced through the Argenta Gap. This is treated as a complete phase.

(d) The combined Eighth and Fifth Armies' offensives from 21st to 24th April, in which the enemy tried to escape across the Po. This is treated as a complete phase.

(e) The final stages of the battle, from 25th April to 2nd May, treated as a complete phase.

222. It should, perhaps, be mentioned that plans were made, and all preparatory action taken for an airborne assault at brigade strength in the initial phases of the battle. Since this assault was not carried out, for reasons of an Army nature, I have made no further reference to it.

#### PLANNING FOR THE BATTLE.

##### *The Army Plan.*

223. The task before the 15th Army Group was to destroy some 25 divisions of the enemy before they could retire north-east into the Alps towards Austria, and prolong the struggle from there.

224. The task was a formidable one. On this west flank, the enemy was firmly planted in the rugged mountains. On his east flank he was solidly entrenched behind the Senio, Santerno, Sillaro and Idice rivers, all comparatively wide and steeply banked; an attacker there faced a maze of ditches, dikes and flooded fields.

225. Beyond these rivers there were still others which made good defence lines for the enemy—the Po and the Adige, both of which were already fortified. Beyond these again, were more river lines, and mountains, across the road to Austria.

226. Against these advantages the enemy was short of transport, his communications were under constant air attack, his air power was negligible, he had very little petrol, and he was woefully inferior in tanks and guns. The relentless air attacks to which he had been subjected in recent months had destroyed his mobility and had decisively undermined his whole powers of resistance.

227. It was certain that he would fight desperately to retain the Po Valley. If, therefore, the 15th Army Group could achieve a quick break-through and a rapid exploitation, huge enemy forces might well be destroyed or captured before they could retire across the Po.

228. The possible lines of attack were severely restricted. The 15th Army Group's front now ran from the Comacchio lagoon on the Adriatic to just below Massa on the Ligurian Sea skirting south of Bologna. The Fifth Army held the mountainous zig-zag line from Massa to Monte Grande, ten miles south-east of Bologna; the Eighth Army line ran south-east from Monte Grande, across the Sillaro and Santerno Rivers, and then north-east along the Senio's south bank to the southern shore of Lake Comacchio and the Adriatic.

229. It was decided that the main effort of 15th Army Group should be launched in the Bologna area by the Fifth Army, since once the latter reached the Po valley, the terrain in their front favoured a quick break-through and a rapid advance.

230. This main thrust by the Fifth Army was to be preceded by an Eighth Army attack, with the object of drawing enemy reserves away from the Fifth Army front.

231. The plan therefore fell into three main parts, which were to follow each other without any pause. In the first stage, each Army would break through the heavily defended enemy

lines opposing it—the Eighth Army first, breaching Senio and the Santerno lines and attacking towards Bastia and Budrio; the Fifth Army second, breaking out of the mountains and into the Po Valley, with the secondary mission of capturing or isolating Bologna.

232. The second stage provided for a break-through by either or both Armies to encircle the enemy forces south of the Po. The Eighth Army was to go through the Argenta Gap to seize the Po crossings at Ferrara and Bondeno, and there make contact with Fifth Army columns exploiting north-east from Route 9 down the corridor north of the Reno. A secondary Fifth Army effort was to be made northward on Ostiglia.

233. In the third stage, operations were to be directed toward crossing the Po and exploiting northward, especially with the object of capturing Verona. If the situation permitted, further exploitation toward and across the Adige River was to follow.

234. As a prelude to this main attack, two important subsidiary operations were to be carried out. The first of these was an attack against Massa, on the extreme left of the battle front, in order to keep the Germans in that area occupied. The second was an amphibious operation to capture the isthmus projecting between Lake Comacchio and the Adriatic, which would give the Eighth Army free access to the Lake, and prepare the way for further amphibious operations which were to aid in opening the road through the Argenta Gap to Ferrara.

##### *The Naval Plan.*

235. The Navy plan for the final offensive was drawn up to give the Army as much support as possible. On the Eighth Army front the capture of the Argenta gap would require an assault in tank landing vessels, across the flooded country surrounding the Valle di Comacchio. A Naval party was to be formed to assist the Army in training L.V.T. (landing vessel, tank) squadrons, and to act as navigational leaders in the assault.

236. The coast northwards of Ravenna was generally unsuitable for amphibious landings. The enemy was, however, sensitive in this area, and a concentration of tank landing craft in the Ravenna-Porto Corsini Canal, combined with a dummy assault and shore bombardment by landing craft at Porto Garibaldi, was to be undertaken in order to delay the movement towards the battle area of the coastal defence division stationed there.

237. On the west coast, gun support to the advance of the Fifth Army along the coast was to be given by cruisers and destroyers. The clearing of a gunfire support area between Viareggio and Spezia would entail further minesweeping.

238. A flotilla of assault landing craft manned by Royal Marines was to be carried overland from Ancona on tank transporters, and launched into the Po River to assist in the crossing.

239. Plans were made for the harbours of Genoa, Trieste and Savona to be opened, and also the Port of Venice as a standby, in case there should be difficulty with the Jugoslavs over the use of Trieste.

*The Air Force Plan.*

240. The Air Force plan was to give maximum assistance to the Armies by close support operations; to prevent the withdrawal of the enemy north of the River Po; and, when the enemy was in sufficient concentration, to ensure his destruction.

241. To achieve these aims, the whole striking power of M.A.T.A.F. and M.A.S.A.F. was to be used, support of the land forces becoming the over-riding priority for both Air Forces as soon as the offensive began.

242. In general the Desert Air Force was to support the Eighth Army and XXII Tactical Air Command the Fifth Army, although one would lend assistance to the other as the ground situation required, and as determined by H.Q. Tactical Air Force. The prior objective of these two forces was to give close support in the immediate battle areas. The 57th Bombardment Wing of medium bombers was to be used on either Army front for close support operations as the situation required.

243. The Strategic Air Force was to be used in close support operations at the beginning of the offensives by each Army. Thereafter, it was to be available to attack communications targets in Italy, nominated by the Commanding General M.A.T.A.F., in order to maintain the interdiction already accomplished while M.A.T.A.F. forces were employed upon immediate battlefield objectives.

244. The opening of the offensive by the Eighth Army was conditional on a preceding air assault by both M.A.S.A.F. and M.A.T.A.F. Entry into the battle of the Fifth Army was to be dependent upon the gains made by the Eighth Army, and was therefore to be made whether or not it was possible to precede it with an air bombardment.

245. Preceding the 8th Army offensive some 800 Fortresses and Liberators were to bomb troop concentrations and gun installation areas 3,000 yards behind the enemy front line on D-day. Roughly 170 medium bombers were also to attack gun areas, after which 700 fighter-bombers were to follow with attacks on headquarters buildings, strong points and targets of moment. Approximately 100 Boston, Baltimore and Mosquito aircraft and the whole of No. 205 Group were to maintain the attacks during the night hours.

