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THE FIFTH AIR FORCE IN THE HUON PENINSULA CAMPAIGN

JANUARY TO OCTOBER 1943

PREPARED BY
AAF HISTORICAL OFFICE
HEADQUARTERS, ARMY AIR FORCES

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R E F E R E N C E H I S T O R Y

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F O R E W O R D

This study, fourth in a series of six covering the activities of the Fifth Air Force and its predecessors from 1941 through January 1944, was written by Maj. Richard L. Watson, Jr., of the Southwest Pacific Branch, Operational History Division, AAF Historical Office. A fifth study is projected to carry the narrative down to February 1944 and thus complete the Huon Peninsula Campaign. The sixth is to be a detailed treatment of air operations in the Bismarck Archipelago from November 1943 to March 1944. Like others in the series, the present study is subject to revision as additional information becomes available.

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Chapter I

THE SOUTHWEST PACIFIC IN JANUARY 1943

On 23 January 1943 the Papuan Campaign was officially considered at an end. Allied air units and Australian infantry, taking advantage of the enemy's overextended supply lines, had driven back a Japanese force which by late summer of 1942 had pushed over the Owen Stanley mountains to points within 30 miles of Port Moresby. With the aid of elements of the American 32d Division which the Fifth Air Force had flown across the towering ranges, the Japanese had been compressed into the Buna-Gona area, where in December they were virtually annihilated. Only scattered remnants had slipped along the swampy coast line to join well-established garrisons in the Salamaua area and at Lae, 150 miles to the northwest.

Though this victory had come as a result of offensive action, the Papuan Campaign was essentially a defensive operation forced upon the Allies by Jap initiative. With the Japanese driven from Papua, however, the Allies were in a position to undertake a full-fledged offensive for the reconquest of New Guinea as a springboard for the return to the Philippines. The first phase of this offensive was an arduous campaign ending in the capture of Lae and Salamaua on the Huon Gulf by October 1943. In the accomplishment of this task, Australian troops fought their way across towering mountains and through steaming swamps in an indescribably difficult overland operation based on Wau, a point about 30 miles inland from Salamaua. Other ground units, both American and Australian, reached

their goal by a series of amphibious landings along the coast of Northeast New Guinea.

Without the continuous cooperation of the Allied Air Forces, however, the campaign could not have succeeded. Using tactics learned the hard way in earlier Pacific fighting, American and Australian flyers maintained the aerial superiority over New Guinea gained in the Papuan Campaign. Hardworking engineers constructed advanced airdromes giving fighters and even bombers new bases from which to cover the enemy's lines of communication through the Bismarck Sea. Unarmed transport planes, usually protected by friendly fighters, defied tropical storms and enemy interception to supply otherwise isolated outposts. At the same time, service units and ground crews "sweated out" what seemed to be a thankless job of moving supplies and keeping planes ready to fly.

During the campaign for the Huon Gulf, Allied forces were confronted with perhaps even more difficult problems of terrain than in the earlier Papuan fighting, and by equally enervating weather and an enemy resistance no less fanatical. It was a small campaign, at least as far as the forces in immediate contact with the enemy were concerned, but other factors made this and succeeding campaigns in the Pacific among the most complicated operations in military history. In addition to great distances, uncooperative weather, and almost uncharted water and land areas, delicate problems of command were chronic in a situation where the air, land, and naval forces of two nations had to be welded together, and where at the outset a certain confusion existed as to the geographical limits of the commander's responsibility.

The choice of General MacArthur in March 1942 as Commanding General of the Southwest Pacific Area had placed in command one who was fully capable of dealing with the broad strategic problems of an area which included not only Australia, New Guinea, the Solomons, and most of the Netherlands East Indies but significantly, the Philippines as well. The original definition of the Pacific areas in May 1942 had given all of the Solomons to the Southwest Pacific but prior to the American landing on Guadalcanal in August, the eastern boundary of MacArthur's command was shifted to follow the 159th meridian south from the equator. Thus the South Pacific forces, primarily a naval command, were given clear-cut authority over Guadalcanal and Tulagi, [1] while MacArthur retained control over the upper Solomons.

Though this presented little difficulty during the operations of 1942, it was clear that activities of converging air and naval forces would soon begin to overlap with resulting complications. Accordingly, the Operations Division of the War Department General Staff prepared a paper for the Joint Staff Planners in September of 1942 which attempted to establish a more satisfactory delineation of responsibilities. The paper remained on the agenda until March 1943 while a subcommittee appointed to study the matter vainly attempted to agree on a report. There was a definite feeling on the part of some of the planners that "for coordination in planning and operations, it is essential that there be unity of command in the Solomon Islands-British New Guinea-Bismarck Islands Theater of Operations." It was difficult, however, to come to an agreement as to how such a unified command could be established, and in the end the setup remained unchanged. [2] The boundary between the South and Southwest Pacific remained the 159th meridian. [3]

Decisions on over-all command and general strategy probably had little effect upon the immediate problems facing the infantry and the airmen whose assignment was to drive the Jap from British New Guinea. More important to them was the organization within the theater itself. The Papuan Campaign had shown that General MacArthur had devised a command flexible enough for jungle combat. With some modifications it was to be retained during the next operation. MacArthur's headquarters was at Brisbane, but he himself spent frequent periods at an advanced headquarters in Port Moresby or, on occasion, even in the forward areas. The Allied Land Forces continued under the command of Australian General Sir Thomas Blamey, under whom Lt. Gen. E. F. Herring, another Australian, commanded in January 1943 the New Guinea Force.[4]

At the conclusion of the Papuan Campaign, General MacArthur did not consider his ground forces prepared for an immediate continuation of the offensive. He had available for combat two U. S. Army, one Marine, and three Australian divisions. Of these the U. S. 32d Division, battered by the Papuan fighting, was being transferred to Australia for rehabilitation and replaced by the 41st Division. The First Marine Division after being withdrawn from Guadalcanal had been sent to the Melbourne area and, according to naval authorities, would not be ready for combat for six months. Jungle combat had also been hard on the Australian 6th and 7th Divisions, and these too were to be reconstituted in Australia. Furthermore MacArthur expected that the 9th Australian, which was returning from the Middle East[5] would have to be completely re-equipped.

Although the ground forces in New Guinea were largely under the control of Australian leaders in January 1943, the air force commanders

were principally American. True, the air organization which paralleled the Allied Land Forces was the Allied Air Forces and was staffed by both Australian and American officers. But of the two units which composed the Allied Air Forces, the RAAF and the American Fifth Air Force, only the Fifth was adequately equipped for offensive action. The RAAF, however, was gradually building up a considerable force, and several of its squadrons equipped with Beaufighters, Beauforts, P-40's, A-20's, and PBY's had already contributed much to the New Guinea fighting while attached to the Fifth Air Force.

Lt. Gen. George C. Kenney, commander of both the Allied Air Forces and the Fifth Air Force, reserved his primary interest for the Fifth, the "Best Damn Air Force in this or any other army." [6] Kenney had perhaps an exaggerated concept of the potentialities of air power, but he possessed a combination of unbounded energy, dislike of redtape, and willingness to experiment, together with a real understanding of both engineering and flying problems, which inspired confidence. His permanent headquarters was at Brisbane where he was in close contact with General MacArthur. [7] His channel to New Guinea was through the Fifth Air Force Advanced Echelon, located at Port Moresby and commanded by Brig. Gen. Ennis C. Whitehead. Whitehead, in turn, was in a position to direct the activities of the V Fighter Command, commanded by Brig. Gen. Paul B. Wurtsmith, and the V Bomber Command under Brig. Gen. Howard Ramey, who had succeeded Brig. Gen. Kenneth Walker lost over Rabaul early in January. The only other organization at the command level, the Air Service Command under Brig. Gen. Carl Connell, was located at Brisbane with an advanced echelon at Townsville. There was at this time no troop carrier command. Of the two

troop carrier groups in the Southwest Pacific, the veteran 374th Group was under the operational control of the Fifth Air Force Advanced Echelon, and the newly arrived 317th Group remained in Australia under the Directorate of Air Transport, Allied Air Forces.[8]

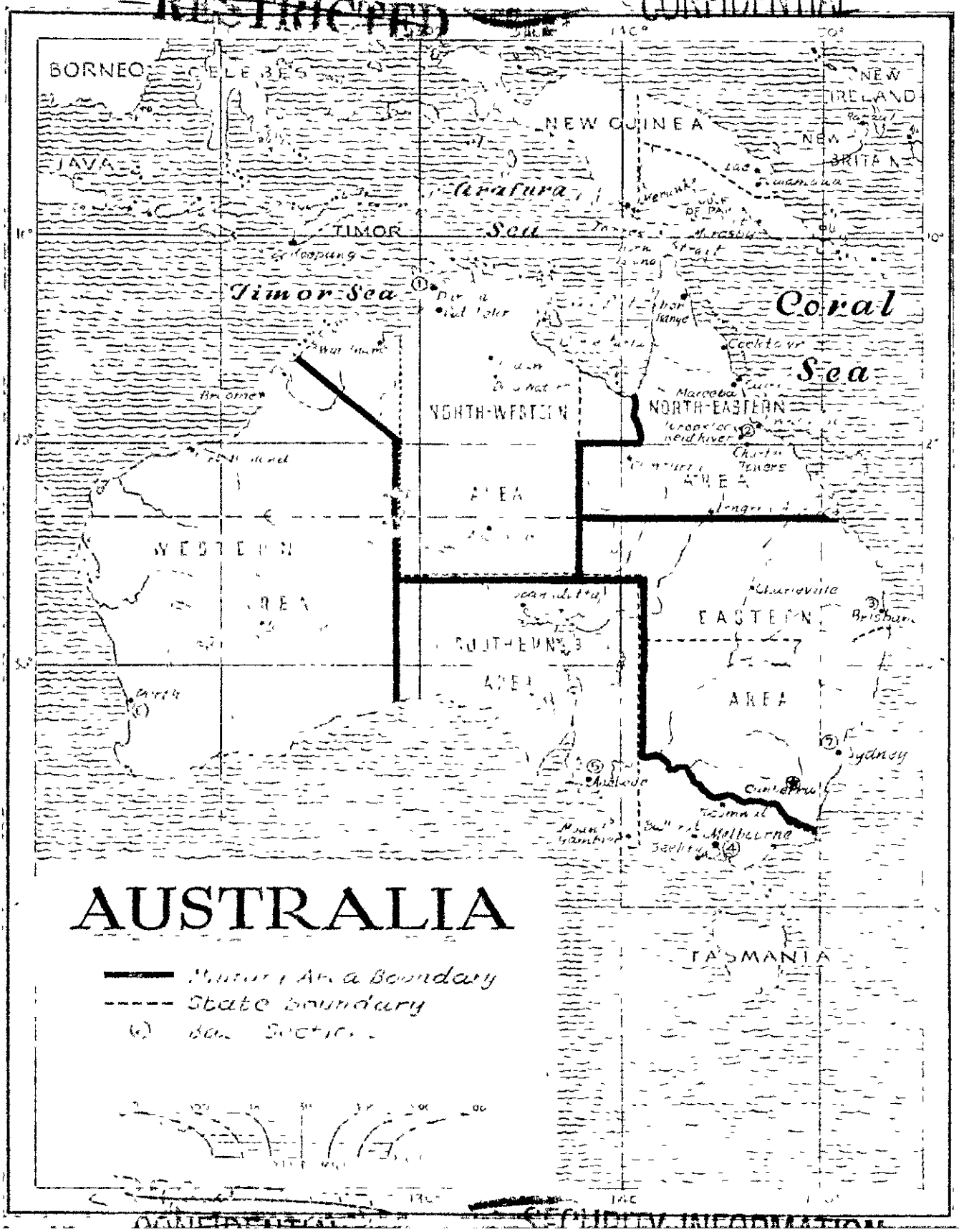
The air force organization was still in its formative stage, having developed after the activation of the Fifth Air Force in September 1942. But though the organization was new, most of its constituent units were veterans in the theater, several having left the United States within two months of the attack on Pearl Harbor. All units, moreover, had become so exhausted during the Papuan Campaign that both General MacArthur and General Kenney believed the air forces, like the ground forces, were not ready to participate in a prolonged offensive.[9]

At the conclusion of the Papuan Campaign, the Bomber Command consisted of two heavy groups, two medium groups, and one light group. The B-17's of the 43d Bombardment Group (H) had seen hard service for six months. Of the 55 B-17E's and F's on hand, approximately 20 at all times were undergoing depot overhaul. Perhaps 50 per cent of the remainder were in daily combat commission, and a quarter of these were regularly used for reconnaissance flights, leaving no more than 14 for a striking force. The other heavy group, the 90th, was equipped with B-24's. The last combat group to arrive in the theater, it had made a slow start in November and December, but in January 1943, it began to take over a major share of heavy-bomber operations. In addition to its reconnaissance and long-range bombing missions, it ran up an impressive record of enemy planes shot down. By April it had been credited with 121 "kills." Maintenance problems, however, were if anything more difficult than with

the B-17, and of 60 B-24's on hand, no more than 15 could be counted on at any one time for a striking force. In 1942, it had been customary, owing to the danger of enemy air attack, for bomb squadrons to be based in Australia, and to use Port Moresby only as an advanced base "to top off" before performing a mission. But by 1 February, Allied flyers had won sufficient control of the air over Papua to permit the basing of five heavy squadrons on Port Moresby fields.[10]

General Kenney's medium bombardment was even weaker than his heavy-bomber strength. On paper he had two groups, the 38th and the 22d. But two squadrons of the 38th Group had never reached Australia and were operating in the South Pacific; and while the other two squadrons were based at Port Moresby with their B-25's, they had only 27 aircraft on hand and were thus about 10 short of their normal complement. These two units, however, were more nearly ready for combat than the four squadrons of the 22d Bombardment Group (M). One of the first B-26 units to see combat, this organization had been in action since April 1942. During the spring of that year it had carried out long-range missions against Rabaul until sufficient heavy bombers had arrived to keep that important point under surveillance. From then on it had concentrated on other targets within the New Guinea area. It had suffered heavy losses, over 30 planes from June through November 1942, and had received only eight replacements. By January 1943 the remaining 28 aircraft were in extremely bad condition, and the entire group was withdrawn from combat and sent to Australia for recuperation.[11]

The light-bombardment unit in the V Bomber Command was the 3d Group. Officially listed as a dive-bomber unit, it had had a varied history.



The original planes assigned to the group, A-24 dive bombers, had been taken out of active combat in August, shortly after a disastrous mission against shipping at Buna from which six out of seven planes had failed to return. Since then the group had flown both A-20's and B-25's with conspicuous success. But since June 1942, some 15 A-20's had been lost and only four replacements received. By January 1943, according to Kenney, the A-20's available had been reduced to a point where the 8th and 89th Squadrons had been "combined to operate what amounts to one squadron." These and the other two squadrons of the 3d Group, equipped with B-25's, were based at Port Moresby, but operations of the latter were limited by intensive training for employment of B-25's as low-level attack planes.[12]

The three fighter groups (the 3th, 35th, and 49th) were all veteran units, having left the United States for the Southwest Pacific in January and February of 1942. At the conclusion of the Papuan Campaign, all nine squadrons were based in New Guinea and, on paper at least, were well equipped since there were some 330 fighters on hand. But 74 of these were rickety P-400 aircraft, all of which had arrived in Australia in the spring of 1942, and only the 80 P-38's were of a type suitable for the long-range, high-altitude missions so necessary in Pacific operations. Furthermore, the flyers of the 8th Group, which had been based in the swampy Milne Bay area since the last of September, were ridden with malaria and were soon to be transferred to Australia for recuperation.[13]

In January 1943 the aircraft of the Allied Air Forces were operating from airfields the majority of which had not existed much longer than six months. Of seven airfields within an area of 30 miles from Port Moresby,

six were in constant use and possessed extensive taxiways and dispersal areas. Conditions still were not completely satisfactory, however, on some of these airdromes. The 9th Squadron of the 49th Fighter Group, for example, complained that Schwimmer airdrome had rough taxiways and inadequate parking areas. Even so, Port Moresby was far better established than the other major New Guinea base, Milne Bay, but there too, great progress had been made. Liberty ships made routine trips to the harbor, and two of three airfields originally constructed were in constant use. Other than the standard complaints of little recreation and poor food, the chief problem was rough and muddy landing strips.[14]

Although Port Moresby and Milne Bay were the principal bases available to the Allies in New Guinea, transport planes made routine flights to a number of other points to deposit supplies and reinforcements. Chief among these were the landing strips in the Dobodura area just inland from Buna to which large quantities of supplies and probably the equivalent of an infantry division had been flown during the Papuan Campaign. Of almost equal importance was an airfield at Wau, about 30 miles south of Salamaua and virtually inaccessible by any other means of transportation.

Without air transport of supplies and men, the early operations in New Guinea would probably not have succeeded. The 374th Troop Carrier Group together with planes of the Directorate of Air Transport (DAT) had performed all the air transport missions in 1942. By the end of the year, the 374th Group was flying a motley collection of worn-out aircraft. In January badly needed reinforcements arrived with the air echelon of the 317th Troop Carrier Group, which flew 52 new C-47's from California to Australia. The new planes were immediately transferred to the veteran

374th, much to the disgust of the newly arrived flyers, and the 317th found itself presented with the old planes, 19 C-47's, 7 C-49's, 10 C-60's, 2 LB-30's, 1 B-17C, and 1 B-17E. Many of the new pilots, however, were soon attached to squadrons of the 374th Group and as co-pilots gained essential experience in difficult New Guinea flying.[15]

Flying transport planes was hazardous not only because of the danger from tropical storms and lofty mountain ranges but also because of the threat of lurking enemy fighters. Although the V Fighter Command could rightly claim that it had won aerial superiority over New Guinea, it could not prevent fairly frequent Japanese air raids flown from Rabaul, or occasional ones from airfields at Lae. Generally these did little damage, owing to the increased effectiveness of the aircraft warning system. In the summer of 1942, Port Moresby had been almost entirely dependent for warning of air attack upon "the poor man's radar" — Australian coast watchers and spotters located in the mountains with binoculars and radio. Not until September did the first American aircraft warning unit, the 565th Signal AW Battalion, arrive, but within two months at least four radar installations were providing a screen for this important military area. Milne Bay was equally well protected. Coast watchers maintained a constant vigil from points along the New Guinea coast and from islands as far to the northeast as Kiriwina, and radars were located at Milne Bay, at Tufi Point (125 miles to the northwest), and on Normanby and Goodenough Islands.[16]

Raids on Port Moresby during January were particularly ineffective. Between 14 and 31 January at least eight raids occurred. The attacks were usually carried out by no more than three or four planes, and Allied

fighters and antiaircraft had sufficient warning to force most of the enemy planes to withdraw. Nevertheless during this period one B-17 and one other aircraft were destroyed on the ground.[17]

At the same time, Milne Bay was subjected to frequent air attacks. The most disastrous occurred on 17 January, when shortly after noon, warning was received of the approach of enemy aircraft. Four P-39's of the 80th Fighter Squadron "were scrambled directly over the field at maximum altitude." Fifteen minutes later all remaining planes were ordered off the ground, but before they could get off, more than 20 bombers escorted by Zero fighters were overhead. The enemy aircraft dropped approximately 150 fragmentation bombs, destroying 2 B-17's, 1 B-24, 2 P-39's, and 1 RAAF Hudson as well as 6 vehicles and 6 fuel dumps. Interception was unsuccessful. The fear of attacks on this relatively exposed base, particularly at night, persuaded the Fighter Command to send a P-38 from Port Moresby as a night fighter. In its first trial on 22 January, the controller directed it by radio after it left the field. At one time it was on the tail of an enemy bomber, but no real success was achieved.[18]

Destructive Japanese raids were the exception rather than the rule. Indeed that of 17 January was probably the most successful raid ever made by the Japanese on Milne Bay. Nevertheless they were an ever-present danger, and although there were many examples of heroism beyond the call of duty when a raid actually occurred, the continued threat had the effect of making the men "nervous and jumpy." From 17 to 24 January, for example, there were 11 raids on Milne Bay; as a result many of the personnel were "groggy" from lack of sleep, and several were transferred to the hospital and put under observation for possible psychoneurosis.[19] Living

conditions were undoubtedly worse at Milne Bay in January 1943 than at any of the other permanent air bases in the Southwest Pacific.

In general, the fighting spirit of the Fifth Air Force was good. One competent observer, for example, stated that the morale at Port Moresby was "tops." There were, however, a number of underlying problems which were threatening to become serious.[20] One of the most pressing difficulties was the question of replacements for personnel. Many of the Fifth Air Force flyers had been in continual combat for as much as 10 months. Back-breaking labor which frequently continued from 12 to 18 hours a day, and occasionally more, wore down ground crews and personnel in service units and depots. To these weary veterans, in the absence of a definite policy of rotation, there seemed little prospect of relief. Only one combat group in the Southwest Pacific, the 19th Bombardment Group (H), had been replaced as a unit since the United States entered the war. After its extended operations in the Philippines, the Netherlands East Indies, and Australia, this group was replaced by the 90th Group in October and November of 1942. By that time, according to flight surgeons, 45 to 60 per cent of the flyers were suffering from combat fatigue owing to constant operations with irregularly spaced missions, the existence of poor living conditions without suitable recreational facilities, and the slackness of promotions.

By January other units had been overseas for almost as long as had the 19th Group, but they were not relieved. The 22d Group, with 10 months of brilliantly executed combat missions, was showing signs of combat fatigue, and the majority were "becoming irritable, short-tempered and lackadaisical." The commanding officer of the 8th Squadron, 49th Fighter

Group, reported that 15 of his pilots had had a year's service in the combat zone, and that their "ability, aggressiveness and morale [were] becoming very low." The writer of the unit history of a quartermaster company stated that although these conditions affected work little, the troops were discontented. After months of "continual strenuous physical labor," they simply wanted to go home. [21]

An equally serious problem was the lack of a balanced diet in isolated areas of Australia and in New Guinea. Those units located near the cities and towns of Australia generally received adequate rations. This was hardly the case, however, in New Guinea. All food had to come from Australia, and the inadequacy of shipping facilities, refrigeration, and air transport limited the quantity and variety of the foods which could be provided. As a consequence, troops in New Guinea ate out of cans. The contents usually satisfied medical requirements, but they were almost invariably of Australian manufacture, and the men found that even American canned foods soon lost their flavor. In Port Moresby, the commanding officer of the 8th Fighter Squadron reported that the food was bad and without variety. The 35th Fighter Control Squadron thought the food problem more serious than air raids, explaining that the Australian Army regularly supplied its mess with bully beef and rice, except on Christmas Day when they had rice and bully beef. The Christmas dinner served to the 80th Fighter Squadron at Milne Bay was an outstanding exception to the rule -- "ham, sweet potatoes, mashed potatoes, several vegetables, three kinds of desert, and three kinds of beverages. Nothing was dehydrated!" [22]

A third problem which was reaching alarming proportions by January 1943 was the increasing incidence of illness. At this time the three

principal diseases were malaria, dengue, and diarrhea. Although there was little malaria in Australia, the incidence in New Guinea was high. Col. Bascom L. Wilson, surgeon of the Fifth Air Force, concluded that all natives were infected and thus provided a constant source of the infection. The problem was especially acute at Milne Bay where it was almost a foregone conclusion that everyone would sooner or later be afflicted. During December, for example, there were 100 new cases in the 8th Fighter Group alone, and 150 more were reported during January. The troops at Port Moresby, on the other hand, had a much smaller percentage of malarial cases, but were plagued by diarrhea which seemed to be endemic to the locality.[23]

Authorities both in the theater and in the War Department were fully aware of these problems, and were making some progress toward a solution. The need of a personnel rotation policywas recognized, but it was difficult to establish a satisfactory balance between the demands of the theater for replacements and the realities of the training program. It was a question whether it was wiser to leave tired veterans in the theater or to replace them with untrained newcomers. The return of the 19th Group to the United States was the first indication that those who had been in an area of combat operations for a long time might have an opportunity to go home. This together with the arrival of more replacements restored some hope to the war-weary veterans. Actually, however, it was impossible to count on regular replacements in the desired numbers; so a number of expedients had to be employed in the theater. The 22d Bombardment Group, for example, had some opportunity for relaxation while its B-26's were in depot, and at the same time it was able to send a "first batch of combat personnel

home." By the first of February the malaria-ridden 8th Fighter Group was withdrawn from Milne Bay, sent to Australia, and provided with an abundance of fresh eggs, meat, milk, and vegetables. While in Australia, pilots and ground officers received regular leaves to Sydney, enlisted men were granted furloughs to Brisbane, and others received passes to near-by towns. There was beer in the camp during the evening, but little liquor of any kind could be found in the towns, and that at exorbitant prices. Some felt that it was more satisfactory to stay in camp where the PX was well stocked with beer and soft drinks, or to go to the dances occasionally arranged by the Red Cross.[24]

The War Department's attempts to solve the replacement problem introduced a new difficulty. Frequently, high-ranking officers and enlisted men, arriving fresh from the United States and without a combat record, required considerable instruction from experienced men of lesser rank. To the men in the theater this was intolerable. Kenney himself championed the cause of his "kids" and was constantly urging (1) that no high-ranking officers should be sent to his theater unless specifically requested, and (2) that he might be authorized to promote deserving men regardless of the table of organization. On one occasion when a major and 10 first lieutenants arrived in Australia from Hawaii, he requested permission to send them back, urging that only second lieutenants be sent in the future. The request was granted. On another occasion, he was allotted 200 vacancies for first lieutenants above the T/O of the Fifth Air Force, and was promised that consideration would be given to a similar provision for the promotion of first lieutenants and captains.[25] In spite of such expedients, the problem of replacement and rotation had not been solved by January 1943.

Equally bothersome was the question of how to improve the health of the personnel. Unquestionably an unbalanced diet and the peculiarities of a tropical climate contributed much to a general lowering of resistance to illness. These factors also account for the fact that troops living in New Guinea might expect to lose from 15 to 20 pounds in weight. But there is little doubt that each individual soldier was in part responsible for the high incidence of tropical diseases. While in the "malarious areas," he was supposed to wear slacks and long-sleeved shirts, to sleep under mosquito bars, to use mosquito repellents, and to take 10 grains of quinine sulphate daily before the evening meal or 0.1 grain of atabrine six days a week. But until the following of such precautions became instinctive, until each member of a command gave wholehearted support to preventive measures, satisfactory results could not be achieved. The average American soldier was not mentally prepared for tropical warfare in 1942.[26]

Under the circumstances, the medical organization of the air force had heavy responsibilities. By 1943, this organization had expanded considerably since the medical section of the United States Air Forces in Australia had been established on 6 March 1942. With the activation of the Fifth Air Force, Colonel Wilson had been designated as Air Force Surgeon, and other officers had been assigned to the Advanced Headquarters at Port Moresby, and to the subordinate commands. These officers directed the activities of the medical detachments of groups and component squadrons. Air Force medical officers were dependent upon the Army Services of Supply to some extent, since both hospitals and medical depots were under SOS control. Cooperation between the two branches of the service was good.

Until June 1942 there were no American hospitals in New Guinea, but within six months thereafter three had been established in Port Moresby with a total of more than 2,000 beds, and two more at Milne Bay with 350 beds. Evacuation from the forward areas to hospitals in New Guinea or Australia was difficult and would have been virtually impossible had it not been for the growing reliance upon air transport. After fields had been made satisfactory for transport planes at Wau and Dobodura, it became possible to evacuate patients from these forward areas to Port Moresby, usually in less than an hour. In the Papuan Campaign alone between 25 November and 31 December 1942, 7,631 sick and wounded were flown from the Dobodura area to Port Moresby.[27]

One of the most important duties of medical officers was to inspect living quarters of officers and men in their camp areas. It occasionally was said that only a general officer was privileged to live in screened-in tents, but actually the well-established camp areas, such as some of those at Port Moresby, were not uncomfortable. In some cases the ingenuity of the soldiers who built the mess halls, the incinerators, and the latrines made the camps as comfortable as many similar areas in the United States. Tents with gravel floors were the rule for living quarters, however, although officers living three or four to a tent occasionally enjoyed wooden flooring. Mess halls were normally of wood, with screens, and occasionally with concrete floors. According to custom, the officers usually had a separate mess. Water was almost invariably a problem since there was no central supply system. Each unit had to lay its own pipes and maintain its own tank, or use water points established by the engineers.

All drinking water, of course, had to be chlorinated. Some units had shower baths. Each squadron of the 38th Bombardment Group (H), for example, had from six to nine individual shower heads, while sinks, constructed of half a gasoline drum, were available for washing clothing.

In an area where diarrhea was prevalent, greater efforts than usual were taken to improve sanitation facilities. All units had devices for washing mess kits. The V Bomber Command boasted an unusually ingenious one which had two fire boxes fueled by a double oil line, over which barrels of water could be brought to a boil in 35 minutes. Soakage pits with grease traps for liquid garbage which could be burned out periodically were usually provided, while solids were disposed of in incinerators. Latrines followed a usual "quartermaster type" pattern. The 43d Group Headquarters, for example, had a standard "eight-holer" with hinged lids and fly-proofed pits.[28]

The experiences of the veterans of the Southwest Pacific theater during 1942 provided a useful background for the campaign which was to begin where the Rabaul Campaign left off. General MacArthur in organizing his theater and directing its strategy and General Kenney in employing his air forces, together with subordinate commanders, had provided a leadership which promised further victories.

Chapter II

PLANS AND ALLOCATIONS, JANUARY-APRIL 1943

The role of air power in Southwest Pacific operations had been established before the conclusion of the Papuan Campaign as essentially that of a tactical air force, although in contrast to the later tactical air force the Fifth contained heavy bombardment units. General Kenney considered the defeat of the Japanese air force his first priority. Fighters were to destroy enemy planes attempting to raid Allied bases, and bombers were to seek out the Japanese air bases and neutralize them. The second priority was the destruction of Japanese communications and supplies. Strategic objectives, with the possible exception of Rabaul and Balikpapan, were out of the range of Allied planes based in the Southwest Pacific, but rewarding substitutes were available along the sea lanes running from Japan's inner line of defenses to her advanced garrisons. Finally, Kenney employed his air units in direct cooperation with ground troops, or as FM 100-20 later put it, in the destruction of selected objectives in the battle area. [1]

In a theater as large as the Southwest Pacific, it would have been particularly easy to fritter away the limited air strength available in numerous small attacks upon widely separated objectives. Actually such attacks had been necessary in the period before July 1942 when General MacArthur was struggling to put the defenses of Australia in order behind the Great Barrier Reef. But even before this purely

defensive period drew to a close, he was considering a plan which would employ both air and ground forces in a coordinated offensive. The purpose of this offensive was to recapture Japan's most important conquest in the Australian Mandate, Rabaul on New Britain Island. [2]

The choice of Rabaul as the objective was in accord with the global strategy early envisaged by the Combined and Joint Chiefs of Staff. It had been clearly established by August 1942 that the Pacific theater was to be subordinated to the European. Shortly thereafter the Joint Chiefs of Staff listed 10 general objectives of Allied strategy. They placed in number 6 position the general aim of securing Australia, New Zealand, Hawaii, and Alaska, and in number 7 that of carrying out limited offensive operations with amphibious forces in the Pacific. [3]

In the early summer of 1942, MacArthur suggested that Rabaul should be the object of an offensive in conformance with this strategy. His suggestion was not at first supported by the Navy because it was believed that such a move would be too hazardous unless preceded by the capture of Tulagi in the Solomons. MacArthur answered these objections in a radio message of 24 June 1942. He admitted that it would be impracticable to attempt a direct assault on Rabaul supported by the limited land-based aviation then available. But he pointed out that the capture of Rabaul was not the immediate but the ultimate goal of the proposed offensive. His plan would require first "a progressive movement involving primary action against [the] Solomons and the north coast of New Guinea in order to protect Naval Surface Forces and to secure airfields." [4]

This was essentially the plan that was finally agreed upon. The operation was to consist of three phases: (1) the occupation of the Solomons, (2) the occupation of British New Guinea, and (3) the occupation of the Bismarck Islands including Rabaul. The first phase, contrary to MacArthur's desire, was to be conducted by Admiral Ghormley, the commander of the South Pacific Area. MacArthur was to direct the second and third phases. At first the dates of the operations were left indefinite pending the deployment of sufficient American forces, but Japanese advances, including the occupation of Tulagi in April and of Guadalcanal early in July, together with their landing in Papua late in the same month, forced a speeding up of counteroperations. The first phase was, therefore, scheduled for 1 August or as soon thereafter as possible in order to thwart further enemy moves in the South Pacific. At the same time General MacArthur was faced with the necessity of defending the Papuan peninsula, an area from which he had hoped to launch his original assaults.[5]

These developments did not change the basic strategy with regard to the Pacific, but they did stimulate discussions on aircraft allocations. Dispatches from both the South and Southwest Pacific theaters to the War Department urged a reconsideration of earlier decisions by the Joint Chiefs of Staff. General MacArthur radioed on 31 August that he comprehended a strategy which assigned "present missions as holding ones to enable concentrations to be made elsewhere," but that "holding areas must have sufficient forces actually to hold," and that "the strength of holding forces can be determined only by a constantly changing accurate appraisal of the enemy's power."[6]

Naval authorities also favored a reconsideration of the needs of the Pacific areas. Admiral Nimitz believed that there was insufficient carrier strength available to support two important operations at the same time. Task 1, the Guadalcanal operation, was already under way, and Nimitz pointed out that amphibious operations would also be necessary for the reconquest of eastern New Guinea. This would require the cooperation of aircraft, but Nimitz feared that the proximity of enemy submarines and land-based planes made the employment of the few remaining American carriers far too dangerous. He therefore urged that more land-based aircraft be sent to General MacArthur.[7]

These demands from the Pacific theater highlighted a subject which had been discussed frequently since early in July. At that time the decision to abandon the project for an invasion of continental Europe in 1942 had brought suggestions that aircraft might be diverted from BOLERO.[8] On 24 July, these suggestions received some official sanction in a decision "that over and above the U.S. forces required from Bolero for operations in North and Northwest Africa," a "readjustment of present U. S. commitments to Bolero will be made for the purpose of furthering offensive operations in the Pacific." This readjustment envisaged the transfer of 15 air groups to the South and Southwest Pacific, with the majority being sent to the latter theater.[9]

Although there was a measure of agreement on the deployment of these aircraft among the Joint Planners, Army and Navy members disagreed as to the order of priority of the various theaters. The Army listed the priorities thus: TORCH (North Africa), Middle East, United Kingdom,

and the Pacific. The Navy put the Pacific before the United Kingdom. The arguments advanced by Admiral King and General Arnold demonstrated the opposing points of view. Admiral King asserted that the Pacific air forces were inadequate, that he understood the high priority of TORCH and the Middle East but to put the Pacific theater last was not in accord with actual need, and that suitable authorization for diversion of aircraft to the Pacific existed in an earlier decision. General Arnold just returned from a brief visit to the Pacific theaters, disagreed with this view. He insisted that the earlier decision "to conduct the strategic offensive with maximum forces in the Atlantic-western European Theater at the earliest possible date, and to maintain the strategic defensive in other areas" still held. Furthermore, he argued that the invasion of North Africa, ordered by the President and the Prime Minister, required not only air cooperation for the operation itself but an intensive air assault from the United Kingdom as well. On the specific point of issue Arnold quoted General Marshall as having said that the transfer of the 15 groups from BOLERO "had been recorded only as an agreement for transfer of planes from one jurisdiction to another, and that priority of allocation, once commitments to the special operation and possibly the Middle East had been fulfilled, should be made in accordance with strategic necessity as the planes [should] become available." [10]

By the middle of October 1942 when this debate approached its climax, the tactical situation had considerably changed. The Jap was retreating in Papua, where the Fifth Air Force had won air superiority.