246. In addition to the close support operations full tactical and artillery reconnaissances were to be flown and four "Rover"\* stations made available.

247. This air programme was planned for four days and thereafter as required. Its execution, together with that for the 5th Army offensive, is described fully in the narrative of the final offensive.

## THE BATTLE.

*Preliminary Phase.*

248. At 0300 hours on 2nd April the preliminary phase of the battle began. Commandos in powered storm boats attacked at its western shore the Spit that divides Lake

\* The "Rover" system was used for bringing aircraft on to targets visible to a controller who was usually in a specially adapted armoured car or jeep—so that close support aircraft could be up to the minute with a rapidly advancing ground force.

Comacchio from the Adriatic. After two days fighting, the Spit had been taken, together with nearly 1,000 prisoners, thus eliminating enemy observation of the Eighth Army's right flank. This attack was helped, especially on the 2nd April, by fighter bombers and medium bombers, who bombed gun positions, troops, and other battlefield targets.

249. A further attack was made on the night of the 6th April across the Reno River on the Lake's southern shore and by the 8th, a bridge-head had been secured across the River. These two operations had secured the Eighth Army's right flank for their main attack.

250. On the 5th April, on the extreme left of the battle-front, an operation was undertaken to capture Massa. This was a diversion to keep the Germans busy in the west. Air support for this operation was provided by fighter bombers and medium bombers. The latter also flew missions against coastal guns near La Spezia which threatened to menace the Army advance up the western coast.

## THE EIGHTH ARMY OFFENSIVE.

251. The first phase was to break the series of river lines—Senio, Santerno, Reno and Sillaro—in which the enemy was very strongly entrenched. The Air Forces' task was to make these defence lines one by one untenable.

252. The first main assault began on 9th April when M.A.S.A.F. was used to pound the enemy's front line positions. Some 800 Fortresses and Liberators of 15th Air Force attacked troop concentrations between the Rivers Senio and Santerno. Medium bombers supplemented the attack and concentrated on gun positions. These in turn were followed by the full weight of Tactical Air Force fighter-bombers, who bombed, strafed and fired rockets at enemy positions to the West of the Senio River and along the floodbanks of the river itself.

253. At 1920 hours the Eighth Army's V Corps on the right and the II Polish Corps on the left opened the assault on the Senio positions near Lugo. By nightfall a bridgehead had been gained and bridges thrown across the river.

254. The effect of the preliminary air bombardment can be judged from the fact that, in spite of extremely difficult terrain and formidable defences, the army gained its objectives with remarkably light losses. The New Zealand Division, for instance, crossed the Senio without a single casualty, killed or wounded.

*Night 9th-10th April—Eighth Army Front.*

255. Following up the heavy raids of the afternoon, 72 Liberators of No. 205 Group dropped a further 200 tons of bombs on fortified positions along the Santerno River, to which the enemy had retreated after the heavy air attack in the afternoon and to which he had also brought forward two reserve divisions. This raid was in preparation for the Army attack on the Santerno positions which was to take place the following day. The employment of heavy bombers by night so close to our own positions was a new development, and undoubtedly surprised and dismayed the enemy. The attack was carried out within a period of four minutes and not a single bomb



fell outside the target areas. A message of thanks from the Army was received, which said "Bombing quite remarkable and accuracy very impressive."

256. In addition to No. 205 Group's attack on the Santerno defences, the night intruders of Desert Air Force—Bostons, Baltimores and Mosquitoes—flew the record number of 169 sorties, attacking gun positions from Castel Bolognese to Massa Lombarda, watching for any movement on the roads in the Po Valley, or on the Po River itself, and bombing strong-points in the battle area.

*Day 10th April—Eighth Army Front.*

257. The following morning, again preceded by a heavy air assault by fighter-bombers, the infantry pushed forward to the line of the Lugo Canal, and by mid-day had reached it in strength. New Zealand troops attacked across the Lugo Canal soon after mid-day and by the evening had reached the Santerno River; at the same time Lugo town itself was captured. Further South the Polish Corps also reached the Lugo Canal.

258. In the afternoon the XVth Air Force made an even greater effort in support of the ground forces, despatching 1,261 bombers and fighters to continue the attack on the Santerno defences begun by No. 205 Group the previous night. The object was again to disorganise the enemy and attack troop concentrations, gun positions and defence installations in the area immediately ahead of the Eighth Army.

259. Desert Air Force flew 662 sorties during the day of which 608 were in close support of V Corps and Polcorps. Four squadrons of Marauders of the S.A.A.F. bombed gun areas at Menate, near the South shore of Lake Comacchio.

260. On the Polcorps sector, attacks were made at Solarolo, Gaiano, Bagnara and against gun areas on both sides of the Santerno. The Mordano bridge over the Santerno was bombed by Thunderbolts, scoring four direct hits on the bridge as well as others on the approaches.

*Night 10th-11th April—Eighth Army Front.*

261. Desert Air Force continued its watch over the battlefield during the night, but after attacks had been made on the primary targets such as headquarters buildings, gun areas, factories and dumps, the ensuing reconnaissance revealed very little movement, and what little there was appeared very scattered.

262. During the early hours of the morning an attack by the army was launched on the extreme right flank from the bridgehead across the Reno gained in the operations preliminary to the main assault and reached a point some five miles south-east of Argenta, to the north of Route 16. The enemy reacted very strongly as this was a dangerous threat to his key towns of Bastia, Argenta and Ferrara, guarding the Argenta gap, and the way to the Po Valley along Route 16.

*Day 11th April—8th Army Front.*

263. During the day and through the following night the Eighth Army fought for the Santerno crossings and by the morning of the 12th April had considerable forces across the river. During the day 824 sorties were flown by Desert Air Force. The majority of these were close support missions under "Rover"

control, against targets in the immediate battle area nominated by the Army. Spitfires and Mustangs were constantly straffing enemy positions. Search by tactical reconnaissance aircraft for enemy movement in and behind the battle area again revealed very little. In fact his powers of movement had been practically destroyed by our previous heavy air attacks in preparation for this battle. Artillery reconnaissance aircraft secured the engagement of hostile batteries throughout the day, and photo reconnaissance aircraft covered the battle area, Ferrara, Rovigo marshalling yards and any port activity in the North. The day's activity was typical of the work carried out by the Air Force during the offensive.

*Night 11th/12th April—8th Army Front.*

264. Further bombing was carried out by No. 205 Group when 225 tons of bombs were dropped on enemy concentrations, defences and dumps in the Bastia area, some two to three thousand yards in front of our own troops. The success of these attacks especially on the enemy's communications caused him to abandon Highway 16 where it crosses the Reno and divert his withdrawal to a point ten miles north-west of Bastia.

265. Desert Air Force night intruders continued their attacks in the battle area and communications behind it.

*Day 12th April—8th Army Front.*

266. During the day the bridgeheads already gained across the Santerno were consolidated into one, and a reserve division moved up through its northern part with the object of producing a local pincer movement against Bastia in conjunction with the force attacking north of Route 16.

267. Further south, Polish forces attacked up Route 9, capturing Castel Bolognese and in the late afternoon, Mordano on the west bank of the Santerno.

268. On this day the majority of the 729 sorties flown by D.A.F. helped the New Zealand and Polish Forces to consolidate and enlarge their bridgeheads across the Santerno River. One hundred and six sorties were directed against targets in the immediate battle area. The usual round of attacks on gun positions and on tanks took place with considerable success.

*Night 12th/13th April—8th Army Front.*

269. During the night No. 205 Group attacked the key communications centre of Argenta on Route 16, which was now being threatened by the Eighth Army's thrust north and south of the road. The destruction was very great; roads were cratered and blocked with rubble thus impeding the enemy's use of this line of communication.

270. Bostons, Baltimores and Mosquitoes continued their vigil throughout the night, patrolling the battle area, the Po River crossings and intruding further North.

*Day 13th April—8th Army Front.*

271. At dawn on the 13th April yet another amphibious assault was launched behind the enemy's left flank on the north-western shore of Lake Comacchio. To the south of Route 16 an attack was begun on Conselice, and further progress was made north and north-west of Massa Lombarda.



272. The bulk of the 766 sorties in the tactical area on the 13th were devoted to direct support of the amphibious landing on the right flank. One notable incident during the day was when Spitbombers saw a Tiger tank disappear into a house. They bombed the house and produced a large explosion.

273. A Brigade Commander, commenting on an attack on a strong point by fighter-bombers, said, "The resistance was completely broken. My own troops were able to advance 1,000 yards without resistance and 100 prisoners were taken after the bombing attack."

*Night 13th/14th April—8th Army Front.*

274. Heavy bombers of No. 205 Group were again airborne to attack the town of Porto Maggiore which was another key point on the route through the Argenta Gap to the Po River, which the retreating Germans would have to use. Desert Air Force's contribution to the night's effort was aimed at harassing enemy movement in and behind the battle area. Motor transport, barges, the Po River crossings, and the road junction at Consandola were the targets. During the night a Mosquito night-fighter destroyed one F.W.190 and damaged another.

*Day 14th April—8th Army Front.*

275. At dawn the 2nd New Zealand Division attacked over the Sillaro River due east of Massa Lombarda and towards Medicina, and by mid-day had established a firm bridgehead. To the north, Conselice was finally occupied, while to the south, the Polish Corps captured Imola on Route 9, and swept on towards Castel San Pietro.

*Summary of the First Phase.*

276. Thus by the 14th April the first three of the river lines on which the enemy depended had been breached, and the Eighth Army's advance was gathering momentum. On the right flank the threat to the Argenta gap was growing, and the ground forces would soon be able to break out along Route 16 to the Po River. On the Eighth Army's left flank good progress was being made along Route 9 towards Bologna.

277. The time had therefore come to launch the Fifth Army into the Po Valley to be the left thrust of the pincer movement aimed at encircling the enemy south of the Po. On the morning of the 14th April the Fifth Army joined in the general offensive.

**THE FIFTH ARMY OFFENSIVE.**

*Day 14th April—Fifth Army Front.*

278. The attack was opened by the IV Corps at 09.45 hours some 20 miles south-west of Bologna in the mountainous country just west of Highway 64, which follows the upper valley of the Reno River. It was aimed at Mt. Pero, Vergato and Montese. The attack was preceded by a forty-minute "set piece" air attack by fighter-bombers, and during the day XXII T.A.C. flew a total of 514 sorties, of which all but 55 were on army support.

*Day 15th April—Fifth Army Front.*

279. A tremendous effort was made by the heavy bombers of 15th Air Force in the afternoon. Every available aircraft that could

possibly be used—even some which had previously been considered unfit for operations—was pressed into service. A total of 1,790 bombers and fighters were airborne. This force was given two tasks. The first was to attack 21 targets nominated by the Fifth Army, such as command posts, dumps and enemy-occupied areas, in the area south of Bologna; the second was to attack communications and stores targets further north. Some 1,600 tons of bombs were dropped by the first force, and some 800 tons by the second. The effort by the heavy bombers was augmented by that of 258 medium bombers of Tactical Air Force, which attacked enemy reserve areas at Praduro on Route 64, and at Medicina, though the latter was more intimately concerned with Eighth Army operations. Meanwhile, XXII T.A.C., in missions against targets along the front, including ground positions, command posts, occupied buildings and dumps, flew just under 500 sorties.

280. By the evening of the 15th, Vergato and Montese had been captured, and during the night, the Fifth Army II Corps, on the right of the 4th Corps, joined in the attack.

*Ground and air effort, 16th to 19th April, Fifth Army front.*

281. During these four days, all the Fifth Army forces were engaged in heavy fighting among the mountains which the enemy held so strongly, but gradual progress was made towards Bologna. Immense assistance was given in this task by both Strategic and Tactical Air Force aircraft, and the heights guarding the approaches to Bologna became universally scarred and pitted with bomb craters.

282. The planned assistance of the Strategic Air Force was largely foiled on the 16th by cloud over the Bologna area which prevented positive identification of targets, and only some 200 tons of bombs were dropped. In the meantime, XXII T.A.C. again directed almost its entire effort of some 500 sorties against battlefield targets to the south and south-west of Bologna. On the 17th and 18th weather conditions were more favourable for accurate bombing, and in the course of the two days, XVth Air Force aircraft dropped a total of 2,700 tons of bombs on tactical targets ahead of the advancing Fifth Army troops. The objective, as in the preceding attacks, was the maximum disorganisation of enemy forces, and the destruction of equipment and installations, prior to an attack by Allied ground forces. As in the case of previous attacks, virtually every building in the areas attacked was destroyed or heavily damaged. This effort was supplemented by that of the medium bombers, while XXII T.A.C. continued to devote almost all its attention to close support work.

283. The night of 16th/17th April provided No. 205 Group with another communications target of importance. Casalecchio, which is located three miles south-west of Bologna, offered an excellent opportunity for the interdiction of the flow of German reserves from Bologna which was attempting to stem the Fifth Army advance. The raid was successful, the road bridge in the town being destroyed, and much other damage being caused.