On the other hand, in the Solomons, the Marines were maintaining a rather precarious foothold in the face of severe enemy counterattacks by land, sea, and air. Clearly the immediate danger was there rather than in Australia."[11]

The Planners believed that there were available in the Southwest Pacific sufficient aircraft to defend the area and to carry out a limited offensive. This had been General Arnold's contention prior to his trip to the Pacific; he reasserted the same views after his return; and repeated them in a letter to General Kenney on 6 December 1942. Furthermore, by the time that Kenney had typed a new letter to General Arnold renewing his requests for more air power and pointing out weaknesses in the units already available, the Joint Planners had considered the same problem and had submitted the following statistics to the Joint Chiefs of Staff:

Deficiencies and Surpluses of Aircraft Compared to the Commitments in the Southwest Pacific

Army	Commitments	1 Jan. 1943	28 Feb. 1943	Deficiencies or surplus to exist on 28 Feb.
B(H)	110	128	126	+16
B(M)	132	95	99	-33
B(L)	87	35	31	-56
Photo	16	12	12	- 4
Obsn	80	9	9	-71
Fighter	338	372	332	- 6
Transport	---	56	112	+112
Navy				
VP	24	22	24	
VOS	---	7	7	+ 7

Estimate of Japanese Strength

Area	VF	VTB VB	VOS Land	Seaplanes	VPB
Sumatra	18 (?)	18 (?)	12 (?)		
Java	18 (?)	30 (?)	18 (?)		
Timor	21	24			4
Borneo) Celebes)	31	36	6	25	
Melanasia	153	117	30	9	18
Carolines) Marshalls)	81	118		22	36

In addi tion to the above-listed Japanese strength, the JPS pointed out that the enemy could probably withdraw some 400 additional aircraft from other theaters and make them available in the Pacific together with approximately 600 ship-based aircraft. However, they concluded that, although the Allied aircraft available did not meet the theater commander's estimate, there was a sufficient number to continue the offensive operations contemplated in the Southwest Pacific.[12]

During the months of the Papuan Campaign, MacArthur had not lost sight of the objectives of the offensive planned in the summer of 1942. Early in January 1943, he outlined his conception of the execution of that plan. His tactics were to be largely based upon two principles, which, with some modification, were to lead to an unbroken series of victories in the Southwest Pacific. His experiences in the first year of the war had clearly demonstrated the value of air power. One major tactical principle, therefore, was that air echelons should move forward progressively in such a way as to provide fighter and bomber cover

for "all surface elements." A second major principle was that in the course of these progressive movements, the objective should be isolated prior to a final assault. Again air power was to be the principal reliance for this process of isolation in a theater where great distances and difficult jungle country made rapid movement of land and sea forces difficult.[13]

A suggestion of Admiral King that the Admiralty Islands would be a logical objective for initial action brought a further exposition of MacArthur's views. The latter opposed King's suggestion because it would have advanced surface operations beyond the range of land-based aviation. He envisaged the campaign as a series of steps each of which would be protected by aircraft flying from newly acquired bases. He did not believe that success could be achieved if the elimination of any preliminary step should result in a movement into Japanese territory where air advantage was entirely on the enemy's side. In the South Pacific, for example, he urged an energetic effort to clear Guadalcanal and to establish air bases there, followed by a movement against other enemy bases including Munda, Buin, and Buka. These points having been captured, land-based aviation could provide protection for surface elements, and it would be possible for "the fleet to operate offensively with the destruction of the enemy's fleet as its primary mission."[14]

The Joint Chiefs of Staff were in substantial agreement as to the necessity for a limited offensive in the Pacific. Within the Combined Chiefs of Staff, however, there was some disagreement. Though the Pacific was an area of American strategic responsibility, the British expressed concern over the extent of the plans for Pacific operations.

It was feared that the decision to make the main strategic effort in Europe might be forgotten. It was admitted that pressure had to be maintained upon Japan and that operations in Burma were important. But the British warned that Allied resources in Europe might be drained into the Pacific, and urged that movements in the direction of Truk after the Rabaul campaign should be postponed.[15]

The U. S. Chiefs of Staff took the position that there had been no violation of the concept which put the main effort in Europe. General Marshall pointed out that America had been compelled to use offensive efforts in Papua in order to prevent the capture of Port Moresby. To support these offensive efforts it had been necessary to employ every device for reinforcing the Allied troops in New Guinea. Furthermore, the crisis had arisen at a time when large forces were idle in the United Kingdom. If a disaster had occurred in the Pacific, a huge diversion of effort to the Pacific would have been unavoidable. As it was, heavy bombers allocated to the United Kingdom had been diverted to the South Pacific; the United States had nearly been forced to abandon TORCH; and only by "courageous" decision by Admiral King, had necessary naval forces for that operation been sent from the Pacific. The Navy through Admiral King argued against the setting of definite limits to Pacific operations. After Rabaul was captured, the same forces might well be in a position to continue the offensive in the Marshalls. At all events, assurance was needed that forces already allocated to the Pacific would not be withdrawn.[16]

The decision, which was incorporated in a report to the President and the Prime Minister before the end of January, permitted a continuation

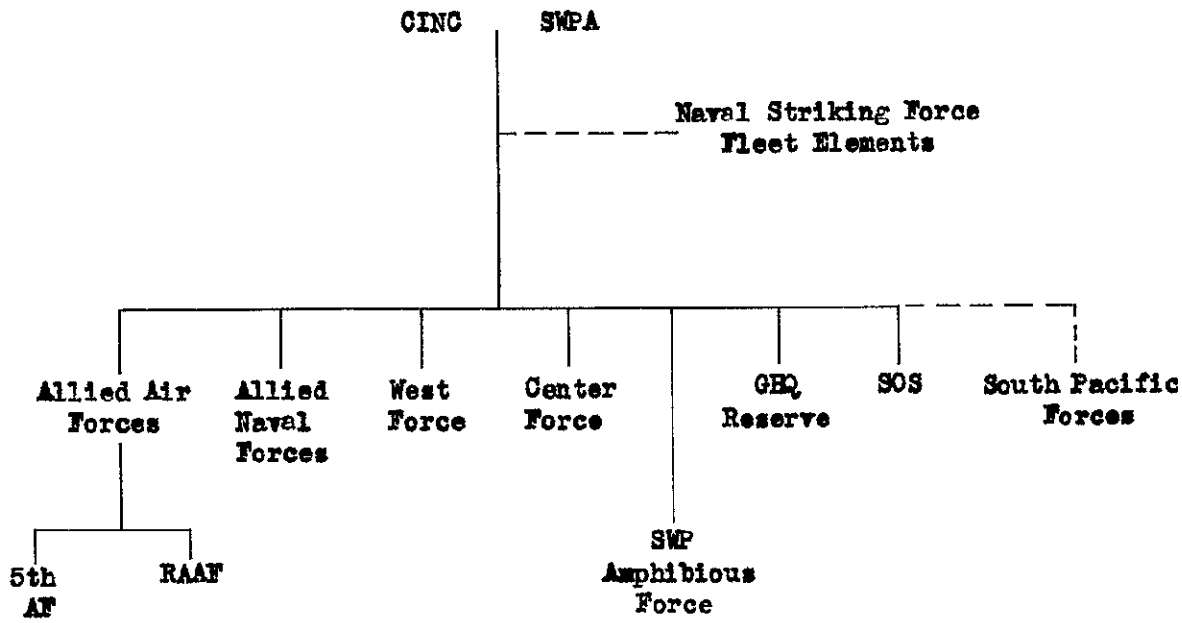
of plans for a limited offensive. In general, it was decided that Allied offensive measures against Japan in 1943 would consist of efforts to destroy enemy ships and shipping, of interdiction of Japanese communications by this and other means, and attacks upon enemy ground, sea, and air forces. More specifically Allied forces were to maintain the Midway-Hawaii line, secure communications to Australia and New Zealand, and block enemy approaches to Australia. In addition to these purely defensive efforts, the Pacific forces were considered capable of a number of offensive actions. Of these, the most important were: to advance along the line Samoa-Jaluit, to undertake a limited push against the Malay Barrier, possibly to Timor, and to move from Midway towards the Truk-Guam line. The capture of Rabaul was apparently considered a foregone conclusion, for it was decided to refrain from an advance from the Rabaul area towards the Truk-Guam line until sufficient forces were available to carry through and follow up such an offensive.[17]

No action on the part of the Joint and Combined Chiefs of Staff changed the plan to make Rabaul the first objective. By the end of February, General MacArthur had incorporated his tactical principles into a basic strategic plan, known as the Elkton Plan. In outline, the Elkton Plan followed that of its predecessors, with initial movements into the Solomons as Task 1. Task 2 would involve seizure of the remainder of the Solomons and points on the northeast coast of New Guinea. The seizure and occupation of Rabaul was Task 3.[18]

With Task 1 virtually completed through the Guadalcanal operation, the Elkton Plan outlined the deployment of forces in Tasks 2 and 3 in

detail. Air bases were to be seized and developed along two general axes of advance: on the west through New Guinea to New Britain, and on the east through the Solomons to the same goal. The initial operations along the western axis would result in seizure of airdromes on the Huon Peninsula of New Guinea. Following this, points on New Georgia along the eastern axis would be similarly occupied. In the final stages of the operations, airdromes in New Britain in the west and on Bougainville in the east would provide convenient bases for the isolation of Kavieng and Rabaul. It was felt that the eastern flank of these operations was relatively safe, since the sea and land areas south of a line from Buna to Guadalcanal were under Allied control. On the other hand, the Jap forces poised in the Netherlands East Indies offered a constant threat to the western flank. MacArthur believed, however, that Merauke in southwestern New Guinea could be occupied as an air base and that a holding force could be concentrated along a line from there across Torres Strait to Darwin.

As Commander in Chief of the Southwest Pacific Area, MacArthur placed himself in supreme command of the general offensive. In its earlier phases, he would serve in actual command of the western axis, and as coordinator of the operations of the South Pacific Forces. His command would include the following elements:



In this command setup, each force was assigned certain general tasks. The Naval Striking Force was to cover operations and to seek decisive action with the enemy fleet. The Allied Air Forces were to destroy hostile aviation throughout the areas of operations, to attack enemy naval forces and shipping, to support operations of Allied task forces, to defend forward bases and Torres Strait, and to provide transport aviation. The Allied Naval Forces, composed of two task forces together with PT boat squadrons and escort vessels, were to give naval support, to defend forward bases and Torres Strait, and to protect lines of communication. The West Force, a self-contained task force equipped for ground and shore-to-shore operations, was to capture Lae and Madang and secure the Huon Peninsula-Markham River valley areas in order to acquire air bases. The Center Force, organized primarily for airborne and

overwater operations, was to consolidate airfields behind the general line Gasmata-Talasea in New Britain and to capture Rabaul. The last would be carried out in conjunction with the South Pacific Forces following their seizure of New Georgia, Bougainville, and probably Kavieng. All these operations, of course, would be supported by the Southwest Pacific Amphibious Force with its transport vessels and landing craft, and by the supply services which would provide logistic support from an intermediate base in the Milne Bay area.

The first objective specified under this general plan was Lae on the Huon Gulf in Northeast New Guinea. The attack against Lae was to be a combined operation, employing both Australian and American troops. An airborne force, based at Port Moresby and supported by overland and airborne supply, was to operate east through the Markham valley. At the same time, small craft supported by light naval vessels would carry out a series of "shore-to-shore overwater" movements along the coast, bypassing Salamaua and landing in the vicinity of Lae. With the acquisition of new bases in the Markham valley, new airborne and shore-to-shore operations would converge on Madang, 140 miles across the Huon Peninsula on Astrolabe Bay, overrunning intermediate objectives such as Finschaven in the process.

MacArthur intended to leave detailed planning for the South Pacific phase of the plan to that command, reserving for himself authority to initiate the actual operations. This reservation was made because of his conception of the necessity for acquiring several advanced bases in order to provide air cooperation for amphibious advances. In this case,

he believed that the line of Japanese airdromes at Kavieng, Rabaul, Buka, and Buin should be neutralized by use of bases in the Vitiaz Strait area of New Guinea prior to an American invasion of the New Georgia group. Specifically, MacArthur recommended the acquisition of bases on the Huon Peninsula before a landing by the South Pacific Forces in New Georgia.

The next operation was to consist of simultaneous landings by both South and Southwest Pacific forces. Again the purpose of the operation was to acquire new airdromes in western New Britain and southern Bougainville. Preceded by heavy air attacks on Rabaul and Kavieng, Southwest Pacific forces were to seize Cape Gloucester and Arawe, followed by Gasmata and probably Talasea. At the same time, South Pacific forces would land on Bougainville.

The final objectives were Kavieng and Rabaul. The Elkton Plan left the capture of Kavieng to the South Pacific command, but indicated that MacArthur would decide whether Rabaul or Kavieng should be assaulted first. The main landing against Rabaul was to be made by the Southwest Pacific forces landing southeast of the town. The South Pacific troops, meanwhile, were to make a secondary landing at Atalikikun or Talili Bay.[19]

General MacArthur believed that the execution of this rather elaborate plan required additional air units.[20] In the Fifth Air Force he had the equivalent of 2 heavy bombardment, 2 medium bombardment, 3 fighter, and 2 troop carrier groups, together with 2 light bombardment and 1 photo reconnaissance squadrons. In addition the RAAF could probably spare from mainland defense 5 medium bombardment, 4 light bombardment, and 6 fighter squadrons, equipped with relatively modern aircraft.

Although MacArthur did not suggest an increase of RAAF strength at this time, he did estimate that he would need the following additional American units for the Huon Peninsula campaign: 2 heavy, 2 medium, and 2½ light bombardment groups together with 3 fighter, 1 observation, and 2 troop carrier groups. In addition to these units, he considered the following essential for the New Britain operation: 1 medium and 2 heavy bomb groups, 1 fighter and 3 troop carrier groups. [21]

There were several problems introduced by the Elkton Plan which required action by the Joint Chiefs of Staff. Perhaps of most importance was the necessity to confirm or reject MacArthur's suggestions as to command of the operations. On 27 March General Marshall submitted for consideration a directive which would establish command responsibilities for certain future operations, including the establishment of airfields on Kiriwina and Woodlark islands, the seizure of the Lae-Salamaua-Finschaven-Madang area and western New Britain, and the occupation of Bougainville. He recommended that these operations should be conducted under the Supreme Commander, Southwest Pacific Area; that the operations in the Solomons should be under the direct control of the Commander, South Pacific Area (COMSOPAC) operating under general directives of the Supreme Commander, Southwest Pacific; and that "naval units of the Pacific Fleet assigned as task forces engaged in these operations remain under the control of the Commander in Chief, Pacific." [22]

The principal objections to Marshall's proposed directive came from Admiral King. In his official memorandum commenting on the directive, it was stated that while the importance of a unified control was

recognized, it was felt that it would be impossible to separate operations carried out by forces of the Pacific Ocean Areas in the Solomon Islands from the remainder of the Pacific Ocean Areas. He, therefore, recommended that when such forces were to act in conjunction with forces of the Southwest Pacific, they should do so under the command of the Commander in Chief, Pacific Ocean Areas. MacArthur would control the operations in his theater, while those in the Solomons would be under the direct command of COMSOPAC subject to the general directives of General MacArthur. Admiral King also urged that something should be said in the directive regarding the timing of the operations. He objected to MacArthur's thesis which delayed the renewal of operations in the South Pacific until after the completion of the earlier phases of those in the Southwest Pacific.[23]

Differences on this subject were soon ironed out. Marshall admitted that the wording of the directive "skirted" the matter of unity of command, and that he had desired to avoid a situation where a large naval force would be controlled by an Army officer. He believed, however, that the operations should be coordinated by a single commander. King pointed out that from the beginning they had tried to prevent a situation where differences of opinion between MacArthur and Nimitz might arise. At this time, however, there was some doubt as to where the Japanese planned to strike next, and King believed that it was necessary to maintain the control of the fleet in a fluid state in order to meet any enemy thrust. He suggested therefore a rewording of one paragraph in the directive to meet this requirement.[24] Basically,

the directive as proposed originally by General Marshall was accepted. The operations were to be conducted under the Supreme Commander, Southwest Pacific Area, but the crucial paragraph, changed in accordance with the Navy's desires, was made to read: "Units of the Pacific Ocean Areas, other than those assigned by the Joint Chiefs of Staff to task forces engaged in these operations, will remain under the control of the Commander in Chief, Pacific Ocean Areas." [25]

Almost as important as the matter of the command for the proposed operations was the question of additional allocations required under the Elkton Plan. The general policy of the Joint Chiefs of Staff was to honor the requests of a theater commander insofar as was possible. On the other hand, they were faced with the perennial problem of an insufficient number of aircraft to fill the needs of all commanders. Under these circumstances, shortages had to be divided among the theaters. [26] It was impossible at this time for the Joint Chiefs of Staff to give General MacArthur any assurances that they could meet his final estimate. They did expect, however, to meet his needs for the Huon Peninsula phase of the campaign before the end of the year. Of some significance, for example, was the Joint Planners' decision late in 1942 to equip a Dutch squadron with 26 B-25's by April 1943, and a reaffirmation in January of a CCS decision to equip 45 RAAF squadrons before the end of the year. [27]

The most important decision, however, as to new units for the Allied Air Forces was yet to be made. The Joint Planners in a memorandum of 18 March carefully considered two schedules for air reinforcement.

In their recommendations, they discarded the more ambitious schedule on the ground that sending additional aircraft to the Pacific would prevent an implementation of the bomber offensive from the United Kingdom. They believed that the Eighth Air Force should be brought to a minimum strength of 1,200 heavy day bombers together with appropriate supporting aircraft as soon as possible.[28] The relative needs of the various theaters were, now as always, the determining factor. At this time, Maj. Gen. Ira Eaker, worried over the slowness with which his heavy-bomber strength was being built up, wrote in a letter to General Arnold: "I hope that you will not let that fellow George Kenney, or that other fellow Tooey Spaatz, steal any of our heavy bombers." This letter could have been no more than received when General Stratemeyer informed Eaker that "as a result of a lot of brass hats that are here from the South and Southwest Pacific, you are going to lose another heavy group."[29]

Apparently the Joint Chiefs of Staff believed that the Southwest Pacific merited more reinforcement than the Joint Planners had recommended. They selected, therefore, a second and more ambitious schedule which allocated the following units to the Fifth Air Force, two of which, a medium and a heavy group, had previously been intended for General Eaker:[30]

Unit	Present or en route 2 Mar. 1943		Planned Initial Equipment Strength 30 June 1943		30 Sep. 1943		31 Dec. 1943	
	Units	A/C	Units	A/C	Units	A/C	Units	A/C
Bomb Gp (H) 4 Sq.	2	102	2	96	3	144	3	144
Bomb Gp. (M) 4 Sq.	1½	82	2	114	3	171	3	171
Ftr. Gp. 3 Sq.	3	353	3	225	5	375	6	450
Ftr. Sq. Nite			2	24	2	24	2	24
T/C Gp. 4 Sq.	2	100	3½	182	4½	234	4½	234
Obsv. Gp. 4 Sq.		53		50	1	131	1	128
Photo Gp.	¾	16	½	13	1	51	1	51

This schedule together with a promise of one additional infantry division for the Southwest Pacific in the second quarter of 1943 and another in the third quarter was dispatched to representatives of the Southwest, South, and Central Pacific commands then conferring on future strategy.[31] Within a day, the Pacific conferees informed the Joint Chiefs of Staff that with these reinforcements, the forces of the South and Southwest Pacific in 1943 would be able to push along the New Guinea coast, capturing strategic points to include Madang, and would be able to land on the southeast portion of Bougainville Island, on Cape Gloucester, and on Kiriwina and Woodlark islands.[32]

These allocations went a long way toward filling the requirements of the theater so far as new units were concerned. General Kenney's immediate problem, however, was to maintain those already in the theater at authorized strength. In a letter of 23 January 1943 to General Arnold, he had pointed out that in November he received 24 combat aircraft and lost

55; in December he received 37 and lost 48; and from 1 to 21 January he received 16 fighters and lost 20, no light bombers and lost 3, no medium bombers and lost 8, and 2 heavy bombers and lost 12. During February the situation was little better: 5 C-47's, 3 B-25's, and 21 P-38's reached the Southwest Pacific, while 2 B-17's and 1 C-47 were destroyed, 2 B-24's were missing in combat, and 9 fighters, 5 bombers, and 1 transport were lost in accidents.[33]

War Department policy on allocation of replacements was not entirely clear. General Arnold, in commenting to General Stratemeyer on Kenney's predicament, stated that "in some instances it is quite apparent that Kenney is calling 'Wolf, Wolf,'" but added that in other instances, he had a "justifiable kick." Arnold pointed out that according to his records "the highest loss Kenney had in fighters in any one month was 43 per cent, and the lowest, 11 per cent, an average of around 21 per cent. The highest loss in bombers in any one month was 25 per cent, and the lowest about 15 per cent." Arnold emphasized that a solution of the problem was essential, and that he did not "want this matter to go so far that we will be in as deep as we were in North Africa."[34]

The Joint Chiefs of Staff incorporated a decision on this matter in the same memorandum which assigned additional units to the Southwest Pacific. Their plan was to maintain a 25 per cent depot reserve in the theater, a flow of 20 per cent of the initial equipment per month as attrition aircraft for combat units, and an actual plane-for-plane replacement of transport losses. General Arnold qualified this to some extent, however, in a personal letter of 30 March which informed Kenney

that the 25 per cent reserve for all units was to be furnished "as soon as availability of airplanes" would permit, and that the attrition rate would be 20 per cent "if losses justify." [35]

This decision though clear enough as far as it went, did not solve a bothersome problem as to what type of aircraft the replacements would be. So far as heavy and medium bombers were concerned, a definite policy had been established late in 1942. Kenney had been informed, somewhat to his sorrow, that only B-24's and B-25's were to be allocated to the Pacific areas, and no B-26's or B-17's had arrived in the theater since November. [36] No policy, however, had been established as to the type of light bombardment to be furnished the Fifth Air Force. Kenney wanted A-20G's, but the situation was rather confused as to the number of this type which would be available from production early in 1943. Furthermore, the Twelfth Air Force was being given priority in A-20's, and a project to convert A-20's into P-70 night fighters was taking others. Consequently there was some thought of sending the Fifth Air Force either A-36's or A-25's as light-bomber replacements. In January Kenney radioed that he preferred the A-25 if it could be made available immediately, or if not he requested more B-25's. On 23 March General Arnold initiated a series of R&R comments on this subject, suggesting that the light-bomber problem might be solved by "some sort of swap" between General Spaatz and General Kenney. This R&R was circulated through a number of offices in Headquarters, AAF. By 4 May the merits of A-20's, A-25's, and P-39's had been discussed; and Allocations and Programs Division of OC&R had recommended the allocation of P-40's "to implement

the dive bombardment program in the Fifth Air Force." The final comment on the A-20's was written on 5 May and stated that any A-20G's which were not needed by the Twelfth Air Force would be allocated to General Kenney.[37]

The policy with regard to fighter allocations was no clearer than that of light bombers. The requirements of the theater suggested a high-altitude, maneuverable fighter capable of combating the Japanese Zero, and with a range sufficient to provide cover for transports and bombers. P-40's and P-39's had already run up an impressive record of victories in the Southwest Pacific. From 14 November 1942 until 20 March 1943 in 81 P-39 sorties, 22 enemy fighters and 9 Japanese bombers were destroyed with only 1 P-39 lost. During the same period, 6 P-40's were lost on 99 sorties in which 54 Japanese fighters and 5 bombers were shot down.[38]

Nevertheless by March of 1943, the need for a base interceptor had almost entirely disappeared, and many felt that the P-39's and P-40's did not have the qualities necessary for other fighter operations. Even the Curtiss-Wright factory representative in Australia indicated that, although the P-40 had done a good job, something more was needed than the types previously available. The Bell Aircraft representative also reported adverse comments on the P-39. After flying a P-39K1 for the first time, Col. Richard A. Legg, commander of the 35th Fighter Group, declared that "after a year of combat I find for a Christmas present the Army has purchased a plane and sent it over to us in combat area which is at least

20 m.p.h. slower than the original plane which we have been fighting the war with. If this is called progress, I would like to know what Bell Aircraft has been doing." [39]

Kenney wanted P-38's, but production schedules and the demands of other theaters necessitated a careful weighing of the needs of each. In January, Kenney was informed that his fighter allocations were based on 1 P-39, 1 P-40, and 1 P-38 group, and that his replacements would arrive according to the following schedule: 15 P-38's a month beginning in January, 15 P-38's in March, none in April, and 15 a month thereafter; no P-40's were allocated until April when 30 P-40N1's were to be sent, followed by 15 in May and June, and 30 in July. By the end of February, however, the schedule had been changed. The situation in North Africa was critical, and all available P-38's were being sent there since attrition was high. Kenney was informed that after receiving only eight P-38's of his January allocations, he would receive no more until June or July. The P-40 schedule was also changed, and the first 40 P-40's were now delayed until June with no more than enough thereafter to maintain authorized strength. [40]

Kenney could hardly be satisfied with the unreliable nature of his aircraft-replacement schedule, but in general the situation in the Southwest Pacific could be considered fairly promising by the end of March. A plan for future operations had been proposed, discussed, and generally accepted. A fairly flexible command structure had been authorized, and a promise had been made of more liberal reinforcements than had earlier seemed possible. Indeed even General Kenney would probably have been in

partial agreement with General Arnold when he wrote that "an analysis of your requirements and the enemy opposition . . . , compared with the additional forces you are now scheduled to receive, make it appear that you are no longer the forgotten man." [41]

Chapter III

THE AIR SERVICE COMMAND

In submitting the Elkton Plan to the Joint Chiefs of Staff and with their acceptance of its basic proposals, General MacArthur was committed to a fairly definite offensive program. By the end of March he had obtained a promise of what was considered a sufficient number of additional air units for operations envisaged for 1943. But the first of these reinforcements were not scheduled for arrival in the theater until June or July; the schedule of replacement could not be completely relied upon; and attrition, about which General Kenney had expressed so much anxiety, was continuing. Indeed the situation might have become disastrous had it not been that the Fifth Air Force had developed a particularly efficient and skillful air service command.

Functions of supply and maintenance were unusually complicated in the Southwest Pacific. In addition to normal attrition expected in air operations, the climate of New Guinea, which so handicapped flyers in combat, made equally difficult the duties of service units. There was so much moisture in the atmosphere, for example, that electrical equipment soon acquired a corroding fungus growth, any metal surface was subject to almost immediate corrosion, and ordinary lubricating oils applied as a preventive seemed either to evaporate or to run off in the hot temperature.[1]

Countless problems also confronted those responsible for keeping combat and service units supplied. In general the three basic difficulties were: the distance from the main supply area in Australia to the

principal source of supply in the United States, the inadequacy of shipping and air transport, and the need for balancing the demands of the various theaters with American production. Within the theater itself there were other and more specific complications. Units were usually widely separated, and transportation was difficult. In the early days, furthermore, some of the service and supply personnel were inexperienced, records were poorly kept, and sometimes it was difficult to persuade responsible officers in depots to send parts forward to advanced points where they could be used more easily. It seemed almost that every nut and bolt presented a problem, and otherwise minor needs often required major efforts.[2]

In many cases the solution of the maintenance problem depended upon the solution of that of the supply. In January and February 1943, for example, there was a need for additional engines of the R-1830 series. A request in November indicated that B-24's would soon be grounded if a number of R-1830-43 engines were not received; in January, the R-1830-92 type for transports were urgently requested; and a month later a series of messages repeated the requests and added that the execution of the vital air transport mission would be jeopardized if more engines were not received, and if certain piston rings necessary to overhaul engines already on hand were not supplied.[3]

Lapses on the part of responsible authorities in the United States occasionally increased the difficulties of the service command in the theater. Particularly annoying was the necessity for de-winterizing many of the combat aircraft which arrived in Australia from the

United States. With few exceptions, all C-47's, B-25's, and B-24's made the long flight to a theater, predominantly tropical, equipped with de-icing and engine-winterization equipment. From January through September 1943, the engineering section of the 30th Service Squadron alone de-winterized at least 22 C-47's (most of these in January), 107 B-25's, and 43 B-24's. Since this task was only one of many which included 50 and 100-hour inspections together with normal repair and maintenance activities, it frequently overtaxed the facilities and delayed delivery of new aircraft to combat units. As a result of complaints from the theater, OC&R informed General Kenney on 14 May that winterization items either had been or would be deleted from all bombardment aircraft sent to his theater. Two months later, however, approximately half of the B-25's still reached Australia with winter equipment and in August a message from Kenney indicated that the same was true of C-47's.[4]

These and other maintenance and supply problems were the subject of a large proportion of radio messages between the theater and Headquarters. Indeed the impression was perhaps intentionally given that if a certain shipment of propellers, of turrets, of aircraft casings and tubes, of valves, or of any number of other spare parts did not arrive, the success of Fifth Air Force operations would be threatened. Actually, although immediate operations were on occasion dependent upon the arrival of some part or piece of equipment, the principal danger was rather that a safety margin of reserves might become exhausted. Usually, supplies arrived regularly enough to satisfy the needs of the theater. In August a message signed by General Kenney assured General Arnold that supplies

had been furnished "within allowances," that on cabled requisitions to Patterson Field there was an average lapse of 26 days, and that delays were the result of unavailability of material or difficulties in transportation. Moreover several months earlier Marshall and Arnold had congratulated Kenney upon his keeping 80 per cent of his aircraft in commission "day in and day out," a feat which surpassed "other theaters in average performance." [5]

This superior record of supply and maintenance can be attributed to a number of factors. One of these was an increase in Australian productive capacity. From the beginning of the war with Japan, the War Department had urged the Pacific commanders to make as much use of Australian facilities as possible. In 1942, although their production of war materials was comparatively insignificant, a number of commercial aircraft companies and airlines were capable of providing needed maintenance facilities. The Australian National Airways and the Ansett Airways at Melbourne, the Commonwealth Aircraft Company and the Australian National Airways at Sydney, and the Quantas Airlines at Brisbane were among those called on for aid by American air units. By 1943, extensive repair and manufacturing agencies had been established in the large east-coast cities to produce critical parts, in some cases the machines and tools used in these shops having been themselves manufactured by hand. Indeed, by this time too, Australian manufacturers, already producing such planes as the Beaufort and the Boomerang, were contemplating the production of American models like the C-47 or the P-47. [6]

Another reason for the success of the Fifth Air Force's service function was the presence in Australia of a number of extremely capable

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exploits

filling a government bomber contract, and held a number of engineering posts at McCook Field. After several years as an instructor in the Air Corps Tactical School at Langley Field and in the Infantry School at Fort Benning, he went to Wright Field in 1939 as commanding officer of a tactical unit. Within a few months, however, at a critical period in aircraft development, he was appointed chief of the Production Engineering Section of the Air Corps Materiel Division. After the outbreak of war in Europe, he was sent as assistant military attaché to Paris where he was tireless in visiting aircraft factories, observing the fighting qualities of French units, and interviewing the officers themselves. He returned to the United States well liked and respected by the French and with information which, according to General Arnold, helped to bring "our production and performance dope up-to-date." [8]

Kenney thus had a real interest in developing an efficient service command, one which was capable of providing immediate service to combat units at advanced bases as well as third and fourth echelon maintenance and major modifications at depots in relatively secure rear areas. Furthermore, in order to support an Allied offensive in which air units were to play a vital part, the service command had to be flexible enough to keep up with the advance and able to send its units forward as fast, and in some cases faster, than combat units. This was in contrast with the defensive needs of early 1942. Then it had been planned that an air base group should be responsible for service in each of seven geographical areas within Australia, all under the general supervision of the U. S. Army Air Services. [9]

With the formal constitution of the Fifth Air Force on 3 September 1942, the existing service orgenization, the U. S. Army Air Services, had been "closed." It was replaced on 27 September by the Air Service Command, Fifth Air Force, under Maj. Gen. Rush B. Lincoln until 18 October when he was succeeded by Brig. Gen. Carl Connell. Even more significant was a change in the theory of employment of service units as indicated by their general movement forward during the fall. In July 1942 the 8th Air Base Group officially in the Sydney area had sent most of its units north to Port Moresby, the 22d Air Base Group was located near Brisbane, the 35th in the Townsville-Charters Towers area, the 36th at Tocumwal near Melbourne and at Laverton inland from Perth, the 45th at Charleville, and most of the 46th at Daly Waters over three hundred miles south of Darwin. At the same time, the 4th Air Depot Group was at Tocumwal and the 81st was divided between there and Brisbane. Of all the service groups, therefore, only the 8th Air Base Group had reached New Guinea, and many were still 2,000 miles away in southern Australia.[10]

Within six months, major changes in location had taken place. By November the air base groups, now redesignated as service groups were located as follows: the 8th at Port Moresby, the 22d near Brisbane, the 35th at Charters Towers, the 36th divided between Port Moresby and Milne Bay, the 45th between Charleville and Port Moresby, and the 46th at Mareeba near Cairns. The 4th Air Depot Group at the same time had moved to Townsville; the 81st and a new arrival, the 27th, were at or near Brisbane. Clearly the center of service activity had moved north.