*Day 20th April. Fifth Army front.*

284. On the morning of the 20th the leading elements of the Fifth Army broke out of the Appenines into the Po Valley, and took up positions astride Highway 9 between Bologna and Modena. Preparations were immediately made for an attack on Bologna, all the high ground before it having by now been cleared.

285. At last the Fifth Army was ready to begin its drive across the Po Valley, first between the Rivers Reno and Panaro, and then across the latter and up to the Po.

## THE EIGHTH ARMY OFFENSIVE.

286. I have now reached a suitable stage in the narrative to go back to the activities of the Eighth Army. It will be remembered that I had taken their story to the 14th April, when a bridgehead had been gained over the Sillaro River and a strong threat developed towards the Argenta Gap.

*Ground effort 15th to 20th April. Eighth Army front.*

287. On the right flank, four days were spent in forcing the Argenta Gap, but on the 16th Bastia succumbed. On the 19th the infantry fanned out into the open country beyond Argenta, though resistance from strong points and defence posts, and at canals, was still met. An armoured brigade previously held in reserve was committed, and began to move through the gap to break the defence wide open.

288. In the centre, on the 17th April, a sweeping advance was made from the bridgehead across the Sillaro, along the Medicina-Budrio railway, until it was halted by yet another defended river position on the Gaiano. By the 20th this river had been crossed and the advance continued to the next river, the Idice. By this time the resistance was faltering, and a bridgehead was quickly gained here.

289. On the southern flank, the Polish Corps pressed on along and north of Route 9, and on the evening of the 17th opened long-range artillery fire on the enemy in Bologna. By the 20th the core of resistance in this sector was broken, and the advance here, together with that in the centre, was menacing the enemy's escape route from Bologna along Route 64 to Ferrara.

*Summary of the air effort from 15th to 20th April.**Eighth Army front.*

290. During these days the Desert Air Force continued its effort over the entire Eighth Army front at full intensity—a typical effort being that of the 16th when some 800 sorties were flown on Army support targets. A great deal of the D.A.F. air effort was concentrated on assisting our troops through the Argenta Gap. A secondary effort was aimed at assisting the advance in the centre.

291. As the enemy was forced from his front line positions, the distribution of his forces became increasingly disorganised, and it became difficult, therefore, to brief fighter-bomber pilots concerning their targets before take-off. In these conditions, briefing in the air by advanced mobile operations sections—"Rovers"—paid rich dividends. Of D.A.F.'s effort on the 16th April, of 800 sorties on close support targets, two-thirds were directed by forward

"Rovers". "Timothies", a code name for assaults by relays of fighter-bombers against points of resistance in the path of our advancing troops, were flown all day and every day. A feature of the attacks was the increased employment of fuel tank incendiary bombs which created widespread havoc over gun areas and strong-points.

292. There can be no doubt that the assistance given by the Air Force to the Army during this period of reducing the enemy's highly organised defences had a decisive effect. For instance, during the twelve days 9th-20th April, over 3,200 enemy-occupied buildings were destroyed or damaged by M.A.T.A.F. aircraft.

293. The Tactical medium bombers' main effort during this period on the Eighth Army front was directed to helping in the penetration of the Argenta Gap by bombing assembly areas and troop concentrations in that area, as well as those further north around Porto Maggiore.

294. No. 205 Group again gave considerable assistance by attacks on the enemy's lines of retreat. The first was made on the night of 17th/18th April against Porto Maggiore in the Argenta Gap. The attack was extremely successful, and the roads of the town were entirely covered with rubble and craters. The second attack—and this was the last made by the Group in direct support of the Army—was made on the night of 19th/20th April on Malalbergo, on Route 64 between Bologna and Ferrara. The town was at the time being used as a lateral communication route for enemy troops facing the Eighth Army and as a normal rear communication route for those facing the Fifth Army front. The attack was so successful that thereafter it could be said that Malalbergo ceased to exist as a communications centre.

295. The night intruders of Desert Air Force also did extremely valuable work during this period, attacking villages immediately to the rear of the enemy's front line, bombing crossings, barges and pontoons on the Po and Adige Rivers, adding weight to the attacks made by No. 205 Group on key communication centres, and attacking all road movement to the enemy's rear wherever it could be found. A tribute to the work of these aircraft was paid by General Von Senger, commanding the German armoured forces, who stated: "The night bombing was very effective, and caused heavy losses."

296. A special air operation (bearing the code name "Herring") added materially to the enemy's discomfiture at the beginning of his retreat. This was on the night of 20th/21st of April when a force of over 220 Volunteer Italian Parachutists was dropped just behind the enemy's lines in the Po Valley (mainly north and north-west of Bologna) by 15 C.47's of the 51st Troop Carrier Wing. They achieved considerable success, killing or capturing over 1,000 Germans and carrying out a varied programme of sabotage and demolition.

THE FIFTH AND EIGHTH ARMIES' OFFENSIVE.  
*21st to 24th of April.*

297. In these four days the German Armies in the Po Valley were cut to ribbons. Considering the enemy's small reserve and limited supplies of petrol and ammunition, normal military strategy would have dictated withdrawal across

the Po at an early stage of the battle before disorganisation was too great for a controlled retreat. But the German Commander, von Vietinghoff, did not give the order to pull back until the Eighth Army had broken through the Argenta Gap and was across the Idice River near Budrio, and Fifth Army troops had reached Route 9 west of Bologna. By then, an orderly withdrawal would in any case have been difficult as all reserves had been committed to the battle; and the attempt that was made was completely smashed by the power of the Allied Air Forces.

298. On the 21st April, Bologna was captured, Polish troops of the Eighth Army entering it from the east at the same time as American troops of the Fifth Army entered it from the south-west. The main part of the German garrison had withdrawn during the previous night.

299. On the Eighth Army's right flank, the drive to the Po along Route 16 was completed, leading elements reaching it on the 23rd, and on the 24th Ferrara was captured. The situation was then that some five German divisions were being contained against the Po east of Ferrara, and were fully occupying the Eighth Army troops in that area. But west of Ferrara to Bondeno the way was clear of the enemy, so it was decided to make a crossing there. By the 25th a secure bridgehead had been obtained, and the division making the crossing later revealed that the total forces opposing it consisted of 14 men.

300. In the meantime Eighth Army troops, advancing westwards south of Route 16, and in the central sector, had linked up with the Fifth Army troops advancing north between the Rivers Reno and Penaro. Meetings were made near Bondeno and Finale, and again near Cento.

301. The Fifth Army had reached the Po River at San Benedetto on the evening of the 22nd and a crossing was made at this point on the 23rd. On the 24th, the bridgehead was enlarged and Fifth Army troops began to pour across the River.

302. Meanwhile, another Fifth Army column was racing west along Route 9, capturing Reggio and approaching Parma. On the west coast, La Spezia was occupied on 23rd April without opposition.

303. In this period many thousands of prisoners were taken and the complete disorganisation of the German Armies was achieved.

#### *Summary of the Air Effort from 21st to 24th April*

304. Since September, 1944, constant reconnaissance of the Po River had been maintained, and an assessment made of the crossings which would most probably be used by the enemy if and when he tried to retire across the river. When, therefore, aerial reconnaissance carried out on the night of the 20th/21st April revealed that practically the whole stretch of the Po from Ostiglia to Crespini (halfway between Polesella and Berra) was active with pontoon bridges and other crossing activity, plans which had previously been prepared were carried into effect, and the full power of the Tactical Air Force was concentrated on the task of making the German retreat a shambles.

305. Constant attacks by the medium bombers made it impossible for the Germans to use the pontoon bridges and the ferries for heavy armour and motor transport. During the four days, 21st to 24th April, B-25 aircraft of the 57th Bombardment Wing made 38 attacks on active sites flying 605 sorties. At the same time, fighter-bombers of XXII T.A.C. and D.A.F. kept constant patrols above the river, and destroyed all craft which they found trying to cross during the day. In the same four days, some 220 boats and barges were destroyed or damaged.

306. In addition to attacking all attempted traffic across the river, the Tactical Air Force fighter-bombers paid great attention to searching out enemy movement on the roads and destroying the vehicles when they were found, and to cratering roads to impede the retreat. For instance, in the middle of the morning of April 24th, a collection of enemy armour, motor transport and guns was seen between Polesella and Berra—at that time the stipulated bomb-line. A special bomb-line was immediately laid down, and under "Rover" control, fighter-bombers attacked the target until late in the evening. In all, there were some three hundred vehicles in the area, and by the end of the day the majority of them had been destroyed.

307. It was in this period too, that the night-intruders put out their greatest effort of the offensive, maintaining during the night the interdiction of traffic across the river established by the medium and fighter-bombers during the day. They attacked pontoon bridges, ferries, boats and barges and concentrations of troops and vehicles assembled near the crossing points. For example on the night of 22nd/23rd April, the Bostons, Baltimores and Mosquitoes of D.A.F. flew a record number of sorties—174. Almost every aircraft was flown twice during the night and some crews made three sorties. The results achieved were also a record—55 motor vehicles destroyed, and 105 damaged, together with six barges. In addition, many direct hits were seen on bridges, wharves, ferry points and pontoons.

308. There can be no doubt that the efforts of the Tactical Air Force played a very important part in the crippling losses in armour and equipment which were inflicted on the enemy south of the River. During the four days 21st to 24th April 3735 motor vehicles were destroyed or damaged by Tactical Air Force. At the same time, claims against occupied buildings fell to 414 destroyed or damaged as compared with over 1,300 during the previous four days, which is indicative of the greatly lessened resistance put up against our advancing troops.

309. The air attacks carried out on the crossings during this period undoubtedly caused the enemy to abandon most of his equipment on the south side of the river. In the stretch between Pontelagoscuro (due north of Ferrara) and Polesella, for instance, where 76 Panzer Corps crossed, 900 vehicles, 100 guns of all calibres, and 59 Mk.4 Tanks, were counted left abandoned on the South side of the river, and this Corps was believed to have suffered fewer losses than other German formations. The air attacks against the Po crossings played a major part in rendering the enemy too weak

and disorganised to prevent the Allied ground forces' quick pursuit across the river in strength, and in causing the collapse which followed.

310. Confirmation of this is given by the statement by General von Senger, commanding the German XIV Panzer Corps "It was the bombing of the River Po crossings that finished us. We could have withdrawn successfully with normal rear-guard action despite the heavy pressure, but due to the destruction of the ferries and river crossings we lost all our equipment. North of the River we were no longer an Army".

311. Similarly General von Vietinghoff, German Supreme Commander, said: "The crossings of the Reno and the Po Rivers were decisively influenced by the employment of the Allied Air Forces. The smashing of almost all ferries and bridges made an ordered retreat across the Po no longer possible. The troops amassed at the crossing points and often had to swim to the other bank without heavy weapons".

*The Final Stages of the Battle. 25th April to 2nd May.*

312. On the 25th, both Eighth and Fifth Armies were largely across the Po. From their bridgeheads, a series of columns were sent racing northwest, north and northeast, and before long had severed the escape route into the foothills of the Alps north of Milan, so that those elements of the German army which had managed to get across the Po to the west of the main Allied crossings, soon found themselves confined in what was, for all practical purposes, a very large prisoner of war camp. In northeast Italy, on the 1st May, New Zealand forces had linked up with the forces of Marshal Tito in the Trieste area.

313. Towards the end of April, with only four German Divisions left which bore any resemblance to intact fighting formations, it was clear that any attempt to hold the Southern Redoubt was hopeless, particularly as Army Group "G" in Southern Germany was also on the point of collapse. One course alone was open to the German Commander—unconditional surrender. The surrender instrument was signed at Field Marshal Alexander's Headquarters at the Royal Palace of Caserta on the 29th April, and the "cease fire" took effect on the 2nd May.

*Air Effort in the final stages of the Battle. 25th April to 2nd May.*

314. The outstanding air activity in support of the Army's pursuit of the defeated enemy was an operation named "Corncob," which aimed at blocking or delaying his retreat into north-eastern Italy by destroying the road bridges over the Adige and Brenta Rivers.

315. On the 20th April, there were nine road bridges serviceable across the Adige between Verona and the Adriatic coast. On that day, 272 M.A.S.A.F. heavy bombers destroyed three of these at Rovigo, Barbuglio and Lusia. On the 23rd April another attack was delivered by M.A.S.A.F. aircraft which put out of action the bridges at Badia Polesine, Legnago, Bonavigo, Albaredo, and Zevio. The ninth bridge, at Cavarzere, was destroyed on the 24th April by Tactical Air Force medium bombers.

316. With all the road bridges down over the Adige river the retreating Germans sought

to use ferry crossings instead. They were prevented from doing this to any large extent by constant patrols of Desert Air Force aircraft from the 24th to the 26th April. On the 26th, Spitbombers found well over one hundred motor vehicles waiting to be ferried across the river and immediately attacked them. The damage inflicted was, however, curtailed by the onset of bad weather.

317. The second phase of Operation "Corncob" was the interdiction of road bridges across the River Brenta, between Bassano and the east coast. Along this stretch of the river there were still ten bridges serviceable for motor vehicle traffic. Bad weather interfered with the execution of the plan, but nevertheless from 23rd to 26th April, seven of the ten targets were cut or blocked by either M.A.S.A.F. heavy bombers or M.A.T.A.F. medium bombers. The targets affected were the three road bridges at Padua, the Chioggia railway bridge (which had been converted for the use of road traffic), the diversion around the previously destroyed bridge at Friola, the bridge at Corte, and a bridge west of Chioggia.