Three months later virtually the entire 46th as well as detachments of the 22d and 35th Service Groups had moved to Port Moresby together with the 27th Air Depot Group. By February 1943 then the great majority of service units were concentrated in New Guinea and in the Brisbane or Townsville areas in Australia.[11]

One of the most significant developments of late 1942 and early 1943 was the opening of Depot No. 2 at Townsville, "an installation unmatched in size and production potential anywhere outside of the United States and England." A decision in the summer of 1942 to make Townsville the center of major supply and maintenance activities was in keeping with an offensive strategy. Townsville at that time was almost in the forward area and suffered occasional air attacks, but the advantages of a central depot within 700 miles of Port Moresby were immeasurable. Furthermore Townsville had the advantages of an excellent airport, a "creditable" harbor and jetty, and railroad connections. On 7 August 1942 General Kenney appointed Col. Donald W. Benner as officer in charge of Townsville Branch, Supply and Maintenance Section, U. S. Army Air Services, and a month later he assigned Lt. Col. Victor E. Bertrandias, a former vice president of Douglas Aircraft, to the 4th Air Depot Group with the specific task of building the depot.[12]

During September 1942 Bertrandias was confronted by numerous problems, chief among which were the acquisition of building materials and the finding of a labor supply. The depot, according to the original concept, was to include six 170 x 200-feet and five 100 x 200-feet wooden arch hangars for repair and five more for warehousing, together

with a camp for 600 officers and men. This was a formidable task, and although Bertrandias had the complete support of both Generals Kenney and Connell, he found that delivery of building materials could be promised only for some uncertain future date, and that hiring of a sufficient number of civilian laborers was virtually impossible. The few Australian civilians available were members of the Civilian Construction Corps, well organized and quite independent. The Americans complained that these civilians refused to work Sundays and more than an eight-hour day, that they insisted on time out for tea, and that "rain was always a signal to seek shelter." [13]

This situation made it clear that the principal reliance for construction of the new depot would have to be upon American military personnel. The 4th Air Depot Group, chosen to construct and operate the depot, had already had considerable construction experience in the theater, having arrived in Australia the February before. In the ensuing months its units had been scattered throughout southern Australia, but its chief activity had been to construct a large repair depot at Tocumwal near Melbourne. The first of the 4th Air Depot Group's units arrived in Townsville in early October. At that time little construction had been done on the new depot, and its site outside of the town, was merely a vast area of some 1,630 acres covered with trees. It was calculated that it would take civilian labor at least six months to complete the construction work, but a two-month dead line was set in order that the major work could be completed before the beginning of the rainy season. Bertrandias insisted that more than the 1,000 enlisted

men assigned to the group would be required to meet that dead line, and he acquired an additional 370 men from the 11th AC Replacement Control Depot, a unit at first made up of unorganized casuals, but later designated the 83d Depot Repair Squadron and assigned to the group.[14]

The work was difficult and the hours long. One compensating feature of a 12- to 18-hour working day was that the men at first were thereby kept from realizing that they were no longer near the southern cities where life was easier and recreational facilities many. By December 90 per cent of the original project was complete, and the men could take time out occasionally to listen to the group's newly formed dance orchestra and to wish that the special service officers would bring them some recreational equipment. Their principal Christmas present was an official commendation from General Kenney praising the 4th Air Depot Group, the 11th AC Replacement Control Depot, and the two signal companies for completing the project in record time and for their "loyalty, diligence, and efficiency."[15]

Meanwhile Colonel Bertrandias had received added responsibilities. On 20 October 1942 he replaced Colonel Benner as Air Service Command Representative for the Townsville Area, and with the establishment of the Advance Echelon, Air Service Command, Fifth Air Force at Townsville on 26 January 1943, he became its commander. Within this broader organization were not only the 4th Air Depot Group, but also the other service units in northern Queensland. In late 1942 these included service units for the 19th and later the 43d Bombardment Groups at Mareeba, the 3d at Charters Towers, and the 22d at Woodstock. By the first of 1943 all

combat units except the 90th Bombardment Group (H) had pushed forward to New Guinea, and thus the installations at Townsville, now known unofficially as the "Fourth Air Depot," were the principal responsibility of the Advance Echelon, Air Service Command.[16]

Since April 1942 service units had been performing front-line maintenance and supply for fighter planes and for bombers which used Port Moresby as an advanced base. In September the activities of these few units were coordinated by the establishment at Port Moresby of the Advance Headquarters, U. S. Army Air Services, and later of the Air Service Command, Fifth Air Force. The duties of the Advance Headquarters, under the command of Lt. Col. Henry A. Sebastian, were many and varied. It was to be a "clearing house for all Air Corps supplies on the island, for petroleum, for salvage, for aircraft returning to the Australian mainland, for all the et ceteras from requisition to crash boats, from personnel to the allocation of equipment and parts."[17]

A good example of the experiences of a service unit in New Guinea during the fall of 1942 is that of the 8th Service Group. This unit, at that time the only complete service group in the Port Moresby area, had arrived there in July; in November it consisted of 54 officers and 1,100 enlisted men. During these months it was the mainstay of numerous combat units. In the first place it was responsible for manning Jackson airdrome and for controlling all base operations there. This control involved both night and day flights of 1 fighter, 1 medium bombardment, and 3 heavy bombardment squadrons, all of which from time to time operated from the airdrome. In the second place, it operated the Arcadia

Transient Camp, which housed and fed combat crews as they passed through Port Moresby to or from the mainland. This responsibility required the service command to provide a permanent kitchen staff in addition to a detachment of an officer and 50 men. Furthermore the 8th Group operated an air depot for both the Port Moresby and the Milne Bay areas and was responsible for salvaging damaged aircraft on five Port Moresby airdromes, on nearby islands, and along the coast for 80 miles. Finally, it performed first, second, and third echelon maintenance on transient aircraft, third echelon maintenance on all fighters using four airdromes from August through November; third echelon maintenance on attack aircraft using two airdromes in September and October; and first, second, and third echelon maintenance on transports using three airdromes.[18]

The general movement forward of ground echelons to Port Moresby provided some relief for the overburdened 8th Service Group. Of equal importance was the arrival early in December 1942 of the 27th Air Depot from Brisbane. Unfortunately, the depot group could not at once assume its expected responsibilities. It first had to construct work shops and a camp area. Upon disembarking from the ships at Port Moresby harbor, the men piled into Australian trucks and were carried for seven miles into the New Guinea wilderness between two ranges of hills separating Wards from Jackson airdromes. There the 900 or more men found themselves in a desolate area where "every inch of ground was covered by the mosquito laden tough fibrous waist-high Kunai grass." At first they had only their barracks bags and field packs. Other supplies and equipment had to be brought from the ships and uncrated before such essentials

as field kitchens could be set up. Some source of water had to be found as the men soon drained their canteens and lyster bags, the only water immediately available. They soon found, moreover, that the table of basic allowances hardly sufficed to meet such a situation. A depot repair squadron, for example, was allotted one carpenter kit, and with this its personnel had to clear the area and build tents as well as any other buildings necessary.[19]

As soon as the camp had been established, the men turned to duties for which they had been trained. Welding, sheet metal, and machine shops were set up, usually by throwing a 30 x 60-foot canvas over a wooden framework. Unfortunately canvas was scarce, and some of the precious machinery left unprotected was ruined during the rainy season. But the group kept functioning. Machine lathes were busy, in many cases making needed parts for the repair of fighter planes which by the latter part of December were being brought to the shops. Adequate work could not be done, however, until a real depot was available. Since there were no engineers at that time for construction, 40 per cent of the group's personnel were instructed to build the depot for themselves on a site which rain had reduced to thick mud. Heavy machinery bogged down and 1,400 yards of cable were broken in hauling it out, but the job was done.[20]

By February 1943, the supply and maintenance situation at Port Moresby perhaps for the first time could be described as well in hand. All ground echelons of the bombardment units which regularly used Port Moresby had arrived and had taken over first and second echelon maintenance. Service units, therefore, could devote themselves more to

third echelon maintenance with the 27th Air Depot Group doing fourth echelon maintenance. Some of the pressure had also been relieved by several War Department decisions. On 16 January General MacArthur had been informed that he was authorized an additional repair squadron for each depot group, and that those for the 27th and 81st Air Depot Groups would be sent from the United States. In addition, Kenney learned that ordnance sections, consisting of one captain and three enlisted technicians were to be supplied to each fighter and bombardment group headquarters.[21]

By the spring of 1943 a general maintenance policy had been established. Fighters were to be repaired in New Guinea, and bombers, if they could fly, were to be sent back to the better-established depots in Australia. These facilities on the mainland were then capable of almost mass production methods. For example, in January Kenney informed Patterson Field that facilities in Australia would soon be capable of manufacturing sufficient belly tanks for all his fighter aircraft. This amounted to 1,200 tanks a month. In April he asserted that all engines could be overhauled locally, and three months later added that his theater would be equipped to handle all propeller overhaul and replacement of blades.[22]

The duties of the busy centers at Townsville and Brisbane were becoming more and more diversified. The Aircraft Repair and Overhaul Section had the following subsections: paint, fabric, and dope shop, brake repair, hydraulic, and rubber repair. In the machine shop were the machine, sheet metal, electrical maintenance, heat treating, plexiglass, welding, radiator, woodworking, regulator, electro-plating,

supercharger, pump overhaul, and photographic sections. In addition the group included a propeller shop, an instrument overhaul shop, a gas section, an enormous supply section, and a signal company responsible for the operation of telephones, switchboards, radios, and of a signal supply depot.[23]

These duties were almost overwhelming, but others were added to them. In January it was decided that more buildings were needed to house the many supplies then being kept in boxes in the open fields. Again the 4th Air Depot Group furnished construction personnel, and by the last of April "the group had succeeded with the assistance of Australian labor in constructing a total of (16) warehouses and seven repair hangars." Only by 24-hour days and seven-day weeks could the demands of the theater be met, and not until early summer was a part of the burden lifted with the arrival of two new depot groups, the 12th and the 15th. In a period running roughly from December 1942 to June 1943, the 4th Group had repaired 224 aircraft and erected 55 others, overhauled 136 engines, completed 1,343 work orders of 5,390 received, completed 489 propellers, packed and inspected 910 parachutes, completed 2,821 fabrication units, 947 control surfaces, 325 brake assemblies, 191 landing gears, 161 hydraulic units, and 114 self-sealing fuel cells. In its supply depot the group had received 5,465,638 pounds of goods and shipped 1,654,941 by truck, rail, air, and ship.[24]

These feats of workmanship were accomplished in a monotonous routine of labor covering long hours day after day. More spectacular perhaps were the achievements of service and depot units in modifying aircraft. Every theater had its own particular problems. In many cases

standard types of aircraft, of armaments, of bombers, and of countless other items were unsuited to tactics employed. Furthermore there was a lapse of time between design and delivery which prevented modifications carried out at the factory from keeping up with specifications required in the field. This was particularly true in a Pacific theater where combat units were meeting conditions unforeseen when materiel was first designed. As a result, every flyer had his ideas of how a weapon should be modified, and "there was hardly a tactical or service squadron which was not busily engaged in hanging more guns or armour on Army Air Forces airplanes." This tendency could have had disastrous results, since an individual's ideas when implemented led frequently to "stresses and strains, weights and balances, undreamed of by the manufacturers." [25]

But the Fifth Air Force encouraged modification through the agencies of the Air Service Command. General Kenney persuaded the War Department in the spring of 1943 that aircraft should generally be flown to the Southwest Pacific unmodified in order to save time in delivery. [26] By the summer of 1943 modification projects were under way in New Guinea, in Townsville, and in Brisbane. Prior to that time most of this work was carried out at or near Brisbane.

Since mid-1942 the 22d Service Group and the 81st Air Depot Group had been located in the Archerfield-Amberley-Eagle Farms-Brisbane area. There, directed by such officers as Col. Ralph L. Fry and Col. William H. Monay, commanding officer and executive respectively of the 81st Air Depot Group, they had performed feats of supply and maintenance similar to those of the Townsville units. A famous "character" of this area,

whose reputation had spread to other Pacific areas, was Maj. Paul "Pappy" Gunn, materiel officer of the 3d Bombardment Group. Perhaps as much as any other single individual he should be given credit for the success of major modifications. He not only was a veteran flyer but a designer who had the reputation of being "exacting in efficiency and ability" and able to do things with aircraft which others would not attempt.[27]

In the summer of 1942, Gunn had supervised a major modification on the A-20. Orginally the A-20 was armed with only four .30-cal. machine guns, and its short range made a flight over the lofty Owen Stanley mountains extremely dangerous. After a considerable amount of experimentation the 30th Repair Squadron together with some members of the 81st Depot Repair Squadron attached four .50-cal. guns to the nose and added two 450-gal. bomb bay tanks. The A-20 then became a potent weapon which General Whitehead's advanced combat echelon employed continuously during the Papuan Campaign.[28]

The success with the A-20 undoubtedly stimulated General Kenney's interest in attack aviation. More than 10 years before he had taught "attack" courses in the Air Corps Tactical School at Langley Field. Perhaps he was following his own teachings when he developed in 1942 a theory of low-level bombing and strafing attacks carried out by planes having sufficient forward fire power to overwhelm antiaircraft opposition. During the fall of 1942, the 81st Depot Repair Squadron was creating an even more powerful weapon than the A-20 for use as an attack plane. With the blessing of General Kenney and supervised once

more by Major Gunn, they began experiments on the sturdy B-25 medium bomber. They took off the lower turrets and the tail gun and added forward-firing machine guns until four bristled from the nose and four more from blisters attached on either side. The result was a plane which was capable of carrying 60 small fragmentation bombs together with 6 x 100-lb. demolition bombs, and which had an upper turret with two 50-cal. machine guns in addition to the eight firing forward.[29]

In December, a three-man crew consisting of Major Gunn as pilot, Jack Fox, North American factory representative as co-pilot, and an enlisted turret operator, carried out several experimental runs. Although several minor corrections had to be made, the modification was approved, and within three months approximately 30 B-25's had been so modified.[30]

According to theater reports the new "straffer," with a crew of three men, had a number of advantages over the A-20. In addition to a longer range, a heavier bomb load, and heavier fire power including upper-turret protection, it carried a co-pilot and had instruments for flying in stormy weather or darkness, extremely comforting factors for the flyers. There were, of course, a number of disadvantages. Having a cruising speed of some 200 m.p.h., it was slightly slower than the A-20, and its speed of 250 m.p.h. while crossing the target was from 10 to 20 miles per hour slower. It made a large target, and the A-20 was more maneuverable, but maneuverability was not considered particularly important while flying at a 150-foot altitude. With 2,000 rounds of ammunition for the forward-firing guns, it was subject to nose-heaviness,

but pilots could soon accustom themselves to this flight characteristic. The advantages, therefore, clearly outweighed the disadvantages. Indeed Jack Fox declared that having two pilots in the B-25 alone made that plane preferable to the A-20 as a strafer.[31]

The successful modification of the A-20 and the B-25 did not in itself spell success for low-level attack theories. The planes were available, armed with the requisite forward fire power. But the theory of attack aviation included the use of bombs dropped from an altitude which rendered a miss unlikely. Without the use of a bomb armed with a suitable delayed-action fuze, however, this presented the possibility that the attack plane would be destroyed by its own bombs. As early as the summer of 1942, General Kenney had sponsored experiments with fuzes in order to develop one with a five-second delayed action. A partially satisfactory result was achieved by modifying the standard M-106 tail fuze. A new detonator housing was constructed, and standard RAAF detonators with one-, five-, eight-, or eleven-second delay inserted. In carrying out low-level attacks on shipping, these fuzes were extensively used. It was soon discovered, however, that many bombs so fuzed failed to detonate, and were by no means so satisfactory as the standard M113 fuze. Kenney early in January requested 1,000 fuzes of the latter type, and later calculated that he needed 2,000 M113's a month. Little could be done with these requests in the United States since the fuzes were still undergoing extensive tests and were not in mass production. Within two months, however, the tests were almost completed. They had shown that less than one-half of 1 per cent of the M113 fuzes were duds, and

Gen. H. K. Ramey, V Bomber commander, was assured that so far as the fuze situation was concerned "we are about to get out of the woods." [32]

Bombs armed with the M113 fuze were to be of use principally against shipping. There was an equal need for bombs which could be dropped with safety against land targets. General Kenney again had initiated a solution to this problem. A parachute was added to the small 23-lb. fragmentation bomb armed with an instantaneous fuze. These were carried in a sort of honey-comb rack which could be fastened in the bomb bay. Forty or more bombs could be loaded in an A-20 depending upon the number of extra fuel tanks carried. The first real test of the parafrags occurred in September 1942 when an attack coordinated with medium-altitude bombers achieved so much success in destroying parked enemy planes that the morale of the whole command soared, an unusual experience in 1942. [33]

The use of these bombs, however, was limited by the available supply. Parafrags developed in the United States were being manufactured by January 1943 in fairly large quantities. But they were being turned out in clusters. Since both the A-20 and the B-25 were equipped with racks suitable only for individual bombs, modification had to be performed by General Connell's service command. This was a difficult task. The clusters had to be torn apart, and end cover plates and vertical suspension wires added. Kenney could not understand why it was not "just as easy to do the job right back home." Further experiments were being carried out in the United States, and early in May Arnold assured Kenney that a new vertically suspended parafrag, the M-72, was in production

and would be dispatched to the Southwest Pacific as soon as they were "physically" available.[34]

Parafrags proved to have a vicious effect when dropped by low-level attack planes. Fifth Air Force designers were also experimenting with antipersonnel bombs to be dropped from high-and medium-altitude bombers, an effort probably inspired by a "daisy-cutter" employed by the Japanese with devastating results in many of their 1942 raids on Allied airfields. Soon the Fifth Air Force's flyers were dropping 100-, 250-, 500-, and 1,000-lb. bombs with two layers of one-eighth inch wire wrapped tightly around the outside. Iron rods one-fourth inch thick were also placed lengthwise around a 100-lb. bomb. They were bound in place with wire. A time fuze was then attached to provide an air burst. In spite of the apparent effectiveness of this and the other wire-wrapped bombs, they were all in an experimental stage until the summer of 1943, and tests were being constantly conducted by the Fifth Air Force to discover dispersion, density, weight, and quantity of fragments.[35]

Experiments with fuzes, with bombs, and with other offensive equipment for all types of aircraft were continuous in a theater where a limited number of aircraft made every improvement significant. The principal modifications of a defensive nature were carried out on the heavy bombers. B-17's had been used in the Southwest Pacific since they first reached the Philippines in September 1941. Then the B-17C and D were the only models available. The first B-17E's were used in Java six months later, and by the summer of 1942 the F model was arriving in

Australia. In general, each succeeding model was an improvement over the preceding, but in at least one respect, the B-17E was preferred to the F. Flyers of 43d Group, the only B-17 organization in Australia after November 1942, did not like the new plexiglass nose. They asserted that vision was impaired because of distortion, and that in case of accident, the B-17E nose, made in sections, was easier to repair. They pointed out furthermore that forward-firing machine guns to meet frontal attacks could not be satisfactorily mounted in plexiglass. Early experiments by B-17 squadrons led to more widespread modifications, and by January 1943 the service command was adding two .50-cal. machine guns to the B-17E nose and substituting it in the B-17F.[36]

By this time, however, the majority of heavy-bomber operations were being carried out by the B-24. Although the 90th Group, equipped with the Liberator, was running up an impressive score of enemy aircraft shot down, from the beginning there had been a general feeling that the plane was not well defended. At first General Kenney considered the lack of the ball turret as the chief defensive weakness, but he soon became convinced that the lack of forward fire power was more important.[37]

This weakness was generally admitted. Kenney was advised from AAF Headquarters that the B-24 nose-gun installation was being redesigned for greater upward fire, and that for the time being he could cut away the floor from under the present gun to increase the field of fire. Meanwhile General Connell had turned his men loose on the problem. Numerous expedients were tried. Jack Fox and Major Gunn worked for a 30-hour stretch trying to install into the nose of a B-24 a lower Bendix turret removed from a B-25 strafer. Another idea was to install a nose

turret and to have the bombardier lie on a platform above the gunner. The B-24 squadrons objected to this and suggested that the gun installation should be above the bombardier. The acceptable solution was finally worked out at Archerfield where a Consolidated tail turret was installed in the nose. Kenney informed General Arnold of this early in January. He requested that 35 tail turrets be delivered to him immediately for the B-24's already on hand, and that the Hawaiian Air Depot be instructed to make a similar installation on all future deliveries. The turrets, shipped by water, did not arrive in Australia until late in March. On 1 May Kenney requested an additional 36 turrets to equip the remainder of his B-24's and reported that the installation had "greatly increased combat efficiency of this type airplane by improvement of both [the] morale of the men and [the] tactical value of the airplane." [38]

The problem of inadequate frontal fire power was thus satisfactorily solved, but new questions arose as to the value of the tail and the ball turret. By May General Kenney had decided in his own mind upon the most desirable armament for the B-24. At that time he received the backing of General Arnold when he informed General Emmons in Hawaii that "I am not interested in standardization with other theaters and unless modifications are made in my way we will do the work in Southwest Pacific Area." [39] Kenney was informed that the following modifications were to be carried out by the Hawaiian depot: removal of the tail turret, its installation in the nose position, and installation of flexible guns in the tail and of a retractable ball turret in the belly. These changes were desired by both the Hawaiian Department and the South Pacific theater. But

although Kenney approved of the nose turret, he definitely did not want the other changes. On 13 May he informed the War Department that he wished to retain the tail turret and to substitute manually operated twin .50's for the ball turret. After an exchange of a number of messages, he listed on 16 July his objections to the ball turret: the danger of the turret jamming in the down position and thus causing a serious landing accident, the extra weight and "extreme aft CG location," and the suitability of lower twin .50's for the type of attack met in his theater. The reply to this message argued that there were provisions in the plane for retracting the turret by the bomb-hoisting mechanism in case of damage to the hydraulic system, and that the installation of the nose turret gave a satisfactory center of gravity location. Furthermore Kenney was informed that other theaters wanted the ball turret, that the B-24 would therefore come off the production line equipped with them, and that he should give them a further trial.[40]

A month's trial did not alter General Kenney's conception of the proper armament for the B-24. On 26 August he signed a message which reasserted the value of the nose turret in improving both the morale of the crews and the tactical value of the airplane, and requested 50 additional turrets, which together with the 149 that had either arrived or were on order would equip all his B-24's. Two weeks later, he repeated his dislike for the ball turret, and stated that the twin .50's would be installed either in Australia or in Hawaii if facilities were not available at modification centers in the United States.[41]

This radio message brought two replies on 14 September. The first was signed by General Arnold and originated in the office of the Chief

of the Air Staff. It stated that in the past "this Headquarters" had always attempted to comply with the desires of the theater commander and would continue to do so. It continued: "I recognize the fact that we can and should be able to accomplish installations and modifications on airplanes with considerable less trouble and loss of time than the theater, but you must also accept the fact that when we initiate a change as a result of a theater requirement, this change is incorporated either in a factory line or else in a modification production line and major changes cannot be made without slowing up production." The message continued that all other theaters wanted the ball turret, that it had therefore become "a factory production line installation," and that in order to comply with Kenney's desire, it would have to be installed in the factory and then removed in the modification center, a most inefficient operation." The message, however, concluded: "We will remove the turret if you do not want them. Your decision at this time will be final for your theater." The second message, also signed by General Arnold, originated in AC/AS, OC&R, and read: "Ball turrets retractable are to be removed from all B-24 airplanes destined your theater . . . . Ring mount manual operated twin caliber 50 belly guns will be installed here." [42] Kenney replied on 18 September that both these messages had arrived at the same time, and that the action indicated in the one from OC&R "is desired for all B-24's destined for here." [43]

In the late spring of 1943 many of the problems which faced the Fifth Air Force had not been solved. There was still a lack of supplies. Spare parts and pieces of equipment sometimes were slow in arriving. A satisfactory airburst fuze had not been developed. Experiments were

continuing on various types of fragmentation bombs, and not until the late summer had the last word been said on B-24 modification. Otherwise, however, the accomplishments of the service and depot units can hardly be exaggerated. In a report of an official inspection of the Pacific Areas during March 1943 it was said: "The 5th Air Force is a well-organized, efficiently run and very effective unit with high morale. One reason for its effectiveness is that it includes a well organized and conducted Air Service Command."[44] Depots and service units were not only carrying out normal supply and maintenance tasks, but they were building camp areas, constructing shops and warehouses, and using their ingenuity to develop modifications for combat aircraft. By March 1943 some of these modifications, notably the development of the B-25 attack plane, were already paying dividends. Indeed, it is doubtful if many of the victories won by the Fifth Air Force could have been achieved without the type of bombing made possible by these technical developments.

Chapter IV

THE ALLIED AIR BLOCKADE OF LAE;
THE BISMARCK SEA ACTION OF MARCH

In January 1943 the Allied forces were unprepared for large-scale offensive operations. The Joint Chiefs of Staff had not yet had an opportunity to consider the Elkton Plan. The decisions on future allocations for the Southwest Pacific had not been made. At least two of General Kenney's combat groups, the 8th Fighter and the 22d Medium Bomber, were out of action and many of the bomber squadrons, particularly those equipped with B-25's, were devoting much of their time to training in low-level bombing techniques. Other Allied air units, however, kept the pressure on the enemy. Theirs was the primary responsibility in interdicting the sea lanes, mapping future combat areas, bombing Rabaul and other centers of enemy supply, and otherwise harassing the Jap wherever he could be found.

When the last organized Japanese resistance in Papua ended on 23 January 1943, Allied ground forces were facing the enemy in only one tiny sector of the Southwest Pacific. This was in an almost inaccessible area of Northeast New Guinea between Wau and Mube, inland from Salamaua. Here a small Australian force, based on Wau, had been fighting a miniature land campaign with the Japanese for nearly a year, during which time they had been supplied almost entirely by air.

In fact, the economic development of the area since discovery of a valuable gold deposit there in 1926 had been almost entirely dependent

upon the use of commercial and privately owned aircraft. Over the course of 17 years no road had been constructed from the coast inland to the mines. There were a few trails which wound through a maze of mountains and jungle and over razorback ridges and swamps infested with poisonous insects and disease, but they provided no adequate communications with the outside world. The town of Wau itself, approximately the size of Port Moresby, had been built under circumstances in which every "nail, sheet of iron, weatherboard, spot of paint, pane of glass, crock, wire, or sheet of paper was carried in by air--at freight rates varying between 4 d. and 1/5 d. per pound . . . . The billiard tables at the hotels were brought in by air. Easy chairs, refrigerators, bath tubs, stoves, dynamos, linoleum, carpets, garden statuary, even great mining dredges, bulldozers and power shovels--all were brought in by air." [1]

As soon as the Japanese had established themselves at Lae in March 1942, they pushed inland toward this rich area. Wau was an enticing military objective not only because of its gold, but because of its well developed airfield. Lying within 150 miles of Port Moresby, it could be used by transports, fighters, and in an emergency even by bombers. To defend this region in the late spring of 1942, the Allies could count only on a "raggle-taggle army of miners, foresters, and civil servants called to the colors on the day of Pearl Harbor." [2] Described as the New Guinea Volunteer Rifles, they were joined early in July by a specially trained commando party of 55 men. This unit had come overland, a trip which involved moving west along the coast from Port Moresby to the

Lakekamu River, up the river to Bull Dog, along the Eloa River valley for a few miles, and then through heavy jungles to Wau. The rigors of the march are well enough indicated by the fact that when the commando party reached its destination 47 of the 55 men required hospitalization. Of the 800 white men in the area at that time no more than 300 were in condition to fight.

Their plight was made worse by the difficulties of transporting supplies to that area. Little more than three tons of cargo a week came over the difficult land and water route, while air deliveries were, under the urgent demands of the moment, both inadequate and uncertain. According to one observer, as much as eight weeks passed on one occasion without a single air delivery. Yet with a shortage of ammunition and on a diet of rice and canned beef, these Australians by "superb jungle craft" denied control of the area to the numerically superior enemy forces, and maintained for the benefit of Port Moresby an effective observance of Japanese plane movements from enemy-held fields in the Markham valley.[3]

While this uneven contest continued through the months of the more dangerous Japanese thrust in Papua, the Allied Air Forces gave all possible aid. By January transport pilots were becoming accustomed to the 3,000-foot runway with a 12 per cent grade heading directly at Kainde Mountain. The pilots, some of them sergeants, had learned to maneuver the clumsy C-47's like fighter planes while flying under clouds through dangerous passes, "dodging a peak here and a cloud there," and landing at unbelievably high speeds. Of several exploits, one merits special

mention. When a transport was forced down with a damaged wing at the remote landing field of Bena Bena, between Lae and Madang, an extra wing was flown in on another C-47 by Maj. E. L. Imparate. The Douglas factory representative, Harry Booth, and Capt. John Boyle of the 27th Air Depot Group, with the assistance of some 75 natives, bolted on the wing, and the repaired plane was returned to Port Moresby under its own power.[4]

By late December, the ultimate purpose of the majority of Allied air strikes was to isolate the enemy troops in the Muboe-Lae-Salamaua area. By that time the Japanese, finding it increasingly difficult to send convoys to Buna and Gona, were apparently shifting their attention from Papau to Northeast New Guinea. The Allies suspected that submarines were regularly bringing supplies to Lae. Occasionally convoys too attempted to slip through, and Allied air units were maintained on the alert against such an attempt. Single B-24's, B-17's, and RAAF Catalinas floated over the sea lanes. F-4's from the 8th Photo Squadron continuously mapped the area.