318. During the early days of the retreat, fighter-bombers by day and night intruders by night continued to attack enemy movement wherever it could be found. After the 27th of April, it could be said that the Air Force's task was finished. The Army was moving so fast against little resistance that pre-arranged targets were no longer possible. In fact, the ground forces did not meet any defence which required bombing from the air, and the battle, such as it was, had passed out of the range of the Spitbombers.

319. After the unconditional surrender took effect on the 2nd of May, sweeps were made in the Trieste area on the 3rd of May to impress unruly elements there, and prevent any incident on a large scale arising from the Yugoslav claim to the city.

*Interdiction of Railways during the period of the Offensive.*

320. Although the blockade of Northern Italy by the disruption of the frontier railway routes continued to be an important item of the air programme throughout April, the satisfactory interdiction prevailing as the result of the previous long offensive made it possible to reduce the M.A.T.A.F. effort against these distant rail targets as soon as the ground conflict re-opened.

321. The most striking feature of the attacks on railways was now the big effort of the M.A.S.A.F. bombers, which operated against targets nominated by M.A.T.A.F., and thus allowed the latter to concentrate primarily on operations directly connected with the battle. Following their big effort of 8th April, 265 U.S. heavies four days later hit rail targets across the Venetian plain and along the Brenner route. Another large scale assault, prior to the enemy's retreat, was made on the 20th by 500 escorted American heavy bombers who attacked the Brenner route bridges and marshalling yards.

322. When it became evident that the enemy was being driven from the Po Valley a policy was formulated of conserving railway facilities in North Italy. Only targets definitely associated with the supply or withdrawal of the

German Armies were attacked, and we had now to consider military needs after the end of the Italian battle, and those of the civil economy. The Strategic day bombers' last big attack on Italian railway targets was made on the 24th April, when a high proportion of 1,200 bombers and fighters bombed or strafed railway communications in North-East Italy and along the Brenner route, while the remainder attacked the continuation of these lines in Austria, Italian road bridges and supply targets. By night, in the meantime, No. 205 Group made two raids on the Verona Parma bridge, at the southern end of the Brenner. The operations of the M.A.S.A.F. day and night bombers against the railway system in Austria, Yugoslavia and Southern Germany, which in many cases directly affected the supply of Italy, are considered in Part IV.

323. From the 9th to 16th April, when the battle raged at full intensity, the Tactical medium bombers were able to devote little attention to their customary railway targets; from the latter date until the 27th (when bad weather grounded the mediums for the rest of the month) the offensive was continued against Brenner line targets and a smaller effort was directed against the north-eastern routes and two bridges in southern Austria and north-west Yugoslavia. The total sorties flown by the Tactical mediums during April against railway communications amounted to 1,374 in the course of which 2,688 tons of bombs were dropped. Seventy-seven per cent. of these sorties were flown against Brenner line targets.

*Results of the interdiction policy during April.*

324. Definite blocks on the Brenner route varied between five and eighteen throughout the month, so that at no time was continuous through traffic possible.

325. The three north-eastern frontier railway routes remained out by the destruction of bridges for the third month in succession. The important northern line was apparently given priority for repairs, but despite this, was never made fully serviceable. Spasmodic attempts were made to repair the central line for a time, but at last the unequal struggle was given up altogether. This had been the case with the southern lines for a long time.

326. Further south, through traffic was at no time possible across the Venetian Plain. The Brenta zone of interdiction was well maintained; in particular, an attempt to make the Padua north railway bridge serviceable was forestalled by a M.A.S.A.F. attack on the 11th April. More repair activity was apparent in the Piave River zone, but here again, M.A.S.A.F. heavy bombers prevented any return to serviceability of the Nervesa and Ponte di Piave diversions. Less interdiction was maintained at the Livenza River zone, but this was comparatively unimportant owing to the disruption at Nervesa, further west. In the Tagliamento River zone, the Latisana diversion was still incomplete when it fell into Allied hands, and that a Casarsa, kept out of action by M.A.T.A.F. fighter-bombers until the 12th, was knocked out for the last time by M.A.S.A.F. on the 24th.

327. In the north-central zone of the Po valley, through traffic was impossible between Verona and Milan until the 22nd April, but

the few bridges which were made serviceable after that date obviously availed the enemy little as the result of the campaign was then a foregone conclusion.

328. All the permanent railway bridges over the Po from Bressana Bottarone to the east coast remained out of action and no attempt was made to repair them.

*The part played by M.A.C.A.F. in the final offensive.*

329. In my description of the part played by the Air Forces in the final offensive, I have not thus far mentioned the work done by M.A.C.A.F. I should therefore like now to make specific reference to its efforts.

330. In operations connected with the Italian campaign during the month of April, M.A.C.A.F. destroyed 328 motor vehicles and damaged 234 more; destroyed or damaged 30 locomotives and over 230 units of rolling stock; and damaged three bridges. These operations were carried out especially at the western end of the Po Valley, thus enabling M.A.T.A.F. aircraft to be concentrated on the main battle front.

331. In its own particular sphere of activity, M.A.C.A.F. during the month of April damaged one ship over 1,000 tons, sank 12 smaller craft (including a midget submarine), and damaged 32 more. Air-sea rescue operations resulted in the saving of 118 aircrew personnel.

*Other Air Force activities during the battle period.*

332. With the very small air force at the enemy's disposal, only a very small part of the Allied Air Force's effort was required in counter-air activity. The enemy air effort was limited to occasional unsuccessful attacks on Allied photographic reconnaissance aircraft, and to small-scale ground attack activity by Stukas and Me. 109 fighter bombers in the battle area. This latter effort reached its peak on the night 22nd-23rd April, when ten to fifteen sorties were reported on the Fifth and Eighth Armies' fronts. After that date this harassing activity quickly declined as the Allied ground-forces over-ran the bases at Villafranca (10 miles S.W. of Verona) and Ghedi (10 miles SSE. of Brescia) and later at Thiene (15 miles N. of Vicenza).

333. Both long-range and short-range reconnaissance by the enemy was on a reduced scale during the battle and quite inadequate to give the German commanders any picture of developments on our armies' fronts and in the rear areas.

334. On sixteen of the seventeen nights from 8th to 25th April, Tactical Air Force night-fighters flew reconnaissance flights over the Ghedi, Villafranca, Bergamo (30 miles NE. of Milan) and Thiene airfields, and made attacks when opportune. Day attacks on airfields resulted in a total of 40 enemy aircraft destroyed on the ground and 27 damaged.