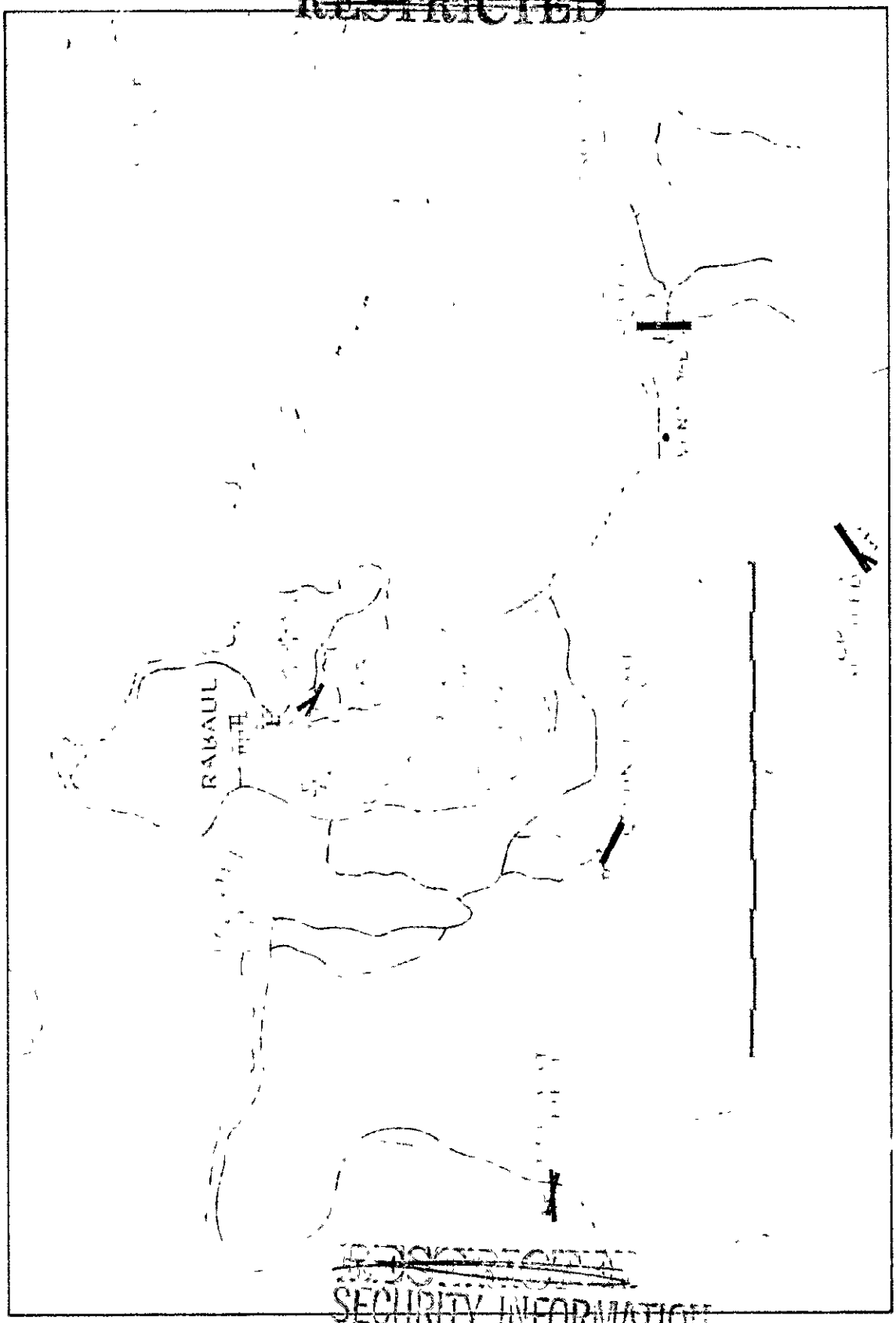
By the first of January, signs pointed toward a new attempt to send a convoy to New Guinea. On 30 December, enemy shipping concentrations were the largest ever sighted at Rabaul. The 91 vessels counted included 21 warships and some 300,000 tons of merchant ships. Although a portion of this shipping could have been merely routine traffic to and from an important base, it seemed clear that something out of the ordinary was being planned. Furthermore, float planes had been sighted in the vicinity of Lae, an indication usually interpreted to mean antisubmarine patrol in advance by shipping, and there was renewed air activity on near-by landing fields.[5]

On 6 January reconnaissance reported a convoy consisting of two light cruisers, four destroyers, and four medium transports off the south central coast of New Britain heading west-southwest. B-17's, B-24's, and B-26's, covered by P-38's, sought it out and dropped their bombs through low broken clouds. They were soon heavily engaged by the enemy fighter escort. On the following day RAAF Catalinas and Hudsons with American B-25's and P-40's joined the attack. On 8 January the convoy, now reported as consisting of one light cruiser, three destroyers, and three transports, had reached Lae, where it unloaded despite continued interference from the Allied Air Forces. Early on the following morning the enemy ships were observed withdrawing to the east, leaving one beached transport behind. For the next two days bombers continued their assaults until the ships were out of range.[6]

The result of this anti-convoy action is difficult to ascertain. The Japanese succeeded in their major objective which was to reinforce Lae, and the Allied Land Forces Headquarters estimated that better than 4,000 troops had reached shore. But at least two transports, probably more, were sunk, while American fighters in their engagements with the enemy's fighter cover had had a field day. The veteran 49th Group scored its greatest success in almost a year of combat. Several of its P-40's dropped two 300-lb. bombs in divebombing attacks, and Lts. A. T. House, Jr. and Claude S. Burtnette claimed one of the transports. Others shot down 28 enemy planes. One P-40 was lost, and the pilot, who had bailed out and landed in the ocean, was last seen swimming toward shore. Lt. Richard I. Bong of the same group, flying a P-38, bagged three planes

in the engagement, thus raising his total score to five. Other P-38's were flown by Capt. Thomas J. Lynch's 39th Fighter Squadron. The pilots of eight of these relatively new planes attempted to carry out dive-bombing attacks with little success; their gunnery, however, was good. This one squadron accounted for at least 13 enemy planes, bringing the total of enemy aircraft destroyed to well over 50 with no more than 10 Allied planes lost.[7]

General Whitehead had thrown all available bombers and fighters against the Lae convoy, which necessarily limited operations against Rabaul. That important port, however, remained the principal supply reservoir for the Japanese forces in Northeast New Guinea, and although the amount of traffic in the harbor declined somewhat during the month of January, lucrative shipping targets still remained. The enemy was also expanding Rabaul's air facilities by improving the two important airdromes of Vunakanau and Lakunai, and by rushing a third, known as Rapopo, to completion. The Fifth Air Force, in spite of the limited number of heavy bombers available, carried out a number of harassing missions against shipping, the airfields, and the town. About 10 days after the first sighting of the Lae convoy, rather sharp attacks were begun again at fairly regular intervals. Exclusive of the raids by lone bombers on armed reconnaissance missions, B-17's and B-24's hit the Rabaul area on 13 nights in January. Never in formations of more than 12, the total number of planes on these missions amounted to over 100 B-17's and approximately 12 B-24's. The weather was generally bad, the equatorial front treacherous, searchlight and antiaircraft activity



The Rabaul Area

more than annoying, but only two B-17's failed to return from these 1,400-mile flights.[8]

The results of the bombing could not be exactly reported. Most of the missions were carried out at night when darkness or the glare from searchlights prevented accurate observation. But bombs usually fell in the target area, [and] causing large fires. Results, however, in some instances were more definite. Perhaps the most destructive mission of the month was carried out on 5 January by two squadrons of heavy bombers. Forty 500-lb. demolition bombs and 24 x 1,000-pounders were dropped from 8,500 feet. The official report read: "nine vessels estimated over fifty thousand tons including one thousand pound bomb hit on destroyer tender with destroyer along side destroyed or left burning." Antiaircraft fire was heavy, and fighter attack by rather inexperienced pilots continuous. Two B-17's were shot down, and the crew of one including Brig. Gen. Kenneth Walker, V Bomber commander, was lost.[9]

The heavy bombers usually dropped their bombs from a medium altitude of from 5,000 to 9,000 feet. All bombardment squadrons, however, had had some training in skip bombing, and the 63d, whose former commander, Maj. "Bill" Benn, had pioneered in low-level attack, was adept at it. Three of its crews gave an example of their skill early in the morning of 21 January. Led by Maj. Edward W. Scott, Jr., they swept over Rabaul harbor at 250 feet. Scott skipped three 500-lb. bombs with a five-second delayed-action fuze against a 6,000-ton transport. It was observed lifting out of the water and rocking violently. He missed

a second ship with two other bombs, and finally dropped three more on an airfield from 1,600 feet. Meanwhile Lt. James T. Murphy released his first two bombs from a skip-bombing altitude without results, circled over land at the same altitude, and came back over water to drop a string of six 500-lb. demolition bombs against a 2,000-ton merchant vessel. The ship was at least severely damaged.[10]

Attacks against convoys and the airfields, harbor, and town of Rabaul were among the principal responsibilities of the Fifth Air Force. Not always so rewarding were attacks carried out to relieve pressure on ground forces. Nevertheless this type of air cooperation, used with some success in the Papuan Campaign, continued to be a definite responsibility of light and medium bombers and of fighters. In January and February their attention was concentrated on the Morobe district of Northeast New Guinea. They bombed the buildings and airfields of Lae and Salamaua; they patrolled the tracks which ran from the coast to Komiatum and Mubo, and the "Black Cat" trail or the "Crystal Creek" route to Wau; they strafed everything that moved in specified areas, sprinkled frags and parafrags along the tracks; and bombed points of resistance as requested by the Australians.

The landing of additional Japanese forces at Lae early in January had led to renewed activity along the tracks. Enemy forces were moving toward Mubo, and were assembling there for another assault upon Wau. On 29 January the 200 Australian defenders of Wau repulsed a sharp patrol attack, but within a few hours an enemy regiment began to infiltrate toward the airfield. Transports were on runways ready to carry

reinforcements to Wau, but the weather conspired against the Allies. Heavy thunderstorms over the mountain ranges shut out the passes, and only a few of the planes that took off were able to find the airfield. For a time it seemed that it would be necessary to abandon the beleaguered garrison, but then the weather shifted. Australian reinforcements boarded some of the 317th Group's new C-47's, manned chiefly by veterans of the 374th; food, equipment, ammunition, and some artillery were loaded on others; and the transports took off, followed by P-39's, P-400's, P-40's, and P-38's of the 35th and 49th Groups to furnish a fighter escort. In two days, 29 and 30 January, over 2,000 troops were flown in to reinforce the hard pressed Wau defenders. By that time the Japs had reached one end of the airfield and were lobbing mortar shells onto the 3,000-foot runway. The Australians upon landing came out of the planes with guns firing. In some cases, transports circled the field until the Diggers on the ground had "grenaded" Japanese soldiers back into the jungle. By noon of 30 January, the enemy was defeated and was beginning to withdrew, leaving behind 250 dead.[11]

During this last serious attempt of the Japanese to capture the Wau airdrome, enemy air action had been sporadic. The principal opposition to the American troop carriers and the accompanying fighters was the weather. For some reason, the Japanese provided no air support for their ground troops. It may be that they were surprised at the speed with which reinforcements could be flown in from Port Moresby; possibly they had been weakened by the Allied attack on the Lae convoy. At all events with the exception of one or two daily sorties over Port Moresby

and a heavy attack of 17 January on Milne Bay,* Japanese aircraft were conspicuous by their absence over New Guinea. Indeed this fact caused Allied intelligence officers considerable speculation. Their sources showed that over 50 bombers and anywhere from 50 to 150 fighters were regularly based in the New Britain-New Ireland area. So far as could be determined, however, the bombers, Sallys and Lilys for the most part, were rarely being used.[12]

Rather belatedly, the Japanese did call for air support, but it did not arrive until six days after their defeat at the edge of the Wau airfield on 30 January. Meanwhile Allied transports had continued to carry supplies to the Australian troops. On 6 February, eight P-39's of the 40th Fighter Squadron were patrolling at 12,000 feet over Wau while providing cover for a routine cargo flight of five C-47's. Shortly before 1100 they sighted 18 Zekes and suddenly discovered that six others were approaching from another direction. Capt. Thomas H. Winburn led the P-39's in a sharp dive into the larger formation. They knocked down at least 11 Zekes and one Sally and claimed five other probable kills. No P-39's were lost. At the same time, eight P-40's of the 7th Squadron on a similar escort mission sighted 12 aircraft which they mistook for Australian Beauforts because of red and blue markings on the fuselage. They soon discovered, however, that three of these "Beauforts" were bombing the Allied airfield. The transports turned back toward Port Moresby, and the P-40's engaged 12 Lilys and 12 escorting Zekes and Hamps. The enemy soon broke formation, and two Lilys,

* See Chapter I.

four Zekes, and one Hamp were destroyed.[13]

Meanwhile General Whitehead's headquarters had been informed of the enemy raid on Wau, and had "scrambled" three more fighter squadrons. Thirteen P-38's of the 39th squadron, which took off from Schwimmer airdrome at 1110, intercepted 12 Zekes and Hamps over Wau at 10,000 to 18,000 feet. At least one Zeke was shot down. Fifteen minutes later, the 9th Squadron, only recently equipped with P-38's, destroyed another enemy fighter. At approximately the same time P-39's and P-400's of the 41st Squadron diving out of the sun surprised six Zekes, shot down three of them, and probably destroyed the remainder. Thus in this enemy attempt to support his ground forces, the Jap lost 21 fighters and three bombers without doing appreciable damage to the Wau airfield and without destroying a single American plane.[14]

This Japanese setback in the air over New Guinea coincided with an enemy admission of a much more serious defeat on Guadalcanal. Although Allied Intelligence during the last week in January had concluded that the Japanese apparently had no intention of giving up that island, the Tokyo radio a few days later officially announced that it had been abandoned. This, the first major reverse admitted by Tokyo, was announced in such a way as to disguise the magnitude of the defeat. The point emphasized was that they had developed Guadalcanal only as a diversion while building up bases in the rear, and therefore their withdrawal was not forced upon them but was carried out according to plan. To the Allied forces in the South and Southwest Pacific, however, the expulsion of the enemy from the lower Solomons definitely changed the strategic

picture. It meant that the threat to the line of communications running from the Fijis to the New Hebrides and New Caledonia had virtually been removed, and that the central and northern Solomons could now be considered principally as "outer perimeter defences" for Rabaul.[15]

Although this was of great strategic significance, it had little immediate effect upon the operations of the Fifth Air Force. The Elkton Plan called for continued coordination of tactical operations between the South and Southwest Pacific theaters of the sort already made familiar during the Guadalcanal campaign. Since the preceding occurrence the Fifth Air Force heavy bombers had repeatedly cooperated with South Pacific Army and Navy forces by hitting Buka, Buin, Faisi, and Rabaul. Their heaviest raids were on the latter base, from which aircraft and ships could move with equal facility either to the Solomons or to New Guinea.[16] Clearly the Japanese defeat in Guadalcanal would not decrease the importance of these same air, sea, and supply bases. Indeed there were indications during February that some of the energy which the Japanese had previously directed through these points to the Solomons was now to be funneled toward New Guinea. Intelligence reports constantly emphasized the increasing activity of Japanese engineers from Babo, in the extreme northwest of New Guinea to points as far east as Lae. They were building a 1,400-yard landing strip on Wakde Island and a 1,300-yard strip inland from Hollandia Bay, as well as roads at Madang and Alexishafen, and at Wewak a real airdrome with 77 dispersal bays.[17]

Submarines, small boats, and air transports were apparently the principal means of supplying these widely dispersed points in New Guinea.

It was obvious, however, that if the enemy planned either to control the area or to launch any serious offensive from it, more ambitious efforts would be necessary to provide troops, equipment, and supplies. Furthermore a Japanese effort to save face might demand such a move after the debacle in the Solomons. The attention of the V Bomber Command during February, therefore, continued to be focused upon an attempt to isolate New Guinea, particularly the northeastern part, from the Japanese-controlled islands to the north.

Medium and light bombers concentrated principally upon the supply lines in the Lae area. They struck at points in the forward areas around Mubo where the Japanese had retreated after their repulse at Wau, bombed and strafed airfields at Lae and at the near-by Malahang field, and swept the coast from Finschaven to Madang. During February RAAF and Fifth Air Force planes harassed the area daily except when "cyclonic disturbances" interfered. A-20's carried out at least 105 tree-scraping sorties; B-25's, 84; and RAAF Beaufighters, 43. Perhaps the best-coordinated mission occurred on 15 February against the Malahang dump area. At 0830, 7 B-25's of the 405th Squadron based at Durand, 5 B-25's of the 13th Squadron based at Schwimmer, and 6 A-20's of the 89th Squadron from Kila Kila took off for the mission. Ten minutes later 13 P-38's of the 39th Squadron roared across the Schwimmer runway and headed across the ranges to provide top cover. Promptly at 1000 the B-25's crossed the target. The 405th Squadron loosed its bombs from 2,200 feet, putting 50 x 300-pounders in the target area, while the 13th recorded 40 hits from 4,000 feet. Five minutes later, the A-20's with all machine

guns blazing swept Malahang from 200 feet. As they reached the target they dropped 48 x 100-lb. demolition bombs armed with an 11-second delayed-action fuze. Three hours after the take-off, all aircraft had returned. They could not claim specific results. But all bombs were classed as hits and large fires had been started.[18]

Heavy bombers and patrol bombers, meanwhile, were reconnoitering the sea lanes and carrying out occasional strikes against Rabaul. A handful of RAAF PBY's, flying out of Cairns in northern Queensland, hovered over Vitiaz Strait, St. Georges Channel, and Buka passage in the Solomons. Single B-24's principally of the 320th and 321st Squadrons and by now based in Port Moresby, did the same while the 400th Squadron from Batchelor and Fenton fields near Darwin flew its reconnaissance missions to western New Guinea and even penetrated the Netherlands East Indies. The B-17's of the 43d Group carried out most of the harassing attacks on the New Britain area. During February B-17's were over Rabaul on an average of every other night, at times singly, usually in flights of six. Buin in the Solomons was also a fruitful target, and on 19 and 20 February, B-17's and PBY's coordinated their attacks on shipping and the airdromes in that area. Two vessels of 7,000 and 9,000 tons were left burning and others were damaged.[19]

The most ambitious missions of the month, however, occurred on 14 and 15 February against the Rabaul township and waterfront areas. Before dawn of the first day 13 B-17's of Major Scott's 63d Squadron led the way with the group commander, Col. R. M. Ramey, as a passenger. The weather was unfavorable, but 12 aircraft flew through electrical storms

to scatter wire-wrapped 100-pounders, 300-lb. demolition bombs, incendiaries, and 20-lb. frags over the target. Succeeding waves of 8 B-17's, 4 B-24's, and 10 B-17's continued the attack until 98,000 pounds of bombs and some 3,700 incendiaries had been dropped from an altitude of 4,000 to 9,000 feet. Searchlights were destroyed and large fires were started. During the following night 17 more B-17's were over the same target carrying out a series of medium-altitude attacks. No B-17's were lost in these missions. During the month, however, the V Bomber Command lost from enemy action two B-17E's, two B-24's (recorded as missing), and one B-25.[20]

The air attacks carried out by the Bomber Command during February were important in maintaining pressure upon the Japanese both in New Guinea and in New Britain. No illusions, however, could have existed as to the effectiveness of these missions. There simply were not enough aircraft in the Southwest Pacific both to neutralize important bases completely and to maintain an air blockade of the New Guinea coasts. Only by a careful husbanding of strength and by the strenuous efforts of ground crews and service units could an average of 75 bombers and 140 fighters of the Fifth Air Force be kept in commission. The general policy was to rotate squadrons so that approximately one-third was occupied in training and maintenance, one-third flying on combat missions, and the remainder held constantly on the alert. In this way at least two-thirds of the available air units could be marshaled for an emergency.[21]

During late January and February 1943, the training program of the Allied Air Forces was devoted primarily to increasing the effectiveness

of the emergency striking force. The results of medium-and high-altitude bombing against shipping had been less than satisfactory. During 1942 bombers attacking convoys, although increasingly effective, had scored a large number of misses. Experiments at Eglin Field together with those of Major Benn's 63d Squadron of B-17's in its operations against the Japanese had proved the superiority of low-level attack against shipping. Heavy bombers flying at 200 feet, however, were vulnerable to antiaircraft fire, and could be used only at night with any assurance of success. The newly modified B-25's had been designed to accomplish what was too costly for B-17's: low-level attacks in daylight supported by their own forward fire power.

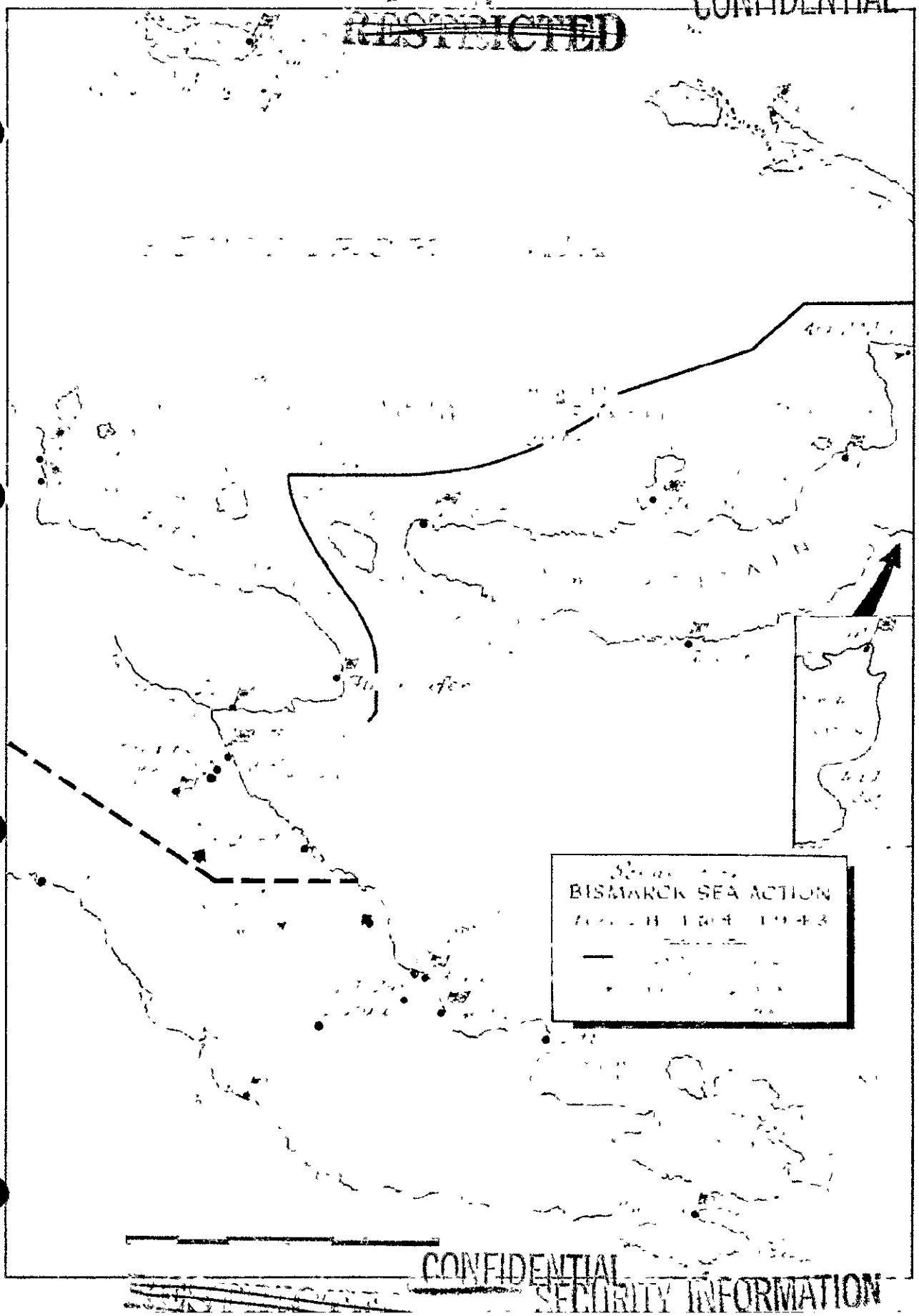
The training was particularly intensive for the 90th Squadron of the 3d Group, recently equipped with these modified planes (B-25C1's). The majority of the pilots of this unit were accustomed to medium-altitude bombing with a bombardier. Now they were to carry out masthead attacks without a bombardier. Week after week they trained using an old wreck off Port Moresby as a target. Experiments had shown that skip bombing was less accurate than aiming directly at the sides of the ship. Accordingly each pilot dropped 30 to 40 bombs from mast height, trying to hit the wreck itself by using a reference point on the nose of the aircraft as a bombsight. The runs were realistic since bombs were actually armed with the modified delayed-action fuze--so realistic, in fact, that one B-25 with its crew was lost when the plane hit the mast of the wreck, and two others were damaged by flying debris when bombs exploded instantaneously upon hitting the target.[22]

By the end of February, coordinated rehearsals were being staged employing almost every type of bombardment aircraft. B-25's approached the target at high speed dropping from a medium altitude to an altitude of from 1,000 to 1,500 feet when they were within three miles of their objective. There they took "violent evasive action at full throttle losing altitude to about 500 feet at 1,500 yards from the target." They attacked in pairs, one plane strafing the vessel from stem to stern, firing "continuously from 1,200 yards with a full-throttle straight beam approach." The other plane "strafed the vessel as it came in on its beam and bombed it" from between 500 feet and masthead height. Australian flyers also participated in these complicated dress rehearsals using the Beaufighter, a twin-engine, two-man aircraft carrying four cannon in the nose and six machine guns in the wings; and A-20 crews, whose plane had already proved itself potent in overland attack, were trained in similar antishipping tactics.[23]

During this period of intensive training, the Bomber Command had little opportunity to prove the effectiveness of the new techniques. One convoy was sighted off Gasmata on 20 February. RAAF Beauforts, the only torpedo-carrying land plane in the Southwest Pacific, B-17's, and the 90th Squadron's B-25C1's were dispatched to intercept it. But the 90th Squadron had no opportunity to test its new weapon since only the Australians found the convoy, and their torpedoes were released without effect. Six days later another convoy was reported north of New Britain, but B-24's and B-17's failed to find it. By this time, however, it was definitely known that the expected effort to reinforce the New Guinea garrisons was imminent. Alert Allied Intelligence had intercepted

Japanese radio messages which clearly indicated that a convoy would soon attempt to run the air blockade, probably either to Lae or to Madang. Accordingly, the Bomber Command prepared three different operational plans. The first assumed that the convoy would head for Lae, in which case it would come within reach of virtually all aircraft of the Allied Air Forces. If the ships should separate north of the Dampier Strait area, however, a second plan called for the heavies to concentrate on that portion of the convoy heading toward Madang, while light and medium bombers were to intercept the remainder of the vessels if they came within range. Finally, the entire convoy might follow a course toward Madang out of range of all but heavy air units, and the third plan was drafted accordingly.[24] Thus were plans laid which were to lead to the brilliant and much publicized Allied air victory in the Bismarck Sea.

The plans of the enemy, who had determined to reinforce his troops in the Lae area at all costs, were also carefully drawn.[25] The reinforcements were to consist principally of the 51st Infantry Division together with supporting units, equipment, and supplies. It was planned that a convoy, consisting originally of seven merchant vessels and eight destroyers, should be loaded in the Rabaul area beginning on 23 February.[26] The loading was to be completed on 27 February, and the convoy was to leave at 2300 of the following night. Detailed instructions were prepared as to speed, formation, and evasive tactics. Air support was to be furnished by both army and naval aircraft according to a definite schedule. Approximately 40 naval planes and 60 army planes were to be made available. The convoy was to reach Lae on 3 March, and after being unloaded was to depart on 5 March for Rabaul where it was scheduled to arrive approximately three days later.[27]



At first it seemed that the weather was conspiring with the Japanese in their plan to push this convoy through. On 27 February southeastern New Guinea and adjacent islands were shrouded in low clouds, and the sky over New Britain was stormy. On the following day flying conditions were fair to good, but on 1 March storms were prevalent in both the New Britain and New Guinea areas.[28]

Nevertheless the B-24's of the 320th and 321st Squadrons maintained a continual search over the sea lanes. Two B-24's of the 321st Squadron patrolled the routes along the north and south coasts of New Britain during the morning of 1 March. They found that the weather had cleared, but otherwise reported nothing of importance. At 1130, a third B-24 was sent on a similar mission. At approximately 1500, its crew sighted 14 ships escorted by Zeros on a westerly course 40 miles northwest of Ubili. Two hours later another B-24 was sent out to shadow the convoy, but visibility by this time was rapidly decreasing. At about the same time seven B-17's of the 63d Squadron followed a few hours later by a single B-17 of the 65th Squadron tried unsuccessfully to find it.[29]

By this time the Advanced Echelon (ADVON) was fully alerted and ready to send its planes into action. Few missions had been flown during the past two days, and as a result a maximum number of aircraft were in commission. Of the units assigned to ADVON and prepared to participate in a convoy attack, the following aircraft were ready for action: 43 P-40's and 18 P-38's of the 49th Fighter Group; 17 P-38's of the 35th Fighter Group; 17 P-40's of the RAAF 75 Squadron; 6 B-25C's and D's of the 13th Squadron, 11 B-25C1's of the 90th Squadron, and 15

A-20's of the 89th Squadron, all of the 3d Bombardment Group; 11 B-25C's and D's of the 38th Group; 28 B-17's of the 43d Group; 9 B-24's of the 90th Group; and 6 Bostons, 13 Beaufighters, and 13 Beauforts of the RAAF 9 Operational Group. In the Allied Air Forces on 1 March there were a total of 154 fighters, 34 light bombers, 41 medium bombers, and 39 heavy bombers ready for combat.[30]

On 2 March the convoy was still too distant for coordinated strikes by all types of aircraft. Consequently the burden of the attack rested upon the heavy bombers protected by long-range P-38 fighters.[31] The first mission, however, was designed to hamper Japanese fighter opposition by neutralizing the Lae airfield. Six RAAF A-20's took off from their Port Moresby base before dawn, bombed the field from both medium and tree-scraping altitudes, and liberally strafed the runway and dispersal areas. Meanwhile a B-24 of the 320th Squadron searched the Bismarck Sea for the convoy. Visibility was still bad, but by mid-morning the convoy had been located and a series of attacks initiated by the Bomber Command.

The first significant strike was carried out by eight B-17's of the 63d Squadron. The bombing attack was scheduled to be escorted by 12 P-38's of the 9th Squadron, but the fighters failed to reach the rendezvous point on time, and the bombers were left to face fierce enemy fighter attack without protection. Shortly before 1000 they carried out their attack from 6,500 feet against a convoy which they reported as containing one light cruiser, five destroyers, and eight merchant vessels.[32] Thousand-pound demolition bombs were dropped. Major Scott and Lieutenant Murphy were each credited with a merchant vessel, one of which was

described as breaking in half and sinking in two minutes.

Within an hour of this attack, 20 more heavy bombers were over the target. According to plan, these planes were to be escorted to the target by 16 P-38's of the 39th Squadron which had taken off at 0740, but there was a considerable amount of confusion and the fighters seem to have accompanied an earlier bombing mission, that of the 63d Squadron, a part of the distance to the convoy. Thus the attacks which followed were carried out without top cover. The weather was undoubtedly in part responsible for this mix-up. Low broken clouds and heavy intermittent thunder showers forced the attacking squadrons to break formation in order to search for their targets. The convoy, apparently taking advantage of the weather, was scattering so that individual ships could take cover in rain squalls.[33] These conditions hampered the attacks, which were carried out principally by 18 B-17's of the 65th and 64th Squadrons. One report of this action, however, described a 6,000- to 8,000-ton transport as "burning and exploding," and a 5,000-ton ship as "burning," while another report stated that a large cargo vessel was "smoking and burning amidships." The 64th Squadron counted three destroyers, two light cruisers, one 750-ton gunboat, and eight or nine cargo vessels of various sizes. Of these it reported that one 6,000- to 7,000-ton cargo vessel was "seen to explode," and that another slightly larger was "in a sinking condition." This damage must have been caused largely by the earlier attack of the 63d Squadron, however, since of the 68 x 1,000-lb. bombs dropped, the 64th and 65th Squadrons claimed only two direct hits and four near misses.[34]

During the afternoon of 2 March, the convoy was still out of range of anything but heavy bombers. A B-17 from the 63d Squadron on a shadowing mission reported that "two possible CL's left convoy" at 1730, and that two unidentified ships had been added between 1530 and 1600.[35] Approximately three hours after this, the final attack of the day was made by 11 B-17's off Rooke Island at the entrance to Vitiaz Strait.[36] Their observers counted 16 vessels, two of which were on fire. Enemy fighters, though not particularly persistent, were numerous, and one was shot down. They caused little damage to the bombers, but a heavy burst of antiaircraft struck the bomb bay of a B-17. Fire broke out, and only after a 25-minute fight, were the co-pilot, engineer, and radio operator able to quench the blaze. Meanwhile 43 x 1,000-lb. bombs were dropped, which according to the report, scored two direct hits amidships of a 5,000- to 6,000-ton cargo vessel which "was left sinking." An RAAF PBY maintained contact with the convoy during the night, and at 0545 of the following morning a B-17 picked it up, now off the Huon Peninsula and within reach of medium and light bombers.

The first attack of 3 March was carried out by the RAAF 100 Squadron equipped with Beauforts and based at Milne Bay. A weather front off Cape Nelson and the failure of flares to illuminate the ships thwarted the mission, however, and only one torpedo was released. But the threat of torpedoes was very real to the Japanese and when, a short time later, RAAF Beaufighters carried out their attacks, the enemy, mistaking them for the similar Beaufort, maneuvered their ships to decrease the possibility of torpedo hits.

The powerful Beaufighters of the 30 Squadron were ordered off the ground at 0700. They were to assemble over Cape Ward Hunt and follow tactics tested against the Moresby wreck only three days before. This involved low-level attacks coordinated with those of B-17's, B-25's, and A-20's bombing and strafing from low and medium altitudes under protection of a P-38 top cover.[37] By 0930 all planes had reached the assembly area. A half an hour later the attack was on. Thirteen Beaufighters "went into the target with flights in line astern." By the time they were within AA range of the destroyers, they were at 500 feet. "They then lost height rapidly and using rated power attacked in line abreast at a speed of 220 knots."[38]

The attack was beautifully timed. Just as the Beaufighters began their sweep toward the by-now widely separated convoy, 13 B-17's of the 64th, 65th, and 403d Squadrons began to drop their bombs from 7,000 to 9,000 feet. Zekes and Oscars intercepted fiercely, and perhaps a dozen were shot down. Bombing was good, and five direct hits were reported to have resulted in the sinking of one 4,000-ton cargo vessel and the probable sinking of another slightly larger in size.[39] Closely following the B-17's but just after the Beaufighters' first run were seven B-25's of the 71st Squadron and six more from the 13th also attacking from medium altitude. Their bombing, however, met with mixed success. The 71st Squadron reported: "One destroyer hit bad. Believe sunk." But the 13th could claim no more than near misses on a transport and a cargo vessel.[40]

Any accurate appraisal of individual scores was becoming increasingly difficult, for within 15 minutes, the air seemingly had become full of rapidly maneuvering aircraft. The Beaufighters were over the convoy for 20 minutes concentrating their heavy fire power on the decks, setting fire to cargo, killing some members of the gun crews, and forcing others to take cover.

The 90th Squadron's B-25C1's in their introduction to combat were even more successful. Twelve of these modified Mitchells roared down to 500 feet, then broke formation, each pilot seeking his own target. Although this occasionally caused some confusion when two pilots chose the same ship, the results were overwhelming. The forward-firing .50's beat down opposing AA, and 500-lb. bombs struck ship after ship. Of 37 x 500-lb. bombs dropped, 17 direct hits were claimed. According to the report of ADVON, there were 11 vessels in the group as the B-25's approached. After this attack, the following results were listed: an 8,000-ton transport was "badly damaged," a destroyer "rolled on its side and sank," a 4,000- to 5,000-ton cargo vessel "burst into flames and sank," an 9,000-ton transport was left "burning violently," a 4,000- to 5,000-ton cargo vessel stopped and "began to settle," a 5,000-ton cargo vessel "appeared sinking," a 6,000- to 8,000-ton transport was "sinking," a destroyer and a 3,000-ton cargo vessel were left smoking after three direct hits, and a 5,000-to-8,000-ton cargo vessel was left burning after another direct hit.[41]

The 90th Squadron created this havoc in approximately 20 minutes. At the same time six B-25's of the 405th Squadron and A-20's of the

89th were scoring comparable successes. The A-20's, two flights of six planes each, came in at mastheight, dropped 20 x 500-lb. bombs, and claimed 11 direct hits. The 405th, dropping 35 x 500-pounders from less than 200 feet, claimed four direct hits.

Four Allied aircraft were shot down during these relentless morning assaults. The only bomber lost was from a four-plane formation of the 63d Squadron which arrived over the target after most of the medium bombers had completed their attacks. They dropped 16 bombs with no observed results. Enemy interception was fierce and from all sides. Fifteen Hamps were counted and at least five shot down. But one evaded all P-38 fighter cover and came in under the wing of Lt. Woodrow W. Moore's plane. Bullets penetrated a wing and the radio compartment of the B-17, starting a fire. Moore pulled out of formation and salvoed his bombs. But the plane went into a "crazy dive." One after another the crew members tumbled out of the plane which disintegrated before plummeting into the sea. Seven bailed out, but all were strafed as they floated toward the water 6,000 to 7,000 feet below. These men and the pilots of three P-38's were lost. But the fighter pilots more than held their own as the 28 P-38's, which were providing cover, shot down at least 15 enemy fighters.[42]

After these morning assaults the remaining Japanese ships received no more than a very brief respite. Shortly after 1500, they were hit again and again in another series of carefully coordinated missions. Allied units received their orders shortly after noon, and almost immediately the planes were roaring off the Moresby dromes and heading

toward Lae. The instructions issued to the RAAF 22 Squadron outlined the plan of attack:[43]

> All available Bostons to carry out coordinated attack on enemy convoy last reported position 0705 South, 148.30 East widely scattered at 1220/3 March (.) Aircraft rendezvous at Cape Ward Hunt at 4000 feet (.) Set course for rendezvous at 1400 hours L 3/March, remaining in visual contact during approach to target (.) Rally Point Cape Warla [sic]. Primary targets transport first alternative warships, second alternative Lae airdrome (.) Order of assembly and approach to target one squadron of B17's at 9000 feet, one squadron B25's 8000 feet, one squadron B25's 7000 feet, one squadron Beaufighters 6000 feet, one squadron B-25's 5500 feet, one squadron B25-C1's 5000 feet, one squadron A20's 4500 feet, one squadron Bostons 4000 feet (.) Order of attack (.) First Beaufighters strafing, then B25's, then B25's-C1, followed by A-20's and Bostons all masthead - then B17's from 7000 feet to 10,000 feet, followed by one squadron B25's 3000 to 6000 feet (.) Bombs medium bombers 500 lb. demolition and instantaneous fuse, high bombers 1000 lb. demolition instantaneous fuse, masthead attack 500 and 250 lb. 5 second delay (.) Fighter cover will have sets of 4395 Kcs (-) Bomber Flight Leaders will identify and locate themselves relative to target when calling for Fighters in any emergency (-) Enemy convoy protected by fighters (-)

The strikes did not go according to plan. The weather over the ranges was less cooperative than in the morning. None of the Beaufighters crossed the mountains, 12 A-20's of the reliable 89th Squadron "could not climb above or find [a] hole in the weather," and of the 29 B-25's which set out, six failed to reach the target.* Those that did found only four or five badly damaged merchant vessels and two or three destroyers still afloat. For a period of approximately half an hour (between 1505 and 1535), the attack continued with no let-up. So complicated were the maneuverings that the Jap defenses, or what was left of them, were completely confused. Apparently the final assault was carried out more rapidly than had been planned since RAAF Bostons "were almost bombing through straffing B-25's, and the B-17's were bombing from medium height through both."

* One because of mechanical failure.

Again the Japanese were overwhelmed. Ten P-38's of the 39th Squadron and eight of the 9th Squadron provided protection against the 10 to 20 Zekes and Oscars which vainly tried to cover the remaining ships. Meanwhile Allied bombers were relentlessly striking at the vessels and strafing the Japanese survivors struggling in the water or trying to escape in small boats. The first of the afternoon attacks of 3 March occurred at 1512. A B-17 of the 63d Squadron reported five vessels in flames and claimed two direct hits on a large destroyer which "stopped and burned." Then the B-25's struck. Within five minutes, the 90th Squadron's eight B-25C1's had left a large destroyer "definitely sinking" after four direct hits from mast height, another probably sinking after four more hits, and two merchant vessels badly damaged (one of which was claimed as sunk).[44] At 1517 nine more B-25's from the 405th and 71st Squadrons, dropping a part of their bombs from medium altitude and the remainder from 200 feet, watched six 500-pounders strike home. In one case a destroyer was left burning and exploding, and in another a "ship disintegrated." Five minutes later the crews of the 13th Squadron flying six B-25's dropped 25 x 500-lb. bombs from 5,500 feet. Four of them crashed into a "light cruiser" which was "left in a sinking condition." Almost simultaneously 15 B-17's commenced their attack. Generally runs were made in flights of three planes, with each bombardier releasing a bomb every 75 feet. The bombing was also successful. A direct hit was scored on a merchant vessel which was left "sinking," and other hits were claimed on two destroyers. Japanese fighters failed to halt the bombardment, and seven were shot down.

Before the B-17's had finished their bomb run, five RAAF Bostons had virtually surrounded a destroyer. The Australian flyers formed a circle around the harassed ship, and made numerous strikes in quick succession. They claimed at least two direct hits, which, with numerous near misses, were considered sufficient to have caused another sinking.

Thus ended the last coordinated series of missions against the Lae convoy. Back at Port Moresby there was a feeling of festivity as a result of the already decisive victory. General Kenney's reaction was typical: "Tell the whole gang that I am so proud of them I am about to blow a fuze." But reconnaissance flyers were still busy searching the scene of action, and trying to assure themselves that none of the burning hulks were in a condition to get away during the night. It was known that one destroyer at least was still afloat, and that numerous survivors were in the water or trying to escape in barges and launches. For days, therefore, mopping-up activity continued. In the night of 3-4 March, five motor torpedo boats assigned to the Seventh Fleet and based at Tufi reached the scene of floating wreckage and dispatched one vessel. During the following morning at least one other badly damaged destroyer was sunk by B-17's and B-25C1's. Beaufighters, A-20's, and B-25's scoured the seas and strafed survivors headed for New Guinea and other islands as far away as Goodenough and Kiriwina to the east.

This Allied victory, which General MacArthur after the Japanese surrender in August 1945 called "the decisive aerial engagement" in his theater of war, so discouraged the enemy that they made few if any further attempts to run a convoy into the Lae area. This in itself was of

tremendous significance. Kenney's flyers had accomplished as much in three days as in similar operations extending through the entire Papuan Campaign, when only toward the end was Buna blocked off from incoming shipping. Now the enemy troops in the Lae-Salamaua-Mubo areas were to be dependent for supplies and reinforcements on submarines, air transport, or barges which either cut across Vitiaz Strait from Cape Gloucester or moved down the coast from Madang or Wewak.

Of perhaps equal importance with this cutting of an enemy supply line was the successful employment of new tactics. Above all the Bismarck Sea victory was one of coordination, made possible by careful preparation and an accurate evaluation of intelligence. General MacArthur emphasized these points when he cabled on 11 March that the success of the Bismarck Sea action was provided by two main factors: "complete anticipatory diagnosis" of enemy plans and intentions and "careful preparation for and exact execution of coordinated medium and low altitude bombing." These carefully rehearsed tactics, however, would not have been possible without the remarkable technical developments accomplished in the theater--the A-20 attack plane, the powerful B-25C1, and the modified M106 fuze which had been further modified in New Guinea 24 hours before the attack.[46] Nevertheless, it is doubtful if the low-flying B-25's, A-20's, and Beaufighters could have bombed so destructively had it not been for the careful coordination of a wide variety of attacks; B-17's and B-25's confused the defenders by the accuracy of their bombing from medium altitudes, and P-38's provided top cover which diverted a large share of defending enemy fighters.

The statistics serve only to emphasize the magnitude of the victory. During the course of a two-week period ending with 14 March, Allied aircraft carried out a total of over 400 sorties connected with the Bismarck Sea action of which 76 per cent reached their objective. A total of 571 bombs (426,000 pounds) were dropped on the ships of the convoy. According to the record, the B-17's scored 9 per cent hits, the medium-altitude B-25's 14 per cent hits, the B-25C1's 43 per cent hits, the American A-20's 50 per cent hits, and the RAAF A-20's bombing from above 1,000 feet, 10 per cent hits. During their sorties, bombers and escorting fighters encountered a total of over 350 enemy aircraft, of which from 50 to 60 were destroyed and from 25 to 40 probably destroyed. At the same time one B-25 was lost in a landing accident, and three P-38's and one B-17 were shot down in combat.[47]

Figures as to the number of enemy aircraft shot down must necessarily be approximate in view of the complicated nature of the action. It is equally difficult to assess exactly the damage done to enemy shipping. During at least a part of the battle of the Bismarck Sea, conditions did not favor accurate observation. Intervening clouds and turbulence on 2 March and a part of the following day interfered with the bombers attacking from medium altitude. Observation must also have been difficult, as is evidenced by the inconsistent nature of the reports. Moreover the speed and maneuvering necessary in low-level attack was not conducive to accurate appraisal of results.

The score as to the number of ships sunk depends to a large extent upon the number of ships in the convoy. Enemy documents, supported to

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probably badly damaged. The evidence is not so clear with regard to the merchant vessels. The eight in the original convoy were certainly sunk. It is possible that others joined that formation at some time during the afternoon of 3 March or during the night. If so, they may also have been sunk. But the evidence from photographs or from sightings is not conclusive that additional ships did join the convoy. Furthermore no captured documents, diaries, or prisoner of war interrogations clearly identify any vessels other than the original 16.[52] On the basis of this and other evidence available to them, the Joint Army and Navy Assessment Commission has concluded that there was a total of 16 vessels in the convoy, and that 12 of them were sunk.[53]

Even though the smaller figure be accepted, it was a victory which merited the commendations which were immediately radioed to the theater from both General Marshall and General Arnold. It was a victory won, however, by concentrating virtually all available air power against the enemy. It would have been difficult to repeat such an attack if other convoys had immediately renewed the reinforcement attempt. It certainly could not yet be assumed that Allied positions in New Guinea were secure. Indeed there was perhaps a need to fight against overconfidence engendered by the tremendous upsurge in morale following the Bismarck Sea victory. According to Marlin Spencer, Associated Press correspondent, both MacArthur and Kenney were aware of the danger of overoptimism. Spencer paraphrased MacArthur's views given at a press conference as follows: "We are waging a holding war in this area. Nothing more. We have hardly enough even to do that. The Japs at Lae are punchdrunk but

we don't have sufficient troops or equipment to deal the knock out blow." Later Kenney confirmed MacArthur's opinion, according to Spencer, by stating that if "he [Kenney] were in the Japs place he could take out the entire 5th Air Force. The Japs would have to pay plenty for it but it could be done." [54]

Chapter V

PRELIMINARY OFFENSIVE OPERATIONS, MARCH-MAY

In the months following the Bismarck Sea action, there were some indications that the Japanese were actually planning, in Kenney's phrase, to "take out the entire 5th Air Force." It was obvious that the enemy did not intend to abandon either the upper Solomons or New Guinea. Indeed in New Guinea their strength was, if anything, greater than at any time since the Allied victory at Iorabaiwa Ridge, 30 miles from Port Moresby, in September 1942. The development of Hollandia, Wewak, Hansa Bay, and Madang were not interrupted by the disaster in the Bismarck Sea. Shipping of all kinds, safe from any but heavy-bomber attacks, continued to reach those areas, and it was clear to Allied Intelligence that northwestern New Guinea was destined in enemy planning to assume almost as important a place as New Britain and New Ireland. At the same time the latter areas were steadily reinforced. Aerial photographs and other intelligence sources showed a gradual increase in the number of enemy aircraft based on fields at Rabaul, at Kavieng, and in the Solomons. The estimated enemy order of battle for 12 March reported 159 aircraft on New Britain, 60 on New Ireland, and 145 in the Solomons; that for 18 March showed for the three Rabaul airdromes alone — Lakunai, Vunakanau, and Rapopo — 80 medium bombers, 52 light bombers, and 101 fighters.[1]

These aircraft threatened Allied Southwest Pacific bases. Planes from Rabaul could hit points either in New Guinea or in the Solomons

with equal facility. The enemy had already demonstrated a discouraging flexibility in deploying his air units and in replacing lost aircraft by others brought in from Yap, Truk, the Palaus, and other bases to the north.[2]

The Allies, meanwhile, had received few if any air reinforcements. In March, as had been the case for the past five months, the total number of aircraft lost outnumbered those received. The monthly status report showed that the following aircraft reached Australia during that month: 13 B-25's, 8 B-24's, 1 C-47, 8 P-38's, and 4 F-5A's. At the same time 4 P-38's, 2 B-17's, 1 B-25, 1 P-400, and 1 A-20 were either lost or reported missing after enemy action; 3 P-38's were destroyed on the ground; and 11 fighters, 7 bombers, 9 transports, and 1 F-4 were wrecked in accidents.[3]

This difficult situation was eased to some extent by improved training facilities, in the theater and by the return of one fighter squadron to combat. In February the first steps had been taken to establish a replacement center at Charters Towers. Actually this was a school rather than a replacement center having for its purpose speeding the assignment of newly arrived personnel to the fighter and bomber commands. This involved a considerable amount of specialized training which had previously been accomplished by tactical units in addition to their combat duties. Officially made the responsibility of the 35th Service Group in April, the replacement center consisted of two camp areas with mess halls, administration buildings, tents with concrete floors, class rooms, a link trainer building, two skeet ranges, and a bombing range. The

school was important in preparation for future operations, but more significant for immediate problems of combat was the return of the 80th Squadron of the 8th Fighter Group to duty. Since the middle of February, when it had been evacuated to the mainland from Milne Bay, this unit had been recuperating from its almost 100 per cent incidence of malaria and at the same time training on newly acquired P-38's. On 21 March an advanced echelon with nine of the twin-engine fighters landed at Kila airdrome near Port Moresby and began to carry out escort missions and to stand its share of alerts. The arrival of these new aircraft was welcome at a time when many of the other fighters, particularly the P-40's, were nearing a point where they might literally be expected to fall apart at any time. By the end of March, for example, of the 25 P-40's assigned to the 8th Fighter Squadron, five were credited with 400 or more hours, seven with 300 or more, and the remainder with 200 or more.[4]

Fighter units, therefore, were little better equipped, except in experience, than they had been in the fall of 1942. The same was true of the bombardment units. The 403d Squadron of the 43d Bombardment Group (H) never had more than five aircraft on hand from March through May. The entire 22d Bombardment Group (M) through this same period remained out of combat because of its lack of aircraft. The same was true of the 8th Squadron of the 3d Bombardment Group, while the 13th Squadron with seven B-25's on hand in March and April could report no more than three in May.[5]

Thus the official tabulation of two heavy, two medium, and one light bombardment group, three fighter groups, and two troop carrier

groups hardly gave a true picture of the strength of the Fifth Air Force. Actually during this period (March through May), there were seven heavy squadrons ready for combat, and of these one was based in Darwin. There were three squadrons which could be counted on for medium-bombardment operations and another equipped with A-20's. There were seven fighter squadrons, at least five of which had many out-dated aircraft; and one of the two troop carrier groups, the 317th, was operating with the Directorate of Air Transport in Australia.

This dark picture was brightened somewhat by the prospect of receiving large-scale reinforcements. By the middle of March, MacArthur and Kenney had learned of the recent JCS decision to reinforce the Fifth Air Force.* But only the beginning of the promised allocations were to arrive within the next two months. On 28 March Kenney was authorized to activate two medium bombardment squadrons, the 822d and the 823d, and to assign them to the 38th Group. This was carried out on 20 April, but only sufficient personnel were available to organize the new units on a "skeleton basis," and it was clear that personnel and aircraft could not be prepared for operations before the end of June, at the earliest. By that time, the 345th Bombardment Group (M) and the 380th Bombardment Group (H), diverted from the United Kingdom, would have arrived, since aircraft for these units were being ferried to Australia by the end of April.[6] This promised a considerable increase in the striking power of the Fifth Air Force.

* See Chapter II.

The outlook for an increase of fighters by the end of June was less promising. True OPD had decided by the end of March that the 348th Fighter Group equipped with P-47's would be diverted to the Fifth Air Force from the United Kingdom. The flight and ground echelons were ready to depart by the middle of May, but the aircraft were not, since the P-47D-1's had operational bugs which had to be removed before being committed to a combat theater.[7]

For the present, therefore, General Kenney had to content himself with the arrival late in March of six P-70's of the 6th Night Fighter Squadron. MacArthur had first requested night fighters in October 1942. He repeated the request four months later, but delivery was delayed until an agreement was reached with the British in regard to night fighter protection in North Africa "where the political situation and the possibility of concentrated night bombing made the matter one of paramount importance." Even then the P-70 proved unsatisfactory. Tests soon showed that it took 23 to 25 minutes to climb to 20,000 feet at full power, and another 15 minutes to reach 25,000 feet. It had hand fuel pumps, and "the pilot would be having a hell of a time pumping" and at the same time trying to fly. When it finally reached that altitude, "maneuverability was nil, and it was impossible to get up any overtaking speed."[8]

The Service Command then took over. After some experimentation in Australia, the 27th Depot Repair Squadron at Port Moresby added a number of improvements. Boosters were installed behind engine-driven pumps to maintain constant fuel pressure at the highest altitudes; the B-17 paddle-type propellers replaced the original blades; a part of the air

scoop was cut off to make room for the new propeller when feathered; the planes were relieved of all unnecessary weight by removing the bomb bay tank, the .30-cal. guns in the rear, a .50-cal. flexible gun, and much of the armor plate; but two .50-cal. guns were attached firing forward. These modifications increased the fighting ceiling about 5,000 feet and the speed almost 60 miles an hour. The fighter command, however, still wanted a better night fighter; but until another was available, the six P-70's, known as Detachment A, served as an integral part of the defenses of Port Moresby.[9]

The problem of reinforcement was one of the most pressing facing those responsible for planning operations in the Southwest Pacific. Of perhaps equal significance both to immediate and to future operations was the first great forward leap of air units since the development of Port Moresby and Milne Bay as advanced bases. This was the movement across the Owen Stanleys to Dobodura, a base which had played a vital part in the winning of the Papuan Campaign. Its air strips, cleared and improved by the combined efforts of natives, infantry men, detachments of the 114th Engineer Battalion, and the 43d Engineer Regiment had received transport planes by the end of November. But its further development in the fall of 1942 was handicapped not only by the presence of Japanese forces in the area but by difficulty in moving supplies from the coast to the base. It was planned to build a road from Oro Bay to Dobodura by the middle of January, but work was not actually begun on this project until the first of February and had not progressed far enough to be considered open for traffic until 13 May.[10]

Long before this date, however, the base had been considerably improved. Wharves were constructed in Oro Bay, combat personnel unloaded the small boats that moved along the coast from Milne Bay, and equipment and supplies were carried by jeep or native carriers over improved tracks to Dobodura. Meanwhile the troop carriers continued to pour men and materiel onto the air strips. With 5,000 pounds to a plane, the average lift during a period of six weeks in March and April was 600,000 to 678,000 pounds a day.[11]

By March a number of service units had arrived to organize the routine of an established air base. A detachment of the 205th Quartermaster Company had been flown to Dobodura shortly after the fall of Buna and Gona in December of 1942. For a time it was the only quartermaster unit there, and with four jeeps and quarter-ton trailers, it was responsible for supplying all units in the area. At times this meant supplying approximately 6,000 men. On 1 January 1943, a C-47 brought a detachment of two officers and 45 men of the 480th Service Squadron from Wards Drome to repair, service, and salvage aircraft in the area. Communications were improved after a platoon of the 440th Signal Battalion had arrived in February. Aircraft warning facilities also became far more reliable. The first radar in the Buna area, an Australian set which had arrived by air transport in December, had never been particularly satisfactory, and in February units of the 565th Signal Aircraft Warning Battalion began to arrive in Oro Bay. By the first of March, reporting platoons were located at Oro Bay itself, Tufi, McLaren Harbor, and at Ionanda. Two weeks later these initial service and signal units were

joined by the 46th Service Group. Carried by troop carriers over the Owen Stanleys, it was the first group of its kind at this advanced base.[12]

Until March no combat group had been based at Dobodura. By December 1942 fighters were occasionally using the strips there as emergency landing fields, but transports and a few Australian Wirraways had been the only planes landing there regularly. Two months later, however, it was decided to post flights of the 49th Fighter Group on alert at Dobodura during the day. Accordingly in February a small detachment of ground personnel was stationed there, and aircraft would fly to Dobodura each morning and return to their Moresby base in the evening. By this means, not only was the area north of the Owen Stanleys given greater protection against enemy aircraft, but the area in which fighters could provide cover for bombers and transports was considerably extended. In fact, the existence of the Dobodura strips with servicing and refueling facilities had been a vital factor in maintaining fighter cover for the bombers in the Bismarck Sea action.[13]

Meanwhile arrangements were being made for the transfer of the entire 49th Group to the advanced base. On 26 February Lt. Col. Robert L. Morrissey, group commander, arrived to inspect new camp sites for his headquarters and for the combat squadrons. By the middle of March the headquarters together with the 8th and 9th Squadrons flying P-40's and P-38's had joined their group commander, leaving only the 7th Squadron to follow about a month later.[14]

The movement into the forward areas brought with it the difficulties inherent in such a change. Servicing of the aircraft was at first

not good. Refueling facilities were particularly unsatisfactory, and high-pressure portable units were needed. Supply dumps seemed inaccessible, in part owing to the lack of transportation equipment on the field. Even more than at Port Moresby, spare parts were at a premium. Shortly after arriving at Dobodura, for example, the 9th Squadron reported that P-38's out of commission were "being stripped to keep 16 for the daily alert." Furthermore, there were the usual complaints when combat personnel, with their own hands, had to build their camp sites where conveniences were few and insects many. The incidence of malaria was high, probably the case of the 46th Service Group being typical. Until the latter part of June, when improved sanitation measures began to take effect, from 15 to 20 per cent of its personnel were regularly incapacitated from malaria and dengue fever.[15]

By the time the camp site with the usual tents, mess halls, latrines, and garbage-disposal facilities had been established, living conditions were probably no worse than in the Port Moresby area. In fact some of "the boys" of the 49th Group preferred their new camp site. There was a swift little stream adjacent to the camp areas which solved the water problem, and at the same time, was an excellent place for swimming. The Special Service Section directed by Lt. Harold H. Peterson arranged for movies, a baseball-league, a lending library, an orchestra, post office facilities, and regular cable service. On 31 March Lieutenant Peterson opened a new canteen "chock full of supplies" in a corner of the mess hall. It offered for sale, in addition to the usual lines of food stuff, canvas wash basins complete with stands. Visiting shows occasionally

reached Dobodura. On 21 March a USO unit arrived consisting of an accordion player, a violinist, a juggler, and "several boys that sang old songs which were popular when our Moms and Pops were young." They were well received as was Joe E. Brown who arrived two weeks later at Horanda, one of the principal Dobodura dromes. He was greeted by the band of the American 41st Division and in spite of scorching heat put on a "swell program."[16]

One of the principal operational disadvantages at Dobodura was the lack of reliable communications with ADVON at Port Moresby. It was necessary to rely principally upon radio, but the peculiar conditions caused by towering mountains and tropical weather frequently interrupted reception. To those acquainted with the razor-back ridges, the gorges, and the corroding jungle country, a telephone line strung across the 150 miles from Port Moresby must have seemed a next-to-impossible job. Yet such a plan was conceived, and by May the project was under way. Signal Corps personnel began to work from both terminals, stringing bare copper wire on poles. On 18 May a detachment of the 440th Signal Battalion was flown to Kokoda and started to work from that half-way point. In the almost impenetrable jungle, use of poles was impossible, and a "native locomotive" led the way, clearing some of the jungle growth so that the wires could be attached to suitable trees. On 24 June the job was done. It had taken 250 natives and 100 American and an equal number of Australian signal corps troops, supplied principally by dropping from air transports, a little more than a month.[17]

Communication problems in the Southwest Pacific were not solved by the herculean job of stringing a telephone line across the Owen Stanley

Range. The constant dampness in New Guinea rotted poles and corroded wires, and frequent storms grounded newly strung lines. Moreover, the move to Dobodura was only the first of many leaps which took combat units, service units, and troop carrier units hundreds of miles ahead of bases that had been established only a few months or even weeks before. In such circumstances, it was impossible to establish reliable communications between the advanced bases and those to the rear. Even in the case of Dobodura, wire connections were not established with Port Moresby until six months after the Papuan Campaign had ended. Under the circumstances it was clear that if authorization for every strike by aircraft based on the north side of the Owen Stanleys were required from Port Moresby or Brisbane, operations would be disastrously delayed.

The organization which existed at the end of the Papuan Campaign was not capable of coping with this situation. General Kenney's Fifth Air Force Headquarters had to be retained in Brisbane where it could coordinate its activities with General MacArthur's GHQ, the headquarters of the Allied Air Forces, and various Australian headquarters. ADVON at Port Moresby still had administrative responsibilities too complicated to permit a forward movement of this headquarters. A new headquarters was thus considered necessary to exercise operational control over the units based at Dobodura.

General Kenney's answer to this problem was the creation in March 1943 of the First Air Task Force, at first known as the Buna Air Task Force. This new organization was to consist of fighter, bomber, and

troop carrier units which could be attached for an indefinite period or for a particular operation only. When a fighter unit was attached to the task force, the Fighter Command retained administrative control, but operational control went to the task force. The same applied to bomber units in their relationship with the Bomber Command. Theoretically General Whitehead as commander of ADVON retained authority for direction of the operations of all combat units in Northeast New Guinea. Actually, however, the commander of the task force could assume, when necessary, the responsibility of dispatching his own units on combat missions, including fighter sorties in defense of the area, missions requested by Allied ground troops, and attacks on emergency targets such as convoys.[18]

There was some difficulty in completing the organization of the task force because of a feeling in Washington that the Southwest Pacific was requesting too many headquarters personnel in higher grades. General Kenney insisted that three headquarters for the Fifth Air Force were necessary, and wrote that "G-3 has no idea of the details of the problem out here and has no conception of the number of officers required to run a show in three echelons."[19] The task force, however, was never officially authorized by the War Department, and personnel had to be taken from other organizations for task force headquarters. To the important post of commander, General Kenney appointed Col. Frederick H. Smith Jr. who continued to be listed on official rosters as deputy chief of staff of the Fifth Air Force. This administrative slight-of-hand had to be performed for all of Smith's staff. His A-3,

Maj. W. F. Coleman, for example, was officially an assistant chief of staff, A-3, at Fifth Air Force Headquarters.[20]

At the beginning the only combat unit attached to the task force was the 49th Fighter Group. But by the middle of April the personnel of the 8th Squadron of the 3d Bombardment Group had been flown across the Owen Stanleys. Within a month the remainder of the 3d Group and the RAAF 30 Squadron had arrived, and new B-25's were being tested by the crews of the 8th Squadron. By the end of June the First Air Task Force was a balanced organization. In addition to service units, it consisted of the following squadrons: one P-38, two P-40, one Beaufighter, one A-20, one B-25C-1, and one unmodified B-25.[21]

Although the principal function of the First Air Task Force was to maintain control of the sea approaches to the Huon Gulf, a secondary function was to provide aircraft for ground-cooperation missions. In this the task force concept replaced that of an air support command which had been suggested by Headquarters AAF in Washington. In January, 10 officers, trained in "air-support" technique, had arrived in Australia and had become a part of the A-3 section of the Fifth Air Force, with an advanced echelon at Port Moresby. By 1 February General Kenney had decided that "the theory of an Air Support Command does not fit the picture in this theater." With the consent of General Arnold, he determined to return several of the high ranking "air-support" officers to the United States, keeping those of low enough grade to serve as assistants to "relatively junior heads of A-3 sections." Among those who remained were Maj. Earl A. Field, who was appointed to head the Support Section at Fifth Air Force Headquarters, Maj. Richard H. Marshall

at ADVON, and Capt. Spencer Shropshire, who became liaison officer at Wau. Early in March Shropshire was relieved by another officer and returned to Port Moresby where he became a liaison officer with combat squadrons, responsible for briefing squadron and group A-2's. The functions of an air support command, therefore, were merged with those of the various operations sections, at Port Moresby if the missions in question were the responsibility of ADVON, or at Dobodura if that of the First Air Task Force.[22]

The creation of the First Air Task Force and the merging of air support officers into A-3 sections was generally successful in increasing the flexibility of combat units in the forward areas. Of less immediate importance was another new organization which was being planned for troop carrier units to provide a headquarters on the same echelon as the commands for fighter and bomber groups. In the middle of January General MacArthur had requested permission to activate a headquarters and headquarters squadron of a "transport wing" in order "to insure proper coordination of increased air transport activities." Before the end of the month CPD had authorized the activation of a troop carrier wing and had suggested that trained personnel be sent from the United States for the new headquarters under the command of Col. Harold Clark, a man with "excellent qualifications and long experience." In general this suggestion was satisfactory to Kenney, but it ran directly contrary to his usual policy of keeping in key posts men with experience in the theater. Consequently he radioed the War Department that although there was no objection to Colonel Clark, "it was necessary in the

interest of efficiency to continue in troop carrier work and particularly in command positions officers familiar with problems peculiar to this area." "For this reason and to avoid degradation of promotion problem," he added, "it is requested that officers with Wing Headquarters be not above grade of major." It was finally decided not to send the trained troop-carrier personnel. A wing headquarters was constituted on 26 February, however, and MacArthur was informed that personnel were to be drawn largely from the theater.[23]

For the next three months, the troop carrier wing was chiefly an administrative problem. On 13 March 1943, the Headquarters and Headquarters Squadron of the 54th Troop Carrier Wing was activitated "pursuant to General Orders No. 2, Headquarters, USAFFE . . . and assigned to the Fifth Air Force effective March 1, 1943." Its initial strength was one officer and one enlisted man whose official duties were to keep a morning report. On 3 May it was directed to move from Brisbane to Port Moresby "less personnel and equipment." The wing then functioned without personnel until 20 May 1943 when eight officers were assigned to it under the command of Col. Paul H. Prentiss, former commander of the 374th Troop Carrier Group. Actually this new headquarters could hardly have increased the efficiency of operations for the next three months since the only troop carrier group assigned to it was the 374th, and Colonel Prentiss's entire staff, with one or two exceptions, was taken from that group. Thus the function of the wing became "merely to act as an added channel, in A-3, for operational orders from Fifth Air Force."[24]