335. In April, M.A.T.A.F. supply dropping aircraft working with Italian Partisan Forces flew 711 sorties, of which 485 were effective; of the non-effective sorties, 107 failed because of lack of signals in the dropping areas. Nearly 950 tons of supplies were dropped, of

which by far the greater proportion was in Italy. The dividends paid by the supply dropping became increasingly evident as the Allied armies made their advance. In addition to harassing the enemy's retreating columns, the Italian Partisans in many cases entered towns before the arrival of our troops and succeeded either in occupying them, or in reducing enemy opposition to our attacking forces.

#### THE EMPLOYMENT OF AIR FORCES DURING THE BATTLE.

336. By way of Summary I should like to draw attention to the salient features of the employment of the Air Forces during the battle. Initially, before the armies could move without sustaining heavy casualties, the way had to be blasted open by the Mediterranean Allied Strategic Air Force and kept open by the Tactical Air Force. Whenever there was a commitment too big for the Tactical Air Force to deal with, the heavy bombers of Strategic Air Force were called upon. On the Tactical side, the development by Desert Air Force of fighter-bomber technique reached perfection. Strong points and defended obstacles a few hundred yards ahead of our ground forces were habitually attacked on call from the ground forces concerned.

337. The air attacks were maintained throughout the night as well as the day and caused heavy enemy losses. Before the battle, all our Boston and Baltimore Squadrons had been trained for effective tactical bombing by night. Joined by a number of Mosquitoes, they were able to maintain at night the interdiction and close support already successfully accomplished by day; they did this with outstanding success and gave the army tremendous help, fully justifying their conversion from day to night bombers.

338. The inclusion, also of No. 205 Group (Night Bombers) in the Strategic Air Force made possible a round-the-clock employment of heavy bombers in a tactical role. The importance of this was not so much in the weight of bombs dropped, but in the fact that we had at our command a heavy night bomber force, so trained that it could paralyse at one blow a vital communications centre or a concentration of enemy troops. The perfection of a technique for close support for twenty-four hours a day helped the ground forces immeasurably in attaining their object of destroying the enemy South of the Po.

339. The scope of the Air Force's effort can best be gauged by an Army Commander's remark:—"I don't suppose there has ever been a campaign where the Army has asked so much of the R.A.F. and where the R.A.F. has given such wholehearted and devastating support, always in the closest proximity to our men." This close support by our aircraft gave our troops great moral as well as material aid. Whenever a difficult position or obstacle was reached by the Army they were able to call on the air forces to attack and remove it. The positions were invariably very close to our own troops and to see them reduce with such effective accuracy and without any air opposition by the enemy kept the morale of our troops at a very high pitch.

340. From the enemy's own description, taken from a captured document, a very clear picture of the intensity and "attention to detail" with which our fighter-bombers pinned down enemy movement can be obtained. The German document covers the few days from the 9th to 13th April:—"Even single despatch riders, isolated telephone line maintenance personnel, messengers and bicyclists were attacked by fighter-bombers. Single tanks were attacked by as many as fifteen fighter-bombers at a time." It was little wonder that the Germans were unable to move.

341. The battle began, as indeed it continued, as an outstanding example of combination and co-operation, not only between the personnel of the British and American nations, for that had already been achieved, but within the Allied Air Forces themselves. Day bombers, night bombers; day fighters, night intruders; all worked with perfect precision and unceasing devotion to duty. Before the last day fighter had landed, Mosquito intruders were airborne and covering the dusk period, closely followed by other Mosquitoes, Bostons, Baltimores and Invaders keeping the battle area, and beyond, constantly covered throughout the night. In the morning the day fighters were airborne before the Mosquitoes flying through the dawn period had landed. This constant vigil was maintained till the German surrender. And reinforcing the constant jabbing by these Tactical Air Force aircraft, would come the sudden massive blows of the heavy bombers, who were employed both day and night closer to our forward troops than ever before in the Mediterranean theatre.

#### A BRIEF ASSESSMENT OF THE CONTRIBUTION OF AIR POWER TO THE VICTORY IN THE ITALIAN THEATRE.

342. My object in the next few paragraphs is to set down some of the outstanding ways in which air power contributed to the victory in Italy. I do not pretend that it is anything like an exhaustive analysis, since that would require an examination of many factors which are outside the scope of this despatch, and are rather matters for the historian, such as the effect of the Allied strategic bombing of German industry upon the ability of the German Armies in Italy to make war. I have confined myself chiefly to the facts that were apparent in the Italian situation, and the ways in which Italian-based air power was known to have affected that situation.

343. In the first place, the enemy's position on the eve of the battle was undoubtedly critical, and air power was the major factor in causing this situation. Though his ground positions were strong enough, he was desperately short of all those things which are required to wage modern warfare successfully, e.g. fuel, ammunition, transport, aircraft, tanks and guns. And it was the Air Forces which had caused him to lack all these vital things.

344. His shortage of fuel was due directly to the strategic use of air power, assisted by the advance of the Russian Armies. This advance in itself was greatly assisted by that same strategic air power. Whatever may have been the overall supply position of ammunition, tanks and guns for all the German Armies on all the fronts, those in Italy without doubt received such reduced supplies that their position was



critical. As for morale, in the words of the German Supreme Commander: "Allied air power was decisive in that as a result of their complete lack of an air force of their own, and without the promise of the help of a like force, the German troops felt still more the Allied superiority of materials."

345. To add to the cares of the German commanders, because of their limited ability to make air reconnaissance they could have had only a very imperfect knowledge of the detailed preparations that were being made for the offensive, while the Allied commanders, through the unfettered freedom of air reconnaissance enjoyed by M.A.A.F. were completely informed about the enemy's defences and dispositions.

346. The extreme effectiveness of the assistance given by the Air Forces to the ground forces during the battle itself is also beyond doubt. I shall not attempt to evaluate which of the forces made the greater contribution—nothing would be gained by that since they were so essentially a team, working together in perfect harmony, the one taking advantage of the opportunities created by the other; but the following points show the great importance of the part played by air power at this time.

347. The air bombardment of the German fixed defences in the early days of the battle was probably the decisive factor in enabling our ground forces to overcome them rapidly and with a minimum of casualties. German prisoners of war testified that the dropping of fragmentation bombs on such a large scale caused many casualties, and, especially in the region of Ferrara and Lake Comacchio, greatly reduced the resistance of the German troops. Again, communications between higher and lower commanders were completely disrupted; even radio and telephone communications were delayed threefold. The German Supreme Commander's statement testifies to the effect of this. "The smashing of all communications connections was especially disastrous. Thereafter, the orders failed to come through at all, or failed to come through at the right time. In any case, the command was not able to keep itself informed of the situation at the front, so that its own decisions and commands came, for the most part, too late."

348. Even when those decisions were made, and the commands given, air power prevented their being carried out effectively. Movement of local reserves by day was to all intents and purposes prohibited by the inevitably high losses which would have followed, while movement by night, though still possible, was also attended by heavy losses. To quote the German Supreme Commander once again: "Local reserves, which should have moved by day, often arrived with great delay at the ordered position. Even tanks could not move by day because of the employment of fighter-bombers. The effectiveness of fighter-bombers lay in that their presence alone over the battlefield paralysed every movement."

349. Another important point was that because of the complete air superiority enjoyed by the Allies, our Air Observation Post aircraft could operate completely unhindered and therefore with maximum efficiency. The final result was that these aircraft had only to appear within sight of the German artillery to cause

the latter to cease fire, and so in this manner, in vital phases of the battle, an essential element of the enemy's defence system was denied him.

350. Orderly retreats could not be conducted by the Germans because of the air attacks on their lines of communication in the battle area. Through the destruction of almost all the crossings of the numerous canals, trans-shipment was made much more difficult, forcing the enemy to leave much heavy equipment behind. In that way, retreat imposed by the ground forces was turned into a rout by the air forces.

351. And at the Po crossings, as I have already shown earlier on in the description of the battle, rout was turned into destruction, again by the use of air power.

352. Such were the effects of air power upon the Germans. There was a reverse effect upon our own troops. Their morale was heightened by the constant presence of friendly aircraft, by the complete absence of enemy aircraft, and by the knowledge that their casualties would always be kept to a minimum because the air forces would be there to lend a hand with the task.

#### FINAL REMARKS.

353. In concluding this despatch I wish to place on record the remarkable team work of the three Services under the leadership of Field Marshal Alexander, the Supreme Allied Commander. The mutual understanding was complete at every level within the Theatre, between the three Services themselves as between the Allied Forces generally. This atmosphere of the happy family working for a single purpose, with no thought except for the general good, was a decisive factor in the success of the operations.

354. Finally, I wish to pay my tribute to the magnificent spirit shown by the officers and airmen under my command whose achievements I have described. When I assumed command of them they had made a long journey from Egypt to Northern Italy. Many of the Squadrons had been engaged for over four years in continuous and bitter fighting. The airfield strips were far from ideal. The Heavy Bomber Squadrons on the Foggia plain had been living under canvas throughout the winter in camps which were often a sea of mud. The Maintenance and Administrative Units had also been operating under the most severe conditions of weather and accommodation.

355. Yet the spirit of all ranks in every unit remained at the highest level. The one desire of the Squadrons was to get to grips with the enemy, and if he was not to be found in the air they sought him out relentlessly on the ground. The maintenance personnel in Squadrons and in supporting units toiled ceaselessly to keep the aircraft flying at the very high rate of effort that the battle demanded. It was a joy and an inspiration to command such a force, whose mastery over the enemy resulted in so complete a victory.

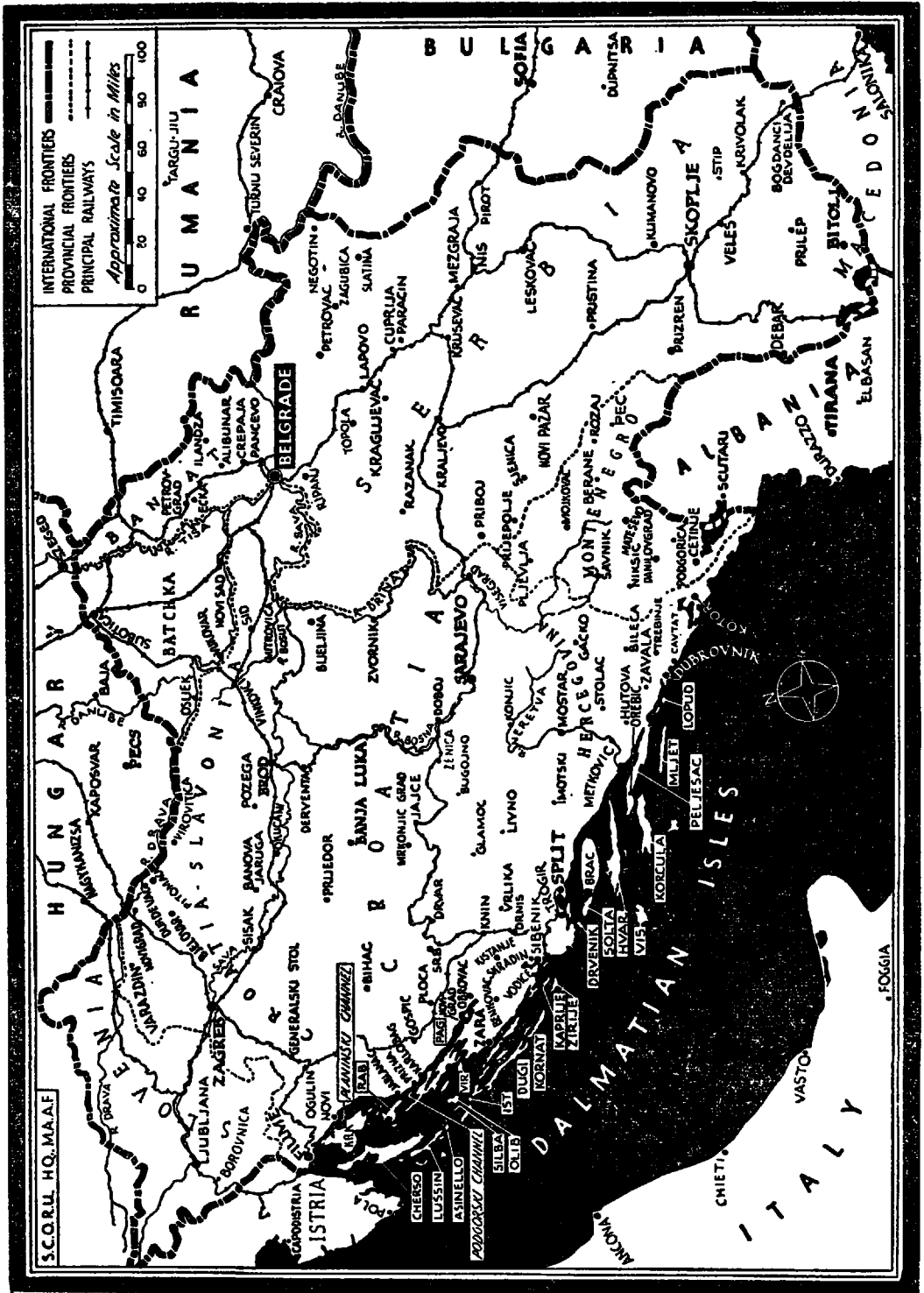
GUY GARROD,  
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Mediterranean and Middle East.*

August, 1946.



GENERAL MAP — JUGOSLAVIA



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