This might seem at first glance merely another example of building an empire of headquarters personnel. Certainly as long as the 374th was the only troop carrier group in New Guinea, there was little excuse for a wing headquarters. But it will be recalled that Kenney had been promised an additional group and a half by the end of the second quarter of 1943. These, together with the 317th Group still under the Directorate of Air Transport in Australia in May, made a total of three and a half groups, a number which probably justified a wing organization. Furthermore Kenney envisaged rapidly increasing duties for his troop carrier units. Of first importance was supplying Dobodura where Japanese air attacks were creating "a constantly decreasing enthusiasm on the part of the shipping people and the Navy about running supplies even as far north as Oro Bay."[25] Almost equally vital was the maintaining of more than 6,000 troops in the Wau area, even these activities, particularly the support of the Wau force, Kenney believed, were little more than preliminary to a main effort of troop carrier units which would later be necessary in the planned Lae-Salamaua operation.[26]

Kenney's confidence in the potentialities of air transport were apparently not shared by at least some of his colleagues in the ground forces. In any case, it was not intended that the Australians at Wau should remain dependent entirely upon supply by air. In December 1942 several Australian engineers had laid the ground work for a road from Bull Dog to Wau. In the middle of February two companies of Royal Australian Engineers undertook the task in earnest. Equipment was flown in to the northern terminus at Wau and carried in by water to

the southern terminus. Land slides, heavy rains, and the shortage of native labor made progress slow, but by the end of July jeeps could move along the road for 14 miles at each end, and a month later they could traverse the entire route.[27]

Every measure to insure an adequate flow of supplies to this jungle-bound force was justified in view of the part it was to play in the coming operations as one prong of the pincers closing on the Japanese forces in the Salamaua area. In March 1943, Kanga Force, as the Wau garrison was called, consisted principally of the Australian 17th Brigade. Its functions were to infiltrate the enemy positions in the Lubo area, to force the abandonment of these forward strong-points, and to prevent the Japanese from withdrawing troops in sufficient strength to oppose American jumps along the coast.[28]

The first of the amphibious moves was to be carried out under the general supervision of the Australian New Guinea Force. The principal American unit involved was the 41st Infantry Division commanded by Maj. Gen. H. H. Fuller. In February various elements of that division arrived in the Buna-Gona area. By the middle of March, the 162d Combat Team, recently flown in to Dobodura, replaced the 163d Regiment which had participated in the Papuan Campaign. At the same time one battalion moved along the coast toward the mouth of the Mambare River in order to deny the use of that area to the Japanese.[29] The 162d Regiment had little more than reached this point when intelligence was received which indicated that the enemy had withdrawn to a line north of Morobe some 75 miles farther up the coast. Such a move on the part

of the Japanese was not only an indication of weakness, but it invited a further Allied advance into the harbor at Morobe itself and to the air strip at Dona, a few miles to the south and suitable for emergency landings and for regular use by liaison planes. Accordingly the MacKechnie Force, consisting principally of the 1st Battalion of the 162d Regiment, was activated on 28 March and specifically directed to secure these points. By 6 April it had carried out a relatively simple conquest. It had begun its move by small boats on 31 March, landed at the mouth of the Waria River and at Dona, and on 2 April other elements had splashed ashore in Morobe harbor. Three days later Col. MacKechnie, the force commander, could report that his men were in control of the harbor, that it was preparing to maintain Dona air strip as an emergency landing field, and that patrols had found no signs of the enemy south of Nai Ama, 10 miles northwest of Morobe harbor.[30]

This important advance which brought American forces within 75 miles of Salamaua was accomplished against little or no enemy opposition. Thus direct cooperation from air units was unnecessary. Nevertheless in spite of little ground opposition to the Allied forces except in the Wau-Mubo area, the continuation of Japanese activity at other points was sufficient indication that the enemy still intended to maintain himself in New Guinea. Allied Intelligence reports during March, April, and May constantly described the construction of airfields at Hollandia, Wakde, Wewak, and a number of other places, and the building of a network of roads centering at Madang, together with what seemed to be a continual flow of shipping into Wewak. In addition Japanese submarines

made frequent forays off the Australian coast, and the threat of enemy air attacks was ever present. In such circumstances, the functions of General Whitehead's Advanced Echelon and Colonel Smith's First Air Task Force were many and varied. They included photo and armed reconnaissance, antisubmarine patrol, convoy, troop carrier, and bomber escort, together with the conventional tactical functions of destroying the enemy air force, isolating the forward areas, and destroying selected objectives on the battlefield itself.[31]

During the months of March, April, and May enemy air attacks against Allied bases, though by no means continuous, were frequent. On 9 March Wau was hit by approximately 26 bombers and 21 fighters; little damage resulted. Two days later an equally heavy force bombed Horendo airdrome at Dobodura. Personnel were taken by surprise when the bombs started dropping. Two enlisted men were killed by flying shrapnel and three aircraft were destroyed on the ground. Four flights of the 49th Group joined another already on local patrol in a savage attack on the raiders. Lieutenant Bong shot down two of the nine Zeros which were officially listed as destroyed. Lt. William F. Haring, Jr., shot down one enemy fighter, badly damaged another, and crashed head-on into a third. He succeeded in bailing out of the plane, and was later rescued from the sea by an Australian tug. Again on Oro Bay, 15 more bombers damaged waterfront installations and set a small fuel dump on fire during the night of the 14th. Three days later 18 bombers escorted by 32 fighters bombed Porlock Harbor at midday causing some damage. The most destructive raid of the month, however, occurred on the 28th when approximately

25 medium bombers and 10 to 15 dive bombers escorted by a large formation of fighters again struck at Oro Bay. The local fighter sector "picked up a large enemy plot and sounded the red alert at 1112." Sixteen P-40's and 15 P-38's took off and, in the ensuing fight, destroyed six Hamps, five Zekes, and two Vals. One P-40 and pilot Lt. Cecil D. Dewees were lost, and enemy bombs cracked into a new wharf, sank two small ships, and killed numerous personnel.[32]

Following the 23 March raid on Oro Bay, there was a lull in enemy activity over New Guinea. Jap attention seemed to have been diverted to the east where aircraft were striking repeatedly at Allied bases in the Solomon-New Georgia area. Allied intelligence prophesied, however, that the Japanese would soon turn again toward New Guinea, and documented this assertion by figures indicating the presence of the largest air force ever assembled by the enemy in the Southwest Pacific Area. The following was the estimated enemy air order of battle during the first week in April:[33]

	6 Apr. 43									
N.E.Area	F.	M/B	S/E B	F/B	F/P	Transports	6 Apr. 43*	2 Apr. 43*	5 Mar. 43*	5 Jan. 43*
New Britain	93	112	32	8	13	13	271	273	143	145
New Ireland	57	36			4		97	76	60	
New Guinea					5		5	5	9	22
Solomons	54	8	15	8	23	4	112	113	101	74

* Totals on these dates.

The Allies, therefore, had a rather clear indication that the Japanese were planning a large-scale air offensive. The only question was whether its objective would be Guadalcanal or Allied bases in New Guinea since the enemy had frequently demonstrated great flexibility in the employment of his air units against Allied positions in the Solomons and New Guinea. This occasion proved to be no exception. On 7 April, a large force of enemy bombers and fighters hit Guadalcanal. Four days later, "45 enemy dive bombers and fighters" were intercepted off Oro Bay by 50 P-40's and P-38's of the 49th Group. Led by Lt. E. A. Harris, who shot down two Zekes and a Val, and Captain Wright who destroyed three Zekes, the American fighters were credited with 17 enemy planes. Meanwhile the bombers had scored two direct hits on a 2,000-ton Allied merchant vessel, and other hits on a corvette and a small supply ship.[34]

On 12 April an even larger enemy force returned to New Guinea. This time Port Moresby was its objective. The 4th Fighter Sector plotted the formation as it approached the Port Moresby dromes. Three P-38's of the 80th Squadron, taking off when the red alert was sounded, found themselves playing hide-and-seek with some 45 Sallys and an even larger number of escorting fighters. Many of the enemy planes were flying at 30,000 feet and appeared as tiny specks to personnel below, some of whom were crouching in slit trenches. Meanwhile, fighter controllers had put all available aircraft of the 35th Fighter Group into the air, and its P-39's and P-400's were trying to reach "an advantageous altitude." At the same time, five P-38's from the 9th Squadron roared off a Dobodura strip to participate in the scramble. Although at a disadvantage because of inferior climbing characteristics, the P-39's were

surprisingly successful. Fifteen enemy bombers and 9 or 10 fighters were destroyed with the loss of 2 American fighters.[35]

The Japanese, however, scored heavily on ground targets in this, Port Moresby's 106th air raid of the war. They damaged or destroyed the following aircraft: four A-20's "slightly damaged"; one Beaufighter burned and two "badly damaged"; one P-39 "badly damaged"; two B-25's "burned," one "damaged beyond repair," two "badly damaged," and two "slightly damaged"; and two C-47's "badly damaged" and two "slightly damaged." Bombs hit runways of Wards, Berry, and Schwimmer drones, and set fire to a fuel dump at Kila. Australian and American personnel working at the dump were burned to death, and their screams were a nerve-shattering experience to those squatting within earshot in rain-filled slit trenches. The damage to planes had been heavy in part because of inadequate revetments for parked planes. A study by the air engineer at ADVON Headquarters indicated that damage would have been reduced by 60 per cent had proper side protection been available. The engineer's report was endorsed at Fifth Air Force Headquarters with a recommendation addressed to the Commanding General AAF that two "combination drag-line and clamshell gasoline driven tractors" and two D-6 bulldozers be furnished each engineer aviation battalion for revetment construction.[36]

On 14 April, the last of this series of heavy attacks occurred when enemy aircraft hit Milne Bay for the 34th time since its establishment as an Allied base. Thirty-six Sallys and 10 to 25 Vals escorted by some 30 fighters damaged one Allied merchant vessel so that it had to be beached and scored direct hits on two other ships. Fighters of

the Dobodura-based 9th squadron took to the air and together with Australian fighters and antiaircraft gunners shot down at least 10 bombers and from three to five fighters. Two Allied fighters were lost. Exclusive of this last raid, the Japanese had carried out approximately 240 sorties against the principal Allied bases in New Guinea and the Solomons within a week, and had lost almost 150 aircraft.[37] These heavy losses, approximately 10 times those suffered by the Allies, must have discouraged the Japanese command. Photo reconnaissance showed that on 16 April there were still 248 aircraft, exclusive of medium bombers probably concealed in dispersal areas at Vunakanau, on the Rabaul airdromes. But for a month following the 14 April attack on Milne Bay there were only light raids on New Guinea bases. On 5 May Allied intelligence recorded a decline in the number of enemy aircraft based in the northeastern area from 611 on 7 April to 466 on 4 May and cautiously hazarded the prophecy that this indicated a diminished threat of aerial attacks in the theater.[38]

For a time it seemed that the Japanese had indeed given up their attacks on New Guinea. Fighter squadrons became almost bored in performing routine patrol duty, ground alert, and transport-and bomber-escort missions. At Dobodura, the ingenious Lieutenant Peterson introduced Bingo parties to the men of the 49th Group and rigged up a loudspeaker system so that enlisted men could have "musical programs dished up with their chow." Farewell parties were held for the first large group of "49ers" to be returned to the United States after a year of combat. Early in May, 100 bags of Christmas cards and packages arrived just in time to

help enliven a program put on by the enlisted men to commemorate Mother's Day. Indeed, storms were more disturbing than Japanese raids to the almost peaceful routine during this period. Tropical winds and rain rotted tents, soaked beds, and blew down trees. Only a partial solution was an order to raise all tents in the area at least three feet off the ground, which was constantly damp and crawling with insects. At Moresby, too, there was a period of relative quiet in which the 35th Fighter Group celebrated "Over the Hump" week in honor of its first year of combat service in New Guinea.[39]

Although "Over the Hump" week with its ball games and special shows provided a relatively peaceful interlude for the 35th Group flyers, for other fighter squadrons "business" began picking up early in May. The first indication of this occurred in the Northwestern Area on 2 May with a heavy air raid on Darwin by twenty-one medium bombers escorted by a large number of fighters. Thirty-two Spitfires intercepted and shot down from three to five enemy fighters and probably one bomber. Little damage was done to Allied installations on the ground, but 13 Spitfires were lost.[40]

Eleven days later, the suggestion of Allied Intelligence, that there was a "diminished threat of aerial warfare in the Northeastern theater," was proved wrong. A new series of attacks began on 13 May with harmless night raids "while a brilliant half-moon shined down over all the camp sites." On the following day, more than 30 bombers and 25 fighters hit Dobodura and destroyed a bitumen dump and a gasoline barge. The 49th Group put 43 P-40's and P-38's into the air and shot down 7 to 9

enemy bombers and 9 to 11 fighters. One P-38 was lost, and the pilot was last seen swimming about 20 miles off shore in shark-infested waters. The Japanese returned during the night of 18 May and again on the following night, but with little effect other than to interrupt a "swell stage show" being put on by men of the 41st Infantry Division.[41]

Meanwhile, other enemy formations attacked Wau four times in a week employing particularly clever tactics. Sallys and Bettys generally protected by Zekes or Hamps swept in over the mountains at such low altitudes that Allied signal units had little chance to give warning; at the same time Japanese pilots sabotaged the efforts of Allied controllers by maintaining a constant chatter on fighter radio frequencies. The heaviest raid occurred on 17 May when 25 or more Bettys destroyed the headquarters, signal office, and operations office of the 17th Australian Brigade. They also smashed a small board shack known as the "American Embassy," which had housed all the radio equipment of the American Air Support party at Australian headquarters. The Japs in this case, however, were too late to do any real damage. Two hours before the raid, the Australians had moved out of Wau, and the Americans had shifted their radio equipment to a dugout. The enemy returned on the following day, and again three days later. In this last raid, "they paid their own way." Twelve P-38's of the Moresby-based 80th Fighter Squadron had taken off to escort a flight of C-47's toward Wau, but the fighter controller immediately after the take-off switched their mission to a scramble over Salamaua. There they intercepted more than 15 Oscars, Zekes, and Hamps. In a brief series of dogfights, seven of the enemy fighters were shot down. No American planes were lost.[42]

These attacks against Wau were no longer merely isolated raids. They were almost daily occurrences, and when considered together with other attacks against the Morobe, Kambare, Douglas Harbor, and Wau-Bulolo areas, it seemed clear that the Japanese were beginning to render a measure of direct support to their ground troops. Furthermore, the enemy had apparently developed the bases in northern New Guinea, particularly at Hewak, to such a point that they were now in regular use. Supplies were still flowing from New Britain and other northern islands into Hollandia, Hansa Bay, and Hewak; roads and airfields were still being built; and Sallys, Bettys, and Lilys were using these fields in their increasingly frequent attacks on Allied bases and on troops in the forward areas.[43]

While Allied fighters were engaged in intercepting the Japanese attacks (in addition to routing escort and patrol activities), Allied bombers during March, April, and May were carrying out a variety of missions. Their principal functions, of course, were to strike at enemy strategic bases, to isolate the battlefield by intercepting convoys, and to cooperate with Allied ground forces in the forward areas. Nevertheless other types of operations frequently took priority over these. The great majority of heavy-bomber missions, for example, were the long, lonely reconnaissance flights carried out by B-17's, B-24's, and the photo F-4's or F-5's. One squadron of B-24's based in Darwin brought back important information as to enemy activities in the Netherlands East Indies. The heavies from Port Moresby frequently "topping off" at Dobodura, patrolled the usual sea lanes in the

Bismarck Sea areas; Moresby-based F-4's of the 8th Photo Squadron continued to photograph New Guinea as far to the northwest as Wewak as well as most of New Britain, including Rabaul; and in May the longer-ranged F-5's began to reach Kavieng. B-25's performed more than their share of patrol and escort missions. Indeed with a few notable exceptions, the 13th, 71st, and 405th Bombardment Squadrons (M) were engaged entirely in short reconnaissance missions, submarine patrol, and convoy escort. This meant that the majority of the combat missions were carried out by the 90th Squadron equipped with B-25C1's by the 89th with its A-20's, and by B-17's and B-24's not assigned to reconnaissance. In addition, General Kenney could depend upon the reliable RAAF A-20, Beaufighter, and Beaufort Squadrons.[44]

It is remarkable in the light of the relative weakness of its air units that the Fifth Air Force was able to do any more than hold its own during this period. It succeeded, however, in keeping the enemy off balance by concentrating its offensive power on a few vital enemy installations. The great majority of heavy-bombardment attacks were carried out against Rabaul, Kavieng, and Wewak. The upper Solomons were left to RAAF Catalinas making almost nightly visitations and to the flyers from the South Pacific. However, B-24's and B-17's, exclusive of numerous attacks by single planes on armed reconnaissance missions, were over Rabaul at least 5 nights in March, 2 in April, and 10 in May. These missions, chiefly against the airdromes, consisted of approximately 96 B-17 and 35 B-24 sorties usually carried out in formations of from four to seven aircraft. The heaviest attack on this

vital Jap base occurred during the night of 22-23 March when all squadrons of the 43d Group sent out 27 B-17's against Vunakanau, Lakunai, and Rapopo. Incendiaries and frags were scattered "all over the land." Wire-wrapped demolition bombs, 500-lb. bombs with 12-hour delayed-action fuzes, and others with advanced fuzes set to explode 300 feet above the ground were aimed at runways, shops, and dispersal areas. One pilot even carried out a little experiment by dropping 2,000-lb. bombs into Rabatana crater. Unfortunately, they failed to explode. Anti-aircraft fire was heavy, but no B-17's were lost, and although most bombs fell in the target area, poor visibility prevented an exact assessment of damage.[45]

Few if any of the attacks against Rabaul were carried out against shipping, perhaps because the Japanese were now making greater use of the more distant harbor at Kavieng. Certainly the most devastating anti-convoy blow of April and May was directed against one which had been tracked to Kavieng. In a period of four days beginning on 1 April, 21 B-17's and nine B-24's harassed the ships at anchor in Kavieng harbor. The B-24's dropped 500-lb. bombs from 5,000 feet and observed large explosions. Some of the B-17's also attacked from medium altitude, but Fortresses skip bombing from 75 to 250 feet caused the greatest damage. The official reports declared that a 6,000-ton vessel was "left settling," a light cruiser "sank bow first," a heavy cruiser "blew up and sank," while two to four destroyers were severely damaged.[46]

Allied air units had little real success in intercepting Japanese convoys actually on the move. They did maintain their blockade of the

Huon Gulf area, but the shipping continually moving into Wewak harbor and into Hansa Bay was out of range of any but heavy units. Only four convoys, two heading for Finschaven, one in the Madang area, and the other off Arawe in New Britain, were located within range of light and medium units from March through May. Beaufighters and B-25's as well as heavy bombers were sent out but were unsuccessful because of particularly unfavorable weather conditions.[47]

The heavies did have some success, however, in attacks on enemy vessels which had already arrived at their destination. For example, 38 B-17 and 26 B-24 sorties were carried out against shipping and harbor installations at Wewak from March through May, not including attacks by single bombers. The official reports list the following results after bombing attacks: on 13 March a 7,000- to 8,000-ton vessel exploded and burst into flames and a tanker was believed sunk; a week later a merchant vessel was badly damaged; on 10 April a 1,000-ton vessel was "destroyed"; five days later an 8,000-ton cargo ship was "sunk," a gun boat was "beached," and an 8,000-ton vessel was "left listing" and another "possibly sunk"; on 20 April a 6,000-tonner was "left blazing fiercely," and on 4 May 4 B-24's left a medium-sized merchant vessel "listing."[48] One of the heaviest attacks of the three-month period was carried out on a convoy unloading in Hansa Bay from 12 to 14 April. Bombs dropped by six B-24's scored four hits, according to the 320th Squadron's report; and resulted in a 10,000-ton vessel "burning from stem to stern," and an 8,000-tonner catching "on fire amidships," according to the official reports, six B-17's had

little success in a follow-up attack, but one of six B-17's scored three skip-bombing hits during the following night which left one vessel "sinking." [49]

Airfields and supply dumps at Lae, Madang, and Gasmata were also important objectives. Lae's airfields, Dagua, Boram, and But, were hit by heavy bombers usually as alternatives when shipping could not be found. Medium bombers, however, could reach Madang, and Beaufighters and B-25's, occasionally escorted by P-38's, carried out several vicious strafing assaults on that area. In one case, on 2 May, B-25C1's sank two small merchant vessels. Meanwhile, Allied Intelligence was devoting considerable attention to enemy activity in Southern New Britain, particularly Gasmata and Cape Gloucester. These points, only rarely attacked in previous months but now within less than 250 miles of the Dobodura-based First Air Task Force, were probably attacked more than any other objective during May. Allied bombers were over Gasmata on at least 15 different days during that month and over Cape Gloucester on three days. B-25's carried out at least 62 sorties, Beaufighters 18, A-20's 17, Beauforts 15, B-17's 7, and B-24's 15. [50]

The attacks of heavy and medium bombers, sporadic as they were in this three-month period, did have a harassing effect on enemy activities. In a small way they were serving a conventional tactical purpose of isolating the battlefield. During this same period, cooperation with the ground forces was performed principally by A-20's, B-25's, and Beaufighters of the First Air Task Force, by Moresby-based RAAF A-20's,

and by Beauforts from Milne Bay. The objectives of these missions were concentrated primarily within a semicircle having a radius of approximately 25 miles and a center at Salamaua. After the Bismark Sea action in March, Allied aircraft hit points in this area in flights of more than three planes on 16 days in March, on 16 days in April, and on 13 days in May. These attacks included at least 125 sorties by the 89th Squadron's A-20's, 85 by RAAF A-20's, 40 by Beaufighters, 65 by B-25's, 12 by Beauforts, and 6 by B-17's. Favorite targets were the airfields at Lae and near-by Malahang, town and shore positions at both Lae and Salamaua, and the tracks connecting these towns with forward areas in the vicinity of Mubo. [51]

The Japanese, holding strong positions on the ridges which controlled the area, faced the Australians at points along the Bitoi River in the Guadagasal-Mubo area. But other Australians had filtered through these enemy positions and were heading toward Salamaua. On 29 April, a change in ground force organization took place with the 3d Australian Division assuming control in place of the commander of the Kanga Force. The latter organization reverted "to its permanent status of 17th Australian Infantry Brigade." At the same time the Allies increased their activities in the Salamaua area. Infiltrating patrols reached Komiatum 10 miles to the south of the town, and on 5 May actually entered the village of Bobdubi no more than five miles from Salamaua. Communication was still the greatest handicapping factor. Food and many supplies had to be dropped by aircraft. Other types of supplies, such as artillery shells, were brought in by native carriers. This was

heartbreaking labor since it took three days for a native to bring two rounds from Wau. At this time, the Australians had only two 3.8-inch mountain guns, and these were of limited use in jungle country where even mortars frequently could not be used against targets 30 yards distant.[52]

Much of the work normally left to artillery, therefore, had to be carried out by aircraft. For this reason the closest liaison was maintained between the air forces and the Australians. Headquarters for the air support party was near that of the 17th Australian Brigade, and the air support officer ate at the brigade commander's mess where plans for future operations were discussed. With the establishment of the 3d Division Headquarters at Bulolo in April, requests for air attacks had to be approved there. Otherwise the procedure was the same as before. Requests went to ADVON at Port Moresby which either sent an attack mission out itself or relayed the request to the First Air Task Force. Targets were located sometimes by smoke shells lobbed into the desired target area and at other times by a grid system using identical oblique aerial photographs in the possession of both ground troops and air units.[53]

By the end of May, then, the Japanese were feeling growing pressure from both Allied air and land forces. American troops of the 162d Regiment were securely ensconced on the coast at Morobe. Australian patrols were gradually eliminating Japanese pockets of resistance between Wau and Salamaua. The Allied Air Forces were awaiting the arrival of additional aircraft before mounting a real offensive. In the meantime, however, Allied fighters were beating back enemy air attacks;

reconnaissance planes were maintaining a constant alert against enemy attempts to strengthen the Lae garrison; and bomber units were keeping up at least token assaults on important enemy supply points.

The results of these Allied air attacks are somewhat difficult to evaluate. The official reports very frequently state that results were not observed. This was particularly true of attacks at night against distant bases and of bombing and strafing missions in cooperation with ground forces. There are indeed some indications that strafing missions were less advantageous to the Allied cause. In several instances, for example, missions carried out by B-25's were directed against villages "to drive away natives aiding Japs." The results of these attacks were the destruction of numerous villages. If the natives actually were aiding the Japanese, such missions were no doubt justified. However, the reports of a patrol sent out in April by the 162d Regiment indicated that in the Salamaua area the native hatred for the Japanese "bastards" was being tempered by their greater hatred for Allied aircraft which fired their villages. The same patrol in another case reported: "Our own air force bombed an island just northeast of Pai-Awa 13 April. Needless to say the island hasn't got a damn thing on it."[54] On the other hand, there is evidence that many of the air attacks were definitely helpful. Those carried out against shipping, particularly by skip bombing, at Kavieng, Lewak, and Hansa Bay were successful, and the Air Support party at Wau asserted that "A-20's and Beauforts became practically airborne artillery and did the job with very nearly the same amount of accuracy."[55]

By the end of May the air forces were in a position to contribute more to offensive operations. Their potentialities had been increased by the development of Dobodura as a base ranking with Port Moresby and Milne Bay. The organization of the First Air Task Force gave promise of a flexibility of air action in northern New Guinea hitherto impossible. Moreover, aircraft were beginning to reach Australia in larger numbers. In April the following aircraft arrived prior to the 24th of the month: 25 B-24's, 13 B-25's, 6 P-70's, and 6 C-47's. During the same period, 2 P-38's, 2 P-40's, and 1 P-400 were lost in combat; 1 A-20, 1 B-25, 1 B-17, and 7 B-24's were missing; 3 B-25's were destroyed on the ground; and 21 fighters, 11 bombers, and 2 transports were lost in accidents. In May the status report showed that 94 B-25's, 31 B-24's, 15 P-39's, and 17 C-47's arrived to offset the following losses: 1 B-25, 5 B-17's, and 2 B-24's missing in action; and 25 fighters, 9 bombers, and 2 transports lost from accidents. Thus, although defensive fighter strength had received little or no increase since the first of the year, it was clear that the offensive power of task force and bomber command would be far greater in June than in previous months.[56]

Chapter VI

PROBLEMS OF MEN AND MATERIEL, MAY-SEPTEMBER

In the three months following the Bismarck Sea action the strength of the Fifth Air Force had declined to such an extent that its scale of effort was probably less than it had been during the fall of 1942. In such circumstances, General MacArthur and General Kenney were unable to plan future operations with confidence. True the Combined Chiefs of Staff continued to emphasize that the defeat of the Axis in Europe took priority over the campaigns against Japan. At the same time, however, they commissioned forces of the United States, in conjunction with those of other Pacific powers, to maintain unremitting pressure against the Japanese. The over-all strategic concept with regard to the Pacific was clearly expressed in a memorandum of 14 May by the Joint Chiefs of Staff as follows: "Upon defeat of the Axis in Europe, in cooperation with other Pacific powers, and, if possible with Russia, to direct the full resources of the United States and Great Britain to force the unconditional surrender of Japan. If, however, conditions develop which indicate that the war as a whole can be brought more quickly to a successful conclusion by the earlier mounting of a major offensive against Japan, the strategical concept set forth herein may be reversed." [1]

In spite of the secondary place held by the Pacific phase of the war in over-all planning, tremendous efforts on the part of the United Nations were essential to carry out that part of the strategic concept.

These efforts were to include retaining China as a base for operations against Japan, attacking Japanese lines of communication, increasing the pressure upon enemy military forces in order to prevent their consolidation, and securing positions for full-scale operations to be undertaken later. Specifically a number of operations were projected for 1943 and 1944. In the Far Eastern theater there were to be air operations in and from China and a ground campaign in Burma. In the Pacific there were to be operations in the Solomons and Bismarck Archipelago in order to maintain the initiative and to continue the defense of Australia; operations in New Guinea not only to serve the same purposes as the Solomons and Bismarck campaigns but to facilitate opening a line of communications to the Celebes Sea; a push into the Netherlands Indies limited to seizure of islands necessary for the capture of New Guinea; and operations in the Marshalls in order to shorten communications to the Southwest Pacific and to the Celebes Sea. These were envisaged as limited offensives, carried out primarily by naval forces. Accordingly the United States naval forces in the Pacific were to be increased to a maximum consistent with minimum requirements in the Atlantic and with due regard to the main effort in Europe. Air and ground forces provided were to facilitate joint action and to make possible optimum use of the United States naval forces.[2]

Specifically the operations contemplated in May by the Combined Chiefs for the South and Southwest Pacific forces remained much the same as those outlined in the Elkton Plan as modified by a JCS directive of 28 March 1943. These were to establish airfields on Kiriwina and

Woodlark islands, to seize the Lae-Salamaua-Finschaven-Madang area, to occupy western New Britain, and to continue operations in the Solomons, with Bougainville as a prime objective. By the middle of May, General MacArthur had set 15 June as the target date for commencing operations whose ultimate objective was the capture of Rabaul. The initial landings, however, were to be on Kiriwina and Woodlark islands. The Joint Planners assumed that MacArthur, charged with overall strategic direction of the campaign, would have established positions in western New Britain and southern Bougainville by 1 December 1943, and that it would take at least another two months before he would be able to launch his attack against the Rabaul area itself and be 1 April 1944 at the earliest before the operation could be completed.[3]

The Joint Planners believed that sufficient forces would be available in the Pacific by the time scheduled for the initiation of the various phases of the campaign. They estimated that 14 "offensive divisions" and 2,106 combat aircraft would be in the South and Southwest Pacific by 1 July 1943. These, together with the naval forces in the area, they considered adequate for the initial moves. MacArthur estimated, however, that he would need seven infantry divisions, of which five were to be amphibious for the reduction of Kavieng and Rabaul alone. The Joint Planners held, on the other hand, that "with effective air neutralization," this number could be reduced to a total of five infantry divisions, and that these could be provided by 1 January 1944. According to their calculations too, the 2,577 combat aircraft allocated to the RAAF, the RNZAF, and the Army and Navy in the South and

the Southwest Pacific areas would be sufficient at this time for the campaigns on the Bismarck Archipelago.[4]

In addition to the campaigns to be carried out under the direction of General MacArthur, decisions made at the Trident Conference in Washington during May authorized operations in the Gilbert and Marshall islands. By 15 June, the Joint Chiefs of Staff had concluded that naval strength in the Pacific made such operations feasible. Their tentative plans involved the employment of the second Marine Division and the major part of the South Pacific naval forces together with the first Marine Division from the Southwest Pacific. These units were to launch their attack in November from bases either at Pearl Harbor or in the South Pacific.[5]

Five days after learning of these tentative plans, General MacArthur radioed General Marshall, strongly expressing his disapproval. He pointed out that the objective of both South and Southwest Pacific operations was the capture of Rabaul, and that preliminary operations were designed "to provide a base of departure for converging attack and adequate air support and flank protection" for obtaining this objective. He had scheduled the first Marine Division, his only amphibious organization, to make the attack on New Britain, and he believed that if this unit were transferred, the action would be precluded. He admitted that a campaign in the Marshalls might be a sufficient diversion to assist the operation planned for his own forces, but he argued that the troops for the diversionary effort should be brought from the United States rather than subtracted from the force available for the main attack.[6]

Actually, General MacArthur did not favor the movement into the mandated islands. He argued that "from a broad strategic viewpoint" the best plan for an offensive in the Pacific was one based on Australia and aimed at Mindanao by way of New Guinea. He favored this course because of his belief both that it would more quickly cut the enemy lines of communication with the conquered territory to the south and that it would be the only course which could assure the support of land-based air power. He saw the movement through the Mandates, on the other hand, as a series of amphibious attacks supported by American carrier-based planes against objectives defended by Japanese land-based aircraft. Such assaults, he asserted, would be hazardous and would result in the capture of no "strategic objective" until Mindanao was reached.[7]

In this exchange of views, neither MacArthur nor OPD had mentioned the function of Southwest Pacific air units in connection with the proposed Marshall Island offensive. On 22 June, however, Assistant Chief of Air Staff, Plans informed MacArthur's headquarters that the plan involved the use of a heavy and a medium bomber group in addition to the naval air forces reported available. MacArthur was reminded of the effect that Central Pacific operations would have in diverting enemy air strength, and was requested to express his views as to the effect on air operations in the South and Southwest Pacific if the two groups were withdrawn from either of these theaters.[8]

MacArthur's reply was clear and explicit, and concurred in by General Harmon of the South Pacific. The campaign against Rabaul

should be the main effort; troops and equipment for operations under consideration in Washington should be drawn from rear areas; the nature of operations in the South and Southwest Pacific demanded more than "air superiority" requiring in fact "air supremacy"; and while a heavy and a medium bombardment group might not represent appreciable air strength in other theaters, in the Southwest Pacific it represented one-third of the heavy bombardment and one-half of existing or one-third the projected strength in mediums. The withdrawal of the two groups would cause a collapse of the projected offensives.[9]

It was indeed true that offensive moves along the coast of New Guinea had been delayed by the lack of sufficient air strength to perform all the tasks allotted to the Fifth Air Force. By May an early improvement in the situation was expected, since two of the additional units allotted to the Southwest Pacific by the Joint Chiefs of Staff, the 345th Bombardment Group (M) and the 380th Bombardment Group (H), were already on the way, and other units were scheduled for early shipment. Operations, Commitments, and Requirements had recommended to OPD in April that two night fighter squadrons be shipped in August and October and one and one-half troop carrier groups in June plus another in the third quarter, and that three fighter groups be added in May, July, and October, the second of these to be activated in the theater. The JCS had also promised General Kenney two light bombardment groups, but CG&R informed OPD that none would be available in 1943.[10]

Shortly after this memo was circulated in the War Department, Kenney listed for OPD the units upon which he based his future plans.

These corresponded in general with the recommendations of OC&R. The principal differences concerned the fighter reinforcements. OC&R listed a P-47 group (the 348th) for May shipment, a P-40N group (the 475th) to be activated in the theater in July, and a P-38 group to be committed in October. Kenney was planning on a group of P-47's to be shipped in May, another in June, and a P-38 group to leave the United States in August. He emphasized the need for P-38's as their range and two engines, so comforting on long, overwater flights, made that type particularly suitable to the Southwest Pacific. He asserted on the other hand that the P-47, probably a good fighter "in spite of some of the adverse comments from England," did not have a speedy enough rate of climb to intercept a Zero, with less than a half-hour's warning.[11]

Confusion continued for a time as to the type of aircraft to be provided with the first two reinforcing fighter groups. Kenney was authorized early in May to activate a fighter group to be equipped by the third quarter with P-40N aircraft. This disturbed Kenney as he had expected a P-47 group. He pointed out, in a message of 6 May, that the Japanese had some 250 fighters and 150 bombers within range of Port Moresby, and that, with less than 200 fighters in the combat squadrons, his fighter situation was critical. He emphasized, furthermore, that the success of planned operations depended on the arrival of new and efficient air units. General Marshall replied on the same day that a P-47 group had been released following an engine adjustment, and on the following day OC&R radioed additional details. There were still certain operational difficulties, such as piston and ignition failures, potential

fire hazards, and radio noises, but P-47 fighters for the 348th Group were to be made completely operational and ready for shipment by 12 June. Flight and ground echelons were to depart as originally scheduled early in May. In addition, Kenney was authorized to activate the 475th Fighter Group (TE) in the theater, and was assured that P-38's would be available for this group in June.[12]

These assurances did not mean that the two fighter groups could be used in combat by the dates indicated. Kenney wrote to General Arnold late in June that "the P-38's are expected to start arriving any minute now and I think I will meet the boat with a band to welcome them." By 3 July 79 P-38's and 59 P-47's, and a month later 36 additional P-38's and 56 more P-47's, had arrived. The personnel of the 348th Group reached Australia on 14 June, and waited in Brisbane a month for their aircraft. A month later, the first P-47's landed on a Port Moresby field, and within 10 days three squadrons with 86 aircraft led by Lt. Col. Neel E. Kearby, group commander, had made the 1,200-mile flight from Brisbane. Only two were damaged en route. For a time the 348th Group was to remain at Port Moresby, where aircraft warning units were giving "almost an hour's warning" of enemy attacks. As Kenney said: "No matter what objections there are to the P-47, it has eight guns and is faster than the Zero at any altitude so I will use it and gladly take all I can get."[13]

The 475th Group, the first all-P-38 group to see action in the Southwest Pacific, was not ready for combat until the middle of August. It had been activated by the Fifth Air Force on 14 May, but problems of

personnel and equipment caused delay. On 17 June, the first of a contingent from New Guinea, "shivering in the winter chill of Australia," reported to Amberly Field as cadre personnel for the new organization. Within three weeks "fillers" had arrived from the United States, as well as additional veterans from the forward areas. "Inevitable red tape" clogged the supply channels, but by the end of July, it was announced that the group, commanded by Lt. Col. George W. Prentice, former 39th Squadron commander, would move to Dobodura. Adequate supplies were supposedly at the camp site, but an advanced detail radioed back that little in the way of screening, burlap, cement, lumber, and piping was there. Meanwhile, P-38's were arriving from the Eagle Farm assembly line at Brisbane, and ground crews were readying them for combat, a routine which was upset by the transfer of 33 of the planes to V Fighter Command. Movement orders were confusing during the next few weeks. The ground echelon reached Dobodura by water on 14 August. But the flying echelons of the 431st and 433d Squadrons were held at Port Moresby, and after a number of P-38's of the 433d Squadron had flown a combat mission from Dobodura on 15 August, that unit too was transferred back to Moresby. Three days later, however, it again joined the First Air Task Force at Dobodura.[14]

Kenney expected in May that he would receive another P-38 group in the fall. As early as 29 June, however, he was informed that the 58th Fighter Group with P-47's was to be substituted for the P-38-equipped 55th Group scheduled to arrive in October. Nevertheless, a week later Kenney urgently requested the latter type saying that

"the P-38 is the only fighter capable of offensive action or useful for convoy of troop carrier or day bombardment operations in this theater." At this time, however, his request was refused on the ground that P-38's were being diverted for modification to the F-5 photo plane, a type in great demand in "overseas theaters." Kenney repeated his plea on 31 August asking for twin-engine fighters not only to equip the next group allocated to his air force but to re-equip two squadrons of the 49th group. Again his request was refused, this time because of difficulties and delays in production which would not permit any change in the "presently planned flow to your theater."[15]

In spite of Kenney's inability to obtain the most desirable type of plane, his offensive fighter strength was to be more than doubled by the fall of 1943. By that time, too, bombardment strength was to be substantially increased. The 350th Group, based in the Northern Territory was to take over heavy-bomber operations against enemy bases in the Netherlands East Indies by the middle of July. The 345th, a medium group, would also be flying combat missions from Port Moresby by that time, and General Arnold had informed Kenney in May that sufficient B-25's to bring the 38th Group up to strength were en route. Two squadrons of the latter group, the newly activated 821st and 822d, were at that time lacking both personnel and equipment, and not until the fall were aircraft assigned. In the meantime their personnel were engaged during the summer either in training or in flying missions while attached to other squadrons.[16]

There was no question as to the need for B-25's in the Southwest Pacific. There was, however, some discussion as to the type of that

versatile bomber most needed. Kenney had decided that approximately 70 per cent were to be strafers, modified in his own air depots, and in June he was debating the value of the new B-25G equipped with a 75-mm. gun in the nose. Since it had not been tested in the Southwest Pacific, he tentatively decided to try several of them in the new 823d squadron of the 38th Group. OC&R had planned to send 63 of the planes to Kenney, more than enough for one squadron; so they suggested that he accept that number, and modify the planes if unsatisfactory for New Guinea operations.[16a]

During this same period, another decision as to the type of B-25 for future delivery had to be made. In July, the B-25H and B-25J were projected for early dispatch to the theaters, and it was planned to exchange these new models for the C's and D's already in combat. Kenney agreed only in part with this suggestion. He had no desire to substitute new models for those already proved satisfactory, but he was willing to accept them as normal replacements, the B-25H for his strafers and the J for his medium altitude bombers. The armament of the B-25H, according to an early announcement, was to include the 75-mm. gun and four .50-cal. machine guns in the nose, four fixed .50's in blisters, together with an upper turret, two flexible waist guns, and twin flexible tail guns. By September, however, the design was changed. Two blister guns on the left side of the fuselage were eliminated to make room for a cabin heater, and Kenney was informed that provisions for a co-pilot had been removed.[17]

General Kenney disapproved of both of these changes. He informed General Arnold that his strafing planes, which rarely reached 1,000 feet

did not require a cabin heater and did require the other two machine guns. He was even more emphatic about the lack of provision for a co-pilot, pointing out that in an attack while the pilot flew the planes and fired the guns, the co-pilot was necessary to open and close the bombbay doors, release the bombs, and operate the cameras. Moreover the safety factor too, he argued, demanded the extra pilot. Flying at treetop height, the pilot could easily be killed by a stray bullet. If a co-pilot were at his controls, he could immediately take over. Otherwise the plane would be lost, and the crew killed.[18]

The problem of allocations was if anything more difficult with respect to light-bomber reinforcements. This question had been under discussion since General Kenney's visit to the United States, shortly after the Bismarck Sea action in March. He continued to favor more A-20's, but a number of factors prevented his receiving any. Production had not reached the numbers anticipated, and the demands of other theaters, particularly "the necessity of having all A-20 aircraft destined for Russia under Lend-Lease out of the country by June 30th," delayed deliveries.[19] With certain definite reservations General MacArthur approved War Department suggestions that would maintain the 3d Group with modified B-25's until A-20's became available, that would dispatch 1 fighter-bomber group equipped with P-40N's in September, and that would fill his fourth quarter allocation with an A-20 group in January 1944. He urged, however, that the P-40 group arrive in July, that he receive an allotment of 80 additional B-25's, and that the A-20 group scheduled for January delivery be replaced by

a B-25 group in October. Within a week, MacArthur, probably inspired by Kenney, repeated these requests, saying that present plans for the New Guinea campaign called for the availability of one light bomber group by July, another in the third quarter, and a third in the fourth quarter. The War Department modified each of these suggestions. In July Kenney was assured that the 312th Bombardment Group (D), equipped with P-40's, would depart for the Southwest Pacific in September, and that an A-20 group, the 409th, would depart in December.[20]

These allocations of new units together with the prospect of the 22d Bombardment Group's return to duty meant that the offensive strength of the bomber units as well as the fighter units was to be doubled before the end of the year. Plans for additional troop carrier units were even more promising. JCS allocations amounted to an additional two and one-half groups. The first of these units to arrive was the 375th. The air echelons of the four squadrons landed on Port Moresby dromes during the first week in July, apparently much to the surprise of local personnel since little or nothing had been done to prepare for their arrival. But the new flyers were soon attached to veteran troop carrier units for orientation, and within a month the group had moved to Dobodura to operate with the First Air Task Force. At about the same time, the 65th and 67th Troop Carrier Squadrons reached New Guinea, but the headquarters together with the other two squadrons of the 403d Group went to the South Pacific. Thus only one more group was scheduled for the Fifth Air Force during 1943, and Kenney was informed late in July that the 433d with 52 C-47's would depart within

a month. By September, the 54th Troop Carrier Wing was responsible for both operations and administration of 10 squadrons stationed at Port Moresby, while the 375th Group, although assigned to the wing for administrative control, was operating with the First Air Task Force.[21]

The arrival of the new units, fighter, bomber, and troop carrier, was a decisive factor in the scheduling of operations for the summer and fall of 1943. As Kenney wrote on 29 June: "If any more delays occur in the arrivals of aircraft or personnel out here, we may as well start our planning all over again, as timing will be all wrong and Jap reactions and movements in the meantime will completely change the picture." On paper the virtual doubling of the combat units in the Fifth Air Force seemed to promise as much as could be expected. But even the actual arrival of units allocated by the Joint Chiefs of Staff did not settle a continuously bothersome problem of attrition and replacement in both personnel and crews.[22]

In trying to satisfy the frequent requests of General Kenney for allowance of higher rates of attrition and a larger number of reserve aircraft, the War Department had the thankless job of trying to balance the needs of many different theaters. At this time many air units in all combat areas were still operating at reduced T/O strength in both aircraft and crews. The general policy as expressed on 6 June was to bring these units to full T/O strength only after airplanes and combat crews were available "in suitable numbers to man and sustain all units of the current Army Air Forces program at reduced T/O strength." For

active theaters, it was planned to provide replacement personnel up to 15 per cent a month of reduced T/O strength. This policy depended to some extent, however, upon priorities, and by August 1943, the United Kingdom held top priority, particularly in heavy bombardment personnel and aircraft, and the Fifth and the Twelfth Air Forces followed in that order. So far as the specific schedule for the Fifth Air Force was concerned, CGAF informed General Kenney on 7 June of the following objectives for combat aircraft: two heavy bomb groups to have unit strength of 48, a third to have a unit strength of 35, and all to have a 50 per cent reserve; medium, light, and fighter bombardment groups to have a unit strength of 37 and a 50 per cent reserve; fighter groups to have a unit strength of 75 with a 50 per cent reserve; night fighter squadrons, a unit strength of 12 with a 50 per cent reserve; and troop carrier groups, 52 plus a 15 per cent reserve.[23]

The attempt to build up the heavy bomber groups to their allotted strength proved to be a particularly exasperating one. On 7 May General Arnold signed a message to Kenney which announced that War Department policy permitted a total of 197 heavy bombers in the Southwest Pacific, noted that at the time there was a shortage of 55, and promised that "this deficit will be made up not later than July 1." During May and June, 41 B-24's arrived, and 5 were lost. On 9 July another radio message signed by General Arnold stated that the 65 B-24's being prepared for ferrying would bring the heavy bomber strength of the Fifth Air Force to 197 by approximately 15 August.[24]

Delay in dispatching reinforcements introduced complications. Kenney pointed out that by 15 August a new situation would exist. In the

first place it would be necessary to anticipate two months' attrition prior to the arrival of the new planes; this would amount to 26 B-24's. Secondly, he argued that in order to replace losses as they occurred, 13 additional aircraft for September attrition should be provided. And finally by September the B-17's remaining in the theater suitable for combat would be fewer than 13, less than enough for one squadron, and therefore should be replaced by B-24's. On 14 July a new message with General Arnold's signature gave assurance that sufficient aircraft would be "in pipeline" to maintain an actual strength of 197 heavy bombers on hand with every consideration given to anticipated losses. But by 1 August, when this goal was to have been reached, the date had been pushed forward to 15 September.[35]

General Kenney had an equally difficult problem in bringing his medium and light bombardment units up to strength. On 23 July, for example, he claimed a shortage of 115 medium bombers. On 9 August, CC&R informed him that his authorized strength was 273 B-25C's and D's and 42 B-25G's, that the shipment of A-20's had been delayed by engine trouble, and that no more than two squadrons of the 3d Group could be equipped with B-25's and these without a 50 per cent reserve. Five days later Kenney replied that his total requirement, calculated on the basis of four groups of 57 planes a group and a 50 per cent reserve, was 342 and that he had only 218 on hand. CC&R, in turn, pointed out that previous figures had not included the number of A-20's either in the theater or allocated, and that specifically the medium- and light-bomber figures included 233 B-25's on hand, 66 en route, 3 preparing for early departure,

and 22 on order for September, together with 19 A-20's on hand, 3 en route, 51 preparing for departure, and 32 more on order for September. This totaled 440 aircraft, and according to OCSA should "more than meet your requirement of 342." [26]

The assumption brought a quick rejoinder from General Kenney. He pointed out that, based on commitments made by Headquarters AAF, the Fifth Air Force had obligated itself to tactical action already in progress and which had to continue. He asserted that an approximate average of 30 days occurred between the departure of a plane from San Francisco and "its effective use in the combat zone," and gave as an example several A-20C's which had left San Francisco in May, and which on 27 August were "still in depots awaiting bomb shackles to render them operational." At this time, the Fifth Air Force actually had on hand 281 medium and light bombers, but when those under repair or in depots for modification were deducted there remained only 69 B-25's, 6 A-20's, and 9 B-26's. Some agreement was finally reached by 2 September when Kenney was assured that the strength of 342 aircraft would be maintained, and that the authorized TBA plus a 50 per cent reserve would be delivered together with attrition up to 20 per cent if necessary. [27]

A detail of this radio exchange well illustrates the misunderstandings which could develop when interested headquarters were 10,000 miles apart. In his message of 27 August, General Kenney stated that he was not considering the A-20A's and A-20C's in calculating his authorized strength. Two days later, one sentence in a long reply signed by General Arnold read: "No reason is apparent why the A-20C's should not

be considered against commitments." Kenney's rejoinder to this, also long and detailed, concluded with the sentence: "For your information, it will be necessary to deliver all A-20A's and C's to the RAAF upon arrival of A-20G's. . . ." This brought the following comment from the Commanding General, AAF: "For your information A-20G aircraft have been charged against meeting strength of the 3rd Light Bombardment Group and A-20G's are not available to replace those to be transferred."[28]

In all types of bombardment, therefore, Kenney had been unsuccessful in obtaining authorized strength. In this respect, the V Fighter Command was somewhat better equipped than the Bomber Command, at least so far as numbers were concerned. For five groups, Brig. Gen. Paul B. Wurtsmith, the fighter Commander, had in the theater 565 aircraft at the end of July and 593 at the end of August. On paper, therefore, this amounted to the allotted unit strength plus a 50 per cent reserve. These fighters, however, included approximately 70 P-39's, 30 P-400's, and 118 P-40's, more than half of which were in the depots for overhaul, and of which few could be depended upon for combat. On 4 July John N. Gibson, a technical representative of Bell Aircraft, reported to General Kenney that the P-39's and P-400's averaged approximately 300 hours of combat flying, that they all needed a complete overhaul and replacement of accessories, that "prevailing conditions and the lack of new accessory replacements made the necessary overhaul impractical," and that new aircraft should therefore replace them. A few days later Paul V. McNamara of Curtiss Wright rendered a similar report asserting that the P-40's had "anywhere from three to five hundred operational hours on them, which is equivalent to

about two thousand normal operating hours." He added that all should be given a general depot overhaul and "retired to the mainland where they can be used for training purposes or be held ready for emergency defense squadrons."[29]

Kenney felt very strongly that the replacement policy of the War Department was letting his air force down. As he wrote to General Arnold, "With the possible exception of Chennault, I do not believe anyone else is flying stuff as old and worn out as these youngsters out here are . . . Every time I visit an outfit I have to listen to the same old question: 'How much longer do we have to push these old crocks around?'" Kenney added that he supposed he need not worry since "the newspapers back home" believe that "Hitler. . . will throw in the sponge this year," and that "the Nips are . . . out of boats and airplanes and will be a pushover." His personal reactions he expressed somewhat differently:[30]

> I have never read of any nation which was not hungry and [which] still [had] three hundred divisions quitting cold but maybe the Germans are going to be different, maybe they will throw down their arms and allow the mobs of Czechs, Poles, Slavs, Belgians, Jews and so on massacre the whole nation. If I were a German I would figure myself better off at war until my opponents got tired enough to offer me acceptable terms. As for the Nip, I have quit arguing but insist that this fighting out here will keep us busy until 1948. In the meantime I would sure like enough people and planes to get the job done that soon.

To General Kenney, who had an equal interest in his "youngsters" and in the materiel necessary for combat, the problem of replacement personnel was of as great importance as that of replacement aircraft. In planning for his future needs, he estimated in June on the basis of past experience that by the fall he would require 650 combat crew

members per month. This estimate was based first on the belief that "everyone who puts in three hundred combat hours should be sent home," and secondly on losses. He assumed that in his three heavy groups seven crews a month would be killed or missing, 12 would reach 300 combat hours, and three would be counted out because of wounds, sickness, or war weariness before reaching the 300-hour mark. This amounted to 22 crews. In like manner he calculated 20 crews for four medium groups, and 35 pilots for three fighter or 58 for five fighter groups.[31]

Since these figures agreed almost exactly with replacements calculated on the basis of 15 per cent of the assigned strength, they were concurred in by the War Department.[32] It soon developed, however, that there were several questions concerning personnel which were not answered in this agreement. On 14 June, a message had been sent to all air forces stating that OTU personnel planned for new units after July would be diverted to replacement crews only in order to bring crew strength to two and a half crews for each heavy and medium bomber and two crews for each light bomber, fighter, and transport plane. AAF commanders were, therefore, requested to report immediately the crew requirements necessary to reach this level. The problem was, however, not quite so simple as this. There were limits to the number of trained personnel available, and there were special commitments to certain air forces. These two facts proved irreconcilable with the proposal to furnish two and a half crews each for all heavy and medium bombers and two crews each for all other combat aircraft. If this plan were carried out, according to General Arnold, no additional combat

units could be turned out between 15 August 1943 and January 1944. Accordingly, a change in policy seemed called for, "one of the most serious decisions that we have had to make," and General Arnold requested carefully considered recommendations for the replacements "that you must have on hand for each type of combat airplane." [33]

Kenney's estimates submitted on 9 July were not acceptable to the planners in the War Department. His general requirements were two crews per airplane in all tactical units, including troop carrier, with a minimum of 15 per cent a month replacement. After considering the requests of the various theaters together with established commitments and priorities, Kenney was informed that for the next year he would receive a replacement flow of no more than 7½ per cent a month for troop carrier units and 15 per cent a month for other units. Furthermore, he was told that any increase of combat crews to more than one crew per aircraft would have to be accomplished by using these authorized replacements as no others could be furnished. [34]

General Kenney did not accept this decision as final. He did not believe that he could carry out his part in the offensive already getting into high gear without a more generous replacement policy, and he based further arguments on the theory that the War Department did not comprehend his particular problem. So far as quality of replacements was concerned, he was satisfied. In fact he reported to General Arnold that "the 345th Medium Group" and the 475th Fighter Group were the best he had seen. But he declared that if the replacement program as set up by the Air Staff were carried out, "I am sunk." He insisted that the

15 per cent replacement flow with only one crew per combat aircraft was not sufficient for heavy bombers, and that it would be as inadequate for medium bombers as soon as his service command had increased their fuel capacity and their losses began to approach that of the heavies.[35]

He was particularly emphatic about the need for additional troop carrier crews. The transports were flying almost constantly with little rest except when unusually bad weather grounded the planes. The 317th Troop Carrier Group, for example, carried 4,344 tons of supplies in June and flew 1,283,121 miles. Its airplanes, including those in and out of commission, averaged 182 flying hours in June, and its pilots, including squadron commanders and operations officers (all 131 pilots assigned in other words), averaged 130 hours for that month.[36] Kenney assured the War Department that the situation demanded 74 additional pilots and 37 radio operators immediately and for emphasis wrote the following:[37]

> In the case of troop carriers, I figure I can get five hundred hours of New Guinea operation out of them. It is asking a lot, for the figures show that between weather and Nips a man lives longer in a P-39 than he does in a C-47 flying the troop carrier supply runs in New Guinea. These kids get a hundred hours a month, so that if I replace them at the five hundred hour mark I will need twenty percent per month for that reason alone, instead of the seven and one half percent your staff has promised me. The replacement rate per month for troop carriers should be twenty five per cent. The troop carrier group working between Australia and New Guinea is averaging over one hundred hours per month per crew. The great part of their haul is over the 750 mile over water hop from Townsville to Moresby on schedule - which they keep regardless of weather. I don't know how much of the grid they can take but with a replacement rate of seven and one half percent I cannot think of sending them home before fifteen hundred hours.

These vigorous arguments apparently persuaded General Arnold that certain exceptions could be made in general War Department policy. He admitted that, although the replacement problem had been solved in North Africa and England, it remained in the South and Southwest Pacific. Perhaps General Arnold's interest in the matter might have had something to do with a change of heart on the part of OC&R. By 17 August Brig. Gen. F. A. Craig, AC/AS, OC&R informed the chief of the Air Staff that "it now appears possible to furnish sufficient replacement crews in excess of the 156 during the months of January and February 1944 to bring the heavy units in the Fifth Air Force to a status of two crews per UE airplane," that 56 medium bombardment crews in addition to the authorized flow were to be dispatched during July and August, and that the specific personnel for troop carrier units requested by Kenney would be furnished. General Arnold approved these decisions, but emphasized that they were exceptions to established War Department policy. He assured Kenney that every attempt was being made to speed up the training program to meet the demand for two crews per airplane, that this need could not be met overnight, and that the additional personnel for troop carrier units had been provided by withdrawing them "from other important requirements of our program." [38]

The problems of personnel and materiel were not solved merely by the signing of the papers in Washington or even by the arrival of expected aircraft or combat crew replacements in the theaters. A considerable program of preparation for combat was necessary. The training of both air and ground personnel had so improved in the United States in

the early months of 1942 that this was becoming less of a problem in the theater, but the need for extensive modification and improvisation of the materiel was probably as great in the number as it had been during the previous spring. One of the most important tasks of the Service Command, for example, continued to be the modification of the B-25.

It will be recalled that General Kenney was basing much of his offensive planning upon the deadliness of low-level bombing supported by overwhelming forward fire power. Indeed he was so convinced of the superiority of that type of attack that he was rather critical of other theater commanders who did not employ it. For example he said of certain operations in the European theaters:[39]

> One last argument about attack aviation and I will quit. If Ira's B.26's were lost by ground fire it was because he violated the basic principle of attack: you must have lots of forward fire power to beat down the enemy ground fire in order to get in close enough to do your bombing; if Tooey had to shove his B.25's up to 6,500 feet it was because he did not have the eight forward fifty calibre firing guns that I have which are proving sufficient to silence the whole antiaircraft deck gun installation of a Jap destroyer or light cruiser so thoroughly that we have yet to lose a B.25 taking out a surface vessel. Of course you must cover these low altitude boys with your fighters so that they can work. Taking them up to 6,500 feet merely makes them more vulnerable to hostile fighters which can work at them from underneath as well as from above. Unless bombers are equipped with a mass of forward firing guns they do not belong in this minimum altitude stuff where there is surface fire to be encountered. This job is an attack job done by specially equipped attack planes flown by personnel who are trained in attack work and who probably would not be worth a damn at high or even medium altitudes. The sighting is different, the type of bomb is different, the tactics are different and there is a perpetual mission of this kind awaiting the attack commander. In spite of the fact that they have not packed enough guns forward, the Russians have done pretty well at this type of operation and the advance from Egypt to Tunisia is full of examples. Mast height bombing has turned out pretty well too, so that I would not

say that there is no such animal as Attack Aviation. The low altitude strafing approach, followed by the parachute fragmentation bomb or the delay fuze bomb, is standard practice here for three groups of B.25's and A.20's. The R.A.A.F. and the Dutch are following along and whether you like the work or not I have an attack outfit which is making the majority of the headline material for this theater.

Kenney planned to have at least 70 per cent of his medium bombardment strength equipped with the modified B-25. Such a program kept the depots busy. During July, August, and September, for example, the depot at Townsville added the eight forward-firing machine guns to 172 B-25C's and D's. The arrival of the first B-25G aircraft in July presented new difficulties. According to an early announcement, regarding this plane, it was to have two .50-cal. machine guns and a 75-mm. cannon in the nose, four blister .50's firing forward, two .50-cal. waist guns, and a .50-cal. tail gun. When it arrived, however, it did not have the four blister guns, and thus lacked the forward fire power which Kenney considered essential for low-level attack.[40]

It was, however, given an immediate trial. On 10 July Colonel Gunn, the modification expert, delivered the plane to the V Bomber Command, and for the remainder of the month, trial missions were flown with pilots of the 3d and 38th Groups. Attacks were made on antiaircraft positions, Japanese barges, and other shipping with considerable success. In one of these, shots from the cannon silenced all antiaircraft fire from the stern and aft of the bridge of a large destroyer. The accuracy of the cannon pleased Gunn, but he at once had any number of ideas as to how the plane could be modified. He particularly recommended that four additional forward-firing machine guns be attached, a change which he felt would result in "one of the most destructive weapons used in combat."[41]

Thus in the late summer and early fall, the Service Command attempted a number of modifications. In the first place, package guns were installed following Gunn's recommendations. With the armament already in the nose, it was necessary to maintain proper balance by attaching the new guns at stations even with the bomb bay. This modification was unsuccessful. After 300 to 400 rounds had been fired, "the skin began to ripple and tear loose at the bombbay, the leading edge of the wing cracked between nacelles and fuselage, the blast was affecting the adjacent primary structure, and the shell ejector chutes were too short, causing the empty shells to jam." [42]

Engineers of the 4th Air Depot at Townsville set to work on plans to remedy these faults, and by September further modifications were under way. Nine changes were performed on each side of the fuselage which aimed at "beefing" the structure at critical points. "Angle stiffeners, fittings, 'V' Channels, formers, and brackets were installed on wing sections between nacelles and fuselage, wing inspection panels and inboard sides of the nacelles." The work required the addition of 97 separate items, 82 of which were fabricated at Townsville. Between 25 September and 8 October, the depot there transformed 28 B-25G's into functionally satisfactory aircraft. [43]

This was only one of many projects performed by the Service Command on bombardment aircraft in the summer and fall of 1943. Actually the B-25G with the 75-mm. cannon never satisfied the tacticians of the Fifth Air Force, but other developments more than fulfilled expectations, and continued to be carried out at Townsville, Brisbane, Sydney, and

Port Moresby. The now standard nose installation of the B-25C1 and D1, the modifications increasing the offensive and defensive strength of the B-24, and the attachment of A-20A vertical and fragmentation bomb racks in the A-20G occasioned the query in the United States at least once: "Why can't we do what Kenney is doing?" [44]

Among his other modification projects, Kenney's interests still turned to the development of more deadly munitions, particularly bombs. For some time (at least since April), his engineers had been working on a fuze which would detonate standard bombs at certain elevations above the ground. They had experimented with the M111 fuze seated in the M103 fuze body, apparently a modification of the fuze used in the parachute photographic flare. But results were inconclusive. The bombs exploded anywhere from contact with the ground to a thousand feet in the air. It was thought, however, that the solution had been found in the Navy Mk. 32 AA fuze. Kenney described this as an "influence" fuze which caused an antiaircraft shell to explode "magnetically sixty feet from an airplane or the ground or water if it misses an airplane." Navy Department restrictions would not permit local efforts to adapt this fuze for bombs, but Kenney stated that his experts would make the attempt if Headquarters AAF could obtain the release of those fuzes already in the theater. In a letter to General Arnold of 23 July he added that he understood the item was in full production," so please have your ordnance men get them out to me instead of waiting until the Army gets through inventing a better one." [45]

Kenney in this case seems to have stumbled upon a first-class mystery. Within a few hours of a radioed request for information on the fuze, the War Department replied, refusing to release any details, and stated that the fuzes were highly secret and still in an experimental stage. A month later, Kenney, learning indirectly that the Joint Chiefs of Staff were holding up the release of the fuze, hazarded the guess that the delay was owing to a desire to accumulate a sufficient number so that they could be released in all theaters at once. He added: "It sounds as though someone wanted to give Tooey Spaatz and Ira Eaker a good sporting chance with me so that I would not get ahead of them." He warned General Arnold, however, that "if my college professor down in Sydney, who is working on the problem, is right in his claims," he would soon have one of his own capable of breaking up airplanes in revetments and killing Japs under the coconut trees.[46]

The actual explanation of the secrecy seems to have been far more significant than Kenney had assumed. The Joint Chiefs of Staff were withholding the use of the fuze except in special overwater missions where there was no chance of recovery. They knew that the Germans were perfecting a proximity fuze, and they could visualize what rockets armed with such fuzes could do to the large formations of Eighth and Twelfth Air Force bombers. Rockets with time fuzes had already created enough havoc; the expected use of rocket-propelled glidebombs might create more; and the Joint Chiefs were determined that no clue as to American developments would be provided to the Germans, at least until fighters could accompany the bombers all the way to their objectives.[47]

In addition to Service Command activities in making bombers more effective, other service units and experts in design were erecting, repairing, modifying, and otherwise improving both the fighters that had been in the theater for many months and those that had just arrived. Major modification projects were initiated on the old P-39 and P-40 aircraft. On the P-40's new Allison, V-1710-81 engines were installed; and inspection plates, main landing-gear spindles, fuel lines and fuel-vent lines among other things were modified. Many of the Bell aircraft, approximately 60 old P-39's and 50 P-400's, were converted into the relatively modern P-39N. New Allison engines with a 9.6 to 1 blower and a 2 to 1 propeller gear were installed. Two .50-cal. machine guns were exchanged for the two .30's normally in each wing, making a total of six .50's and either a 20- or a 37-m. cannon. In addition the installment of a "Fifth Air Force leak-proof tank" gave from 15 to 20 gallons "more integral fuel capacity." By the middle of August this project was well under way, and within a month Kenney had instituted a production line at Sydney which reworked all spare wings to replace those on aircraft in the squadrons.[43]

Perhaps of even more importance in increasing the efficiency of the fighter command was the development of a belly tank for the P-47. Kenny insisted that this aircraft had less range than the P-40, and that the "engineers back home" were developing planes with no "more range than is needed to defend London or to make a fighter sweep across a ditch no bigger than Chesapeake Bay." The obvious solution was the use of a belly tank. None had accompanied the P-47's when they arrived, however, and

it was discovered that a 200-gallon tank shown in the Materiel Command's data sheet had been abandoned because of the tail buffeting which it caused. During the first week in July, the 27th Depot Repair Squadron at Port Moresby was given a rush job of designing a suitable belly tank with a reliable release mechanism. The first plan was to modify the flat, oval-shaped, 110-gallon tank used in P-39's and P-40's, and Kenney requested that Patterson Field send him 100 kits to make this modification. The Service Command at Patterson Field replied that demands of other theaters together with the realities of production would permit no more than 10 kits to be sent each week, a rate which seemed ridiculous to Kenney since it would mean that the 348th Group would not have sufficient tanks to enter combat for two months.[49]

Meanwhile depots in both Port Moresby and Brisbane were working on the project. Using tools and equipment on hand, the 27th Depot Repair Squadron was working 24-hour days each consisting of three 8-hour shifts, with some of the more skilled technicians working from 12 to 16 hours. Soon they were attaching the modified tanks on P-47's at the rate of seven a day, and something over 100 planes were so equipped. By the first of August, however, a 200-gallon belly tank had been designed at Brisbane, and tests proved that it was far superior to the 100-gallon tank and others developed in the United States. This model, therefore, became standard in the Southwest Pacific, and the 27th Repair Squadron began to install the new tank rather than the older model, not a difficult change since there were only a few differences in the installment of necessary booster pumps and motors.[50]

The accomplishments of the Service Command were probably as important in making possible the fruition of the planning for the Southwest Pacific offensives as those of the crews who were actually flying the planes into combat. In spite of the large reinforcements which were arriving by the summer of 1943, ADVCOM and the air task forces simply could not have accomplished their job without the facilities provided by service units and depots. General Arnold commented in regard to the development of the belly tanks: ". . . there is no reason in God's world why General Kenney should have to develop his own belly tanks. If he can develop one over there in two months, we should certainly be able to develop one here in the United States in one month."[51] The fact remained that Kenney's organization did develop and produce certain items of equipment more rapidly than it could be done in the United States where the demands of every theater had to be considered. Some of these items were even being supplied to the Thirteenth Air Force, and in July the War Department suggested that the Fifth Air Force Service Command provide fourth echelon maintenance including engine overhaul for the Thirteenth. The suggestion progressed as far as conferences between personnel of both air forces where it was discarded owing to the lack of water transportation facilities between the two theaters. MacArthur, however, made the following recommendations: that the present cooperation between the two air forces continue, that the Fifth Air Force lend every aid by supplying Australian fabricated parts and equipment to the Thirteenth Air Force, that the Thirteenth continue the existing system of supply procedure, and that present engine overhaul facilities be retained until the two air forces could be more closely merged.[52]

Chapter VII

LAUNCHING THE OFFENSIVE, JUNE-AUGUST

The period from May through September 1943 witnessed not only the building up of the Fifth Air Force in men and material but also offensive operations on a larger scale than any yet undertaken by the Allied forces in either the South or the Southwest Pacific theaters. The reduction of Rabaul remained the ultimate goal of the forces operating both from New Guinea and the Solomons. The immediate objective was to bring the Fifth and Thirteenth Air Forces into position for the culmination of the campaign against that enemy-held stronghold. And so while the forces of the South Pacific headed up from the lower Solomons through New Georgia toward Bougainville, those of the Southwest Pacific, using well-established bases at Port Moresby, Milne Bay, Goodenough Island, and Dobodura, had secured the Morobe area and were preparing to establish themselves on the Huon Peninsula as a necessary preliminary to moves against New Ireland and New Britain.[1] While the real offensive got under way during the summer of 1943, therefore, the Allied Air Forces struck with increasing frequency at targets along the northern New Guinea coast from Lae to Wewak, and along the southern New Britain coast from Gasmata around Cape Gloucester to Talasea. In evidence of a high concentration of effort, it may be noted that though air operations in general were rapidly increased through this period, heavy attacks against such formerly favored targets as Rabaul, Kavieng, and the Solomons were few and far between.

Rabaul nevertheless was not entirely omitted from the list of objectives. B-17's and B-24's on reconnaissance paid periodic visits not only to Rabaul but to Kavieng as well. Even the heavy bombers, however, concentrated almost entirely upon the sea lanes leading directly to the Huon Gulf, to Hansa Bay, or to Wewak. F-4's and F-5's of the 8th Photo Squadron were perhaps more active than the bombers in recording activity in harbors and on airfields of New Britain, New Ireland, and the upper Solomons, but photo-mapping was hampered greatly by weather which the camera eye could not pierce. During June planes of the 8th Photo Squadron were over Rabaul on at least 25 different occasions, but of these missions 12 were abortive because of poor weather conditions. In July no photos were taken in seven flights; in August three out of four missions were fruitless; and in September six out of eight.[2] To the uncooperative weather were added the hazards arising from the Photo plane's lack of defense against interception. In June two of the squadron's most skillful flyers were shot down over Rabaul. One of these, Capt. Arthur L. Post, who bailed out of his plane in the vicinity of Wide Bay on 20 June, was rescued three months later. The other, Lt. Kenneth J. Murphy, was less fortunate. He carried out six reconnaissance missions over Rabaul, Buka, Madang, and the Malahang area during June. Owing to the shortage of trained pilots, he volunteered for more flights than would ordinarily have been necessary, and on 26 June, he failed to return from his last mission over Rabaul.[3]

During the four-month period under discussion, the heaviest concentration of bombing attacks fell in June. In that month heavy

bombers struck at Vunakanau, Lakunai, and Rapopo on eight different nights in formations of three or more planes, performing approximately 60 B-17 and 62 B-24 sorties. The number declined in July to five attacks comprising 26 B-17 and 46 B-24 sorties, while in August and September only one mission was carried out against Rabaul, that of 11 RAAF Catalinas on the night of 3-4 September.[4]

It was impossible to evaluate accurately the results of these missions. The lack of aerial photographs made it necessary to depend upon observations by bomber crews, and these could not be exact. They usually reported that their bombs, varying from four-lb. incendiary to 1,000-lb. general purpose bombs had hit the target area and that large fires and explosions had resulted.[5] Although weather conditions were probably more disturbing to the attacking American planes than Japanese interception, there seemed to be a growing coordination of enemy defenses. Not only was there an obvious liaison between the always annoying searchlights and antiaircraft batteries, but enemy night fighters resembling the twin-engine Dinah began to put in an appearance. The ineffective interception, however, is demonstrated by the lack of air battles over Rabaul. From June through September no enemy aircraft was shot down over that target by Fifth Air Force planes, and of the five B-17's and two B-24's lost none was definitely shot down in fighter attacks, one was listed as missing in action; one was shot down by antiaircraft fire; and the remainder were listed as having been lost from "other causes."[6]

In the Northwestern Area, of the Southwest Pacific, meanwhile, preparations were being made to strike at what was perhaps the most

important strategic objective in the Southwest Pacific area, Balikpapan in Borneo. Until the last of June, the 319th Squadron of the 90th Group continued to fly missions out of the Darwin area into the Netherlands East Indies. It had struck sharp blows at numerous points including Ambon on the island of Amboina, Koepang in Timor, and even Makassar and Kendari in Celebes. By the first week in July, however, it was transferred to Wards Drome near Port Moresby where it joined the other components of the group. The recently arrived 380th Bombardment Group (H) took its place at Darwin, and the B-24's of this new organization continued the operations against the enemy in the Netherlands East Indies.[7]

Sensational strikes were planned for this group. The Japanese received what was perhaps a first warning of new penetrations into their empire on 22 July. At approximately 0245, six B-24's of the 528th and Headquarters Squadrons glided in over the port of Soerabaja after more than a 1,200-mile flight from Darwin. They scattered 646 small incendiaries and 36 x 500-lb. demolition bombs from an altitude of 10,500 feet. After 14 hours of continuous flying all six planes safely returned to base.[8]

Even longer missions, in terms of time elapsed at least, occurred almost a month later. At 1730 on 13 August, 11 B-24's, carrying 69 x 500-lb. bombs, took off from Fenton and Maribullo fields and headed out across the Timor Sea through generally cloudy and turbulent weather toward Balikpapan. One aircraft was forced to turn back, and another failed to find the target, but between midnight and 0145, nine planes

bombed their objectives, oil refineries, tanks, and harbor installations. They dropped their bombs from between 5,000 and 8,500 feet and claimed 48 "hits." As the last plane turned for the long flight back to base, two refinery areas and one medium-sized vessel were afire and seven large oil tanks were exploding. In just under 17 hours from the take-off, eight of the nine aircraft had returned; the ninth, short of fuel, had crash-landed but all crew members were safe. The refineries had not been destroyed, as two reconnaissance B-24's returning in daylight two days later noted, but a second mission carried out on 17 August hit only at shipping targets. Again nine out of 11 B-24's starting reached the target, and swept in for a low-level attack. The bombardiers released 500-lb. delayed-action bombs and watched them crash into at least six ships, "destroying or setting on fire" four of them.[9]

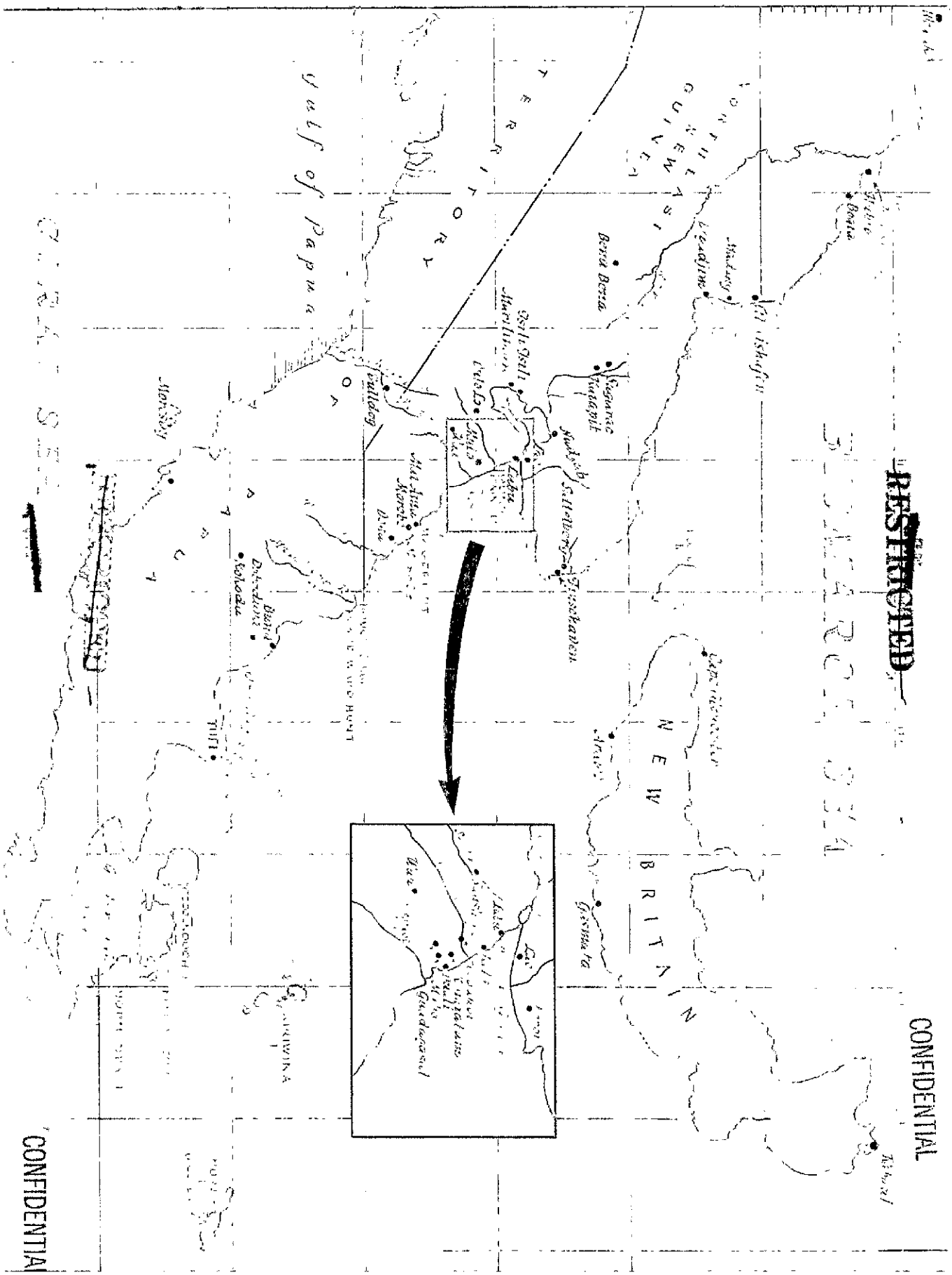
These attacks on strategic targets were token raids rather than part of a bombing offensive. The aircraft based at Darwin (Australian Beaufighters, Hudsons, and Spitfires for the most part, together with Dutch B-25's and American B-24's) continued to maintain a vigil designed to harass the enemy within range of their bombers and to deny Torres Strait and other sea routes to the enemy. The objectives, therefore, were primarily tactical and the missions defensive. At the same time in the Northeastern Area, the attacks upon any bases which might conceivably be called strategic were subordinated to the plan for an offensive designed to secure advanced bases in forward areas.

By the middle of June plans had been virtually completed for a three-pronged advance toward the principal objective, Rabaul. These

plans involved simultaneous landings by South Pacific Forces at Rendova in the New Georgia group and at other points in the upper Solomons, and by Southwest Pacific forces on Kiriwina and Woodlark islands and at Nassau Bay, 50 miles up the coast from Morobe harbor in New Guinea. South Pacific naval forces in addition to their part in the New Georgia operation, were to reconnoitre an area north of 1° north latitude in order to detect enemy forces coming south from Truk and to perform a similar function northeast of New Ireland and Buka passage and east of 155° east longitude. The Southwest Pacific air and sea forces, meanwhile, were to provide defensive reconnaissance over the Solomons and Bismarck Sea areas west of the 155° longitude line and southwest of New Ireland and Buka passage, and were to support a seizure of Woodlark and Kiriwina by attacks on such targets of opportunity as aircraft and ships.[10]

On the New Guinea mainland, Allied land forces had worked out a "master plan." Australian troops of the 15th Brigade were to seize Bobdubi Ridge, which dominated the Japanese supply line to Mubo; American troops, landing at Nassau Bay were to push inland and along the coast destroying the Japanese forces near Mubo in conjunction with the Australians and pushing those near Komiatum back to Salamaua. Meanwhile outposts further north and in the interior, notably at Bena Bena, 100 miles northwest of Lae, were to be built up as intelligence centers and to attract the attention of the enemy away from activities at more vital Allied bases.[11]

The Japanese, fully aware of potential Allied threats, were continuing to strengthen their forces in Northeast New Guinea. Shipping



continued to flow into Wewak and Hansa Bay; barge traffic moved across Vitiaz Strait from New Britain and along the New Guinea coast; and ground troops gradually moved into the Ramu River valley making contact with Allied patrols working out from the Bena Bena area inevitable. The Japanese also struck at Allied land forces from the air. Oro Bay, Dobodura, Wau, and above all Bena Bena were hit a number of times in June. Several of these raids were in some force. For example, the Bena Bena area was attacked by 27 medium bombers and 30 fighters on 15 June, by 6 bombers and 6 fighters and 18 bombers and 22 fighters on the following day, by 8 "aircraft" two days later, and by an "unknown number" of planes which dropped 49 bombs on 19 June.[12]

Damage from these air raids was negligible, but not always because of Allied interception. Fighters, which during June were concentrating upon the escort of bombers and transports, made contact with enemy planes no more than three times during the month. Three enemy fighters were destroyed in scrambles in which 1 P-38 was lost. Many of the raids on Bena Bena were not intercepted, probably because no Allied fighters were based there, and attacks on other bases which did have fighter protection were usually small and carried out at night. These raids did little damage but they were a nuisance at times, as when a performance of the motion picture Arsenic and Old Lace was interrupted at Dobodura on 12 June.[13]

During June the principal function of the bombers was to soften up the enemy defenses in the Lae-Salamaua area. Even Wewak, with its four airdromes and recognized as perhaps the most potentially dangerous base

in New Guinea, was hit on only three occasions. These attacks, on 2, 4, and 7 June, consisted of 16 B-17 and 13 B-24 sorties, in which all types of bombs from four-lb. incendiaries to 1,000-lb. general purpose and including 100-lb. and 300-lb. wire-wrapped "daisy cutters" were dropped. On 16 June, medium and light bombers began a steady if not an overwhelming pounding of the Lae-Salamaua area. For the next 13 days, RAAF Bostons made approximately 37 sorties, A-20's 27, and B-25's 55. The Bostons in formations of from four to six planes paid almost daily visits to the area. B-25's and A-20's sweeping the tree-tops in minimum-altitude attacks dropped delayed-action bombs on the airfields at Lae, Salamaua, and Malahang and strafed buildings in the villages and barges in hideouts along the coast. The heaviest of these attacks occurred on 24 June when 17 B-25's hit Salamaua and on the 26th when 20 B-25's struck at Lae and eight at Salamaua. In this latter attack, 120 x 100-lb. wire-wrapped daisy cutters together with 104 clusters of three 23-lb. parafrags were dropped. The planes then strafed the airfields through thick smoke which arose from the bomb craters and a hail of antiaircraft fire thrown up by Japanese batteries. Visibility was bad, but later intelligence indicated that the runways had been rendered at least temporarily unserviceable.[14]

These strikes at the airfields at Lae and Salamaua were only preliminary to other missions designed to simplify the Allied landings now imminent. Reconnaissance and photo aircraft had surveyed Woodlark and Kiriwina. Plans had been completed and D-day set for 30 June. Actually little preliminary softening up of the designated landing

beaches was necessary. On 29 June six B-25's hit enemy positions south of Salamaua, and the 89th Squadron scattered 76 x 100-lb. bombs in a Japanese camp south of Nassau Bay. Meanwhile, 13 P-38's and 100 enlisted men of the 80th Fighter Squadron had moved to Vivigani strip on Goodenough Island to cover the invasion of Kiriwina and Woodlark. But Allied troops landed there without interference and within a few days Army engineers and Seabees were converting the hard coral islands into air bases without having experienced either a land or an air attack. By 5 July the Allied strength on Kiriwina was 5,200 men and on Woodlark 1,300. Two weeks later General MacArthur could report that his men had cleared an air strip on Kiriwina, that on Woodlark 155's were in position, and that a runway would be ready for fighters by 23 July.[15]

The landing at Nassau Bay proved to be more difficult. The principal organization involved was the MacKechnie Force which two months before had secured the Morobe harbor area. Beginning on 26 June, this force, consisting principally of the 1st Battalion of the 162d Regiment, moved by boat to a staging area at Mageri Point, 15 miles northwest of Morobe, and three days later embarked for their destination. The maneuver had not been particularly well planned. Landing craft were not assembled until the day before the operation started, and when the time came for embarkation only 28 LCV's, 1 damaged LCM, 2 Japanese barges, and 3 PT boats were to be found. Little specific information, moreover, was available on the nature of the landing beach, which seems to indicate poor liaison somewhere in view of the large number of aerial photographs which had been taken of other areas. Indeed Colonel MacKechnie had made

efforts to secure suitable photographs as long as five weeks before the landing, but with little success. One series of photos was received, but these covered only half the landing beach area; rotogravure photographs were available but were unsatisfactory; and usually there was only one copy of any photograph so that the lower unit commanders rarely received any. In the case of Nassau beach, an Australian officer had made a cursory reconnaissance of the landing area, and plans had to be based largely upon his report.[16]

The troops embarked at 1900 on 29 June. It was raining; the seas were rough with surf at least 10 feet high; according to some natives the worst that they had ever seen. Eight or 10 boats never reached their initial rendezvous and were forced to turn back. An Australian patrol, which was to mark the beach, was late in arriving; consequently the boats which were to land in three waves became confused, and the first two waves landed at the same time. Owing to the surf, the PT boats which comprised the third wave were unable to land at all, probably not a misfortune since all craft which did reach the shore, 17 or 18 LCV's and 1 LCM, were destroyed by the high seas. Fortunately the 740 men aboard the latter vessels landed without loss of life, but mortars, radios, and much ammunition were lost, and no artillery and few antiaircraft guns could be brought to the shore.[17]

The situation on the beach was naturally confused. American troops were soon in contact with the enemy but a number of factors were hindering their advance. For one thing they had no artillery or antiaircraft protection; moreover since little or no provision had been made for the

replacement of the losses in landing craft, the arrival of more supplies was uncertain. Consequently, the MacKechnie force feared to venture too far from its defense perimeter established close to the beach. In such circumstances the danger of air attack was great. The situation had been made even more serious by a loss of virtually all radio equipment upon which liaison with the Fifth Air Force depended. Fortunately, the air support officer at Bulolo had suggested that a telephone line be strung from his station to the beachhead, and by this means a precarious and roundabout communication was established. The first request, sent by Captain Shropshire, air liaison officer with the MacKechnie Force, early in the morning of 30 June, was that a fighter cover be provided until the beach was cleared. But although several squadrons were not otherwise occupied, no cover was provided.[18]

Perhaps the most important efforts the Fifth Air Force carried out in conjunction with the Allied landings in New Georgia, on Kiriwina and Woodlark, and at Nassau Bay were a number of heavy attacks upon airfields both in the Lae-Salamaua area and at Rabaul. On 30 June 8 B-17's and 3 B-24's struck at Vunakanau; during the following night, 10 B-24's hit Lakunai and Rapopo; Vunakanau and Rapopo were the targets for 11 B-17's and 7 B-24's on 2 July, and all three airfields were bombed by 13 B-24's a day later. In spite of weather which made even reaching the target a hazardous effort, and in spite of fierce antiaircraft fire and night fighter interception, only one B-17 was lost in the four-day assault, and almost 100 tons of bombs of all types were dropped. Meanwhile from 30 June to 2 July, B-25's had carried out 58 sorties and A-20's 11 against

airfields and supply points in the Lae-Salamaua area. On 1 July the ground troops had also received some aid from the 89th Squadron, six of whose A-20's roared over Japanese installations at Duali on Nassau Bay, dropping 31 x 100-lb. bombs in the target area from 1,000 feet, and then returning to make 32 strafing passes from treetop level.[19]

These cooperative bombing missions apparently had some effect. In early July the Japanese were able to throw considerable air strength against the American landings in the upper Solomons and New Georgia, but they could not muster sufficient air strength to threaten both the landings there and the Allied operations at Nassau Bay. During the South Pacific landing operations, the Japanese lost more than 100 planes while the Allies were losing 17, and the enemy continued to attack Rendova daily. The first attack on the Nassau Bay beachhead, on the other hand, did not occur until 2 July when 10 medium bombers made three bombing and five strafing runs over Allied positions. Although the American fighter sector at Dobodura had ordered several sweeps over the area during the day, the fighters failed to intercept these enemy planes. On the following day, however, the first fighter combat of the month occurred. Various squadrons of both Moresby- and Dobodura-based fighters had carried out periodic patrols over Lae and Salamaua. In the afternoon 14 P-40's of the 7th Squadron were returning to Dobodura after a routine escort mission to Mubo. Shortly after 1600 they saw six or eight bombers (probably Dinahs), escorted by Zekes attacking Allied positions. The P-40 flight leaders changed their course, the flyers dropped belly tanks, and within a few minutes the fight was on. At least one Dinah and four Zekes were

shot down, a victory suitably celebrated with "jungle juice" on an otherwise-quiet Fourth of July.[20]

These two enemy air attacks were sufficient to do little more than harass the American force establishing itself at Nassau Bay. Other obstacles, however, kept the Americans from immediately pressing inland to join the Australians in the Mubo area and from pushing farther up the coast toward Salamaua. The command situation, in the first place, was temporarily unsatisfactory, and conflicting orders were received from the 17th Brigade, the 3d Australian, and the 41st American divisions.[21] Furthermore the troops, for the most part without combat experience, were at first jittery and would not volunteer to go out on all-important combat patrols. Some had not learned to hold their fire until sure of a target and perhaps 50 per cent of the first American casualties were caused by other American troops. Intelligence was faulty, and little was known of the enemy strength in the area.[22]

The principal problem, however, was that of supply. The possibility of the initial loss of landing craft had apparently not been foreseen. For the first few days, therefore, supplies were slow in arriving. By 15 July additional craft were allocated to the force, and the situation was somewhat relieved. The additional craft, however, did not get supplies to those troops already penetrating jungle country where it took 10 men eight hours to evacuate one casualty to the aid station on the beach. A road was to be built to accelerate the forwarding of supplies, but on 6 July only 150 Americans were available for construction purposes together with some 100 natives who were to serve as carriers.

Moreover the only bulldozer was disabled, and the only tractor was buried in the mud.[23]

In these circumstances, the ground forces working inland were almost entirely dependent upon transport aircraft for their food and munitions. Arrangements were made, therefore, with the 17th Brigade for supply-dropping, never a comoletely satisfactory expedient. At first only B rations were dropped. These required cooking, but the troops were unable to carry kitchens with them, and canned heat was not available. In one instance New Guinea Force authorized the dropping of rations at a certain point inland from Nassau Bay, known as Dry Creek Bed. Numerous supplies, many perishable, were dropped at a time when no troops were in the vicinity to pick them up. This action was explained by saying that the food would be more useful there than at Port Moresby, and that sooner or later a battalion of men would be available to salvage it. Some of these supplies were saved, but much of the food littering the creek bed had to be cleared away and buried.. This was an isolated instance, however, and although supply-dropping was expensive, it did succeed in maintaining a flow of nourishment to the fighting troops. Troop carrier units took pride in this "biscuit bombing" and watched the percentage of foods recovered rise from 50 per cent during the Papuan Campaign to 85 and 90 per cent by the fall of 1943. Moreover when rations and ammunition were lost, the transports would load up and return again and again, so long as weather and visibility permitted.[24]

In spite of these problems of supply, and in spite of the Japanese soldier's ability to make an ally out of the terrain, the Allies gradually pushed forward toward Salamaua. By 13 July elements of the 162d Regiment

had joined the Australians who had been fighting the Japanese in the Wau-Mubo area for months. This juncture cut enemy communications running from Komiatum to Mubo and led to the final capture of the latter stronghold. Meanwhile, American troops were forcing their way up the coast, and by 30 July had secured a beachhead on Tambu Bay, little more than five miles from Salamaua. These forward elements were joined during the night by other units which had boarded landing craft at Nassau Bay. Within a week batteries of the 41st Division's field artillery were firing shells into Salamaua itself.[25]

During this advance through most difficult terrain, the Allied Air Forces were working in complete cooperation with ground troops. In addition to troop carrier missions, fighters and bombers were carrying out an unprecedented number of offensive and defensive sorties. The primary responsibility of the fighters, of course, was defense, but defensive missions implied not only what the 67th Fighter Squadron called "FAFSOAPing (Fifth AF Sitting on ASS policy) otherwise known as ground alert," but transport and bomber escort together with routine scrambles or patrols. Most of these proved uneventful, at least so far as making contact with the enemy was concerned, but there were many more interceptions in July than in the previous month. From the 3 July interception at Salamaua to the end of the month, Japanese aircraft made sorties over Allied positions, chiefly in the Bena Bena and Salamaua areas, on at least 11 days. During this same period Allied fighter squadrons shot down no less than 58 Japanese fighters and 4 bombers, and lost 5 P-38's and 1 P-40 together with 3 pilots.[26]

Several of the enemy raids during July were not intercepted. Only one of those against Bena Bena, for example, resulted in combat when the 9th Squadron shot down one or possibly two enemy fighters. An attack of 13 July by 10 bombers and 15 fighters and another of 20 July by 30 fighters, however, were not intercepted. The principal air battles occurred either in the Kubo-Salamaua area or on routine escort missions. P-38's of the 39th Fighter Squadron "got into 'em" three times between 18 and 23 July to destroy a total of 19 enemy fighters. Their "big day" was on the 21st when 50 enemy fighters jumped 13 P-38's which were escorting B-25's on a bombing mission to Bogadjim near Madang. In the ensuing combat, 1 P-38 was lost, but 12 enemy fighters and probably 4 more were shot wown. The 80th Squadron also contributed 11 fighters to the escort of this mission, and these P-38's shot down 10 or 11 more Japanese interceptors while losing only 1 of their own. Five days later the Dobodura-based 9th Squadron shot down at least 10 Japanese fighters over Salamaua. Lt. Richard I. Bong, who together with Capt. James A. Watkins was credited with eight planes in this engagement, submitted the following account:

> I was leader of Blue Flight when we were scrambled to the Salamaua Dropping Area at 1230/K. We went up there and made a circle over Lae, came down to Salamaua, and then went down to the Markham Valley just back of Lae at 16,000 feet.
>
> On our way there I called in airplanes at 12 o'clock and we were intercepted at 1350/K over the Markham Valley. There were about twenty fighters; ten inline-engine fighters and ten Zeros. I dropped my tanks and shot at an inline job and missed.
>
> I dove out and shot at a Zeke head-on, and he burst into flames. I shot at an inline job 45 degrees from behind and above, and knocked pieces off his fuselage. I shot at another inline job and he burst into flames. I shot at another Zero head-on and knocked pieces out of his canopy and engine cowling or engine.
>
> I shot at one more inline job and missed. I left the area at 1410/K and returned to base and landed.

To this report the squadron historian added the comment that such a brief report by a pilot who had riddled four enemy aircraft in one engagement was typical of Bong's reticence: "He would describe a major engagement in the same amount of space another man would take to tell of drinking three beers." [27]

The increased activity of the fighter units was more than duplicated by the bombers. Indeed the month of July probably witnessed more of a sustained bombing effort against enemy ground positions in the battle area than any previous month in Southwest Pacific fighting. Some missions were carried out against points outside the principal battle zone. For example Madang was an important target because intelligence reports indicated that supplies were being collected there and sent overland to the southward. This belief was confirmed by aerial photographs and reported on 19 July. These showed extensive road and bridge construction work south of Bogadjim. Two days later the first in a series of three heavy raids on the Madang area occurred. Between 20 and 23 July, B-25's, performing "the deepest penetration by attack bombers into enemy territory" to that date, carried out from 100 to 120 sorties; and at the same time B-24's performed 12 and B-17's 13 against that important port on Astrolabe Bay. The heavy bombers alone dropped over 60 tons of bombs on buildings and installations in the Bogadjim area, and caused large fires. [28]

Attacks against shipping during this same period were limited almost entirely to interfering with the enemy barge traffic. Barges continued to reach New Guinea from New Britain, and supplies still moved

along the coast in the same manner. During the last week in July at least 22 A-20, 14 B-26, and 70 B-25 bombing and strafing sorties were carried out against these targets. Perhaps the most damaging series of attacks on shipping, however, occurred on 28 and 29 July. It had been reported that several destroyers and at least one merchant vessel were in the Bismarck Sea south of Cape St. George and Cape Gloucester. On 28 July, 15 B-25's including one B-25G of the 3d Attack Group pounced on two destroyers. They swept in at mast height, strafing with their heavy forward fire power, dropped 100-, 300- and 500-lb. delayed-action bombs, scored 14 hits, and left one destroyer on fire. The same number of planes performed a similar attack on the following day, this time with a P-38 cover. Debris was found which seemed to confirm the sinking of a destroyer on the day before, and more hits were scored both by bombs and 75-mm. shells on another already beached, causing "the vessel to explode." [29]

The heaviest concentration of bombs, however, was not dropped on shipping but on points in the Lae-Salamaua area in direct cooperation with the ground forces. After 5 July, bombers were over this area almost every day. Weather blocked out the objectives for only two full days, although a number of individual missions were prevented on other occasions, and the month's total of sorties included approximately 400 by B-25's, 100 by B-24's, 45 by RAAF Bostons, 35 by A-20's, 30 by B-17's, and 7 by B-26's. [30] The largest number of aircraft went out on 11 July when the air force was requested to eliminate an enemy strong-point outlined with morter smoke bombs in the old Bobdubi area. For this

mission the two veteran squadrons of the 38th Group teamed up with the new 345th Group covered by an escort consisting of P-38's, P-39's, and P-400's. Thirty-two B-25's reached the target, 22 of these dropping from 60 to 70 x 1,000-lb. instantaneous and delayed-action bombs from between 3,500 and 8,000 feet. The 10 B-25's of the 405th Squadron swept over the smoking pinpoint at from 25 to 150 feet, dropped 20 x 1,000-lb. delayed-action bombs in the area, and claimed 19 hits. Meanwhile 29 other Mitchells and 16 A-20's were strafing villages, airdromes, and tracks in the general area. Japanese fighters made several passes at the bombers, but had little effect. The American fighter escort, on the other hand, suffered two losses while shooting down at least five of the enemy.[31]

By July then the bombers of the Fifth Air Force were carrying out spectacular strikes against Japanese forces. Clearly, however, it was not fulfilling what was probably its primary function, the destruction of the opposing air force. American fighter pilots were knocking down Japanese planes at the rate of about 10 for every one of their own losses, whenever they encountered Japanese planes. But the Japanese seemed unwilling to do more than make token interceptions of Allied bombing attacks in New Guinea, and consequently were able to preserve a substantial air force intact. This can be demonstrated by the fact that from 1 June to 30 July Allied flyers in the Solomons claimed 529 Japanese aircraft destroyed while General Kenney's "kids" made a score of only 165 in the entire Southwest Pacific. If, as was probable, the enemy was throwing more airplanes into the defense of the Solomons than into New Guinea, this would in part account for the difference

in scores. But Allied Intelligence, based on aerial photographs, reconnaissance, and the reports of patrols ever on the move behind the Japanese forward areas, indicated that the enemy had the strength, and that he was preserving it for use at some future date.[32]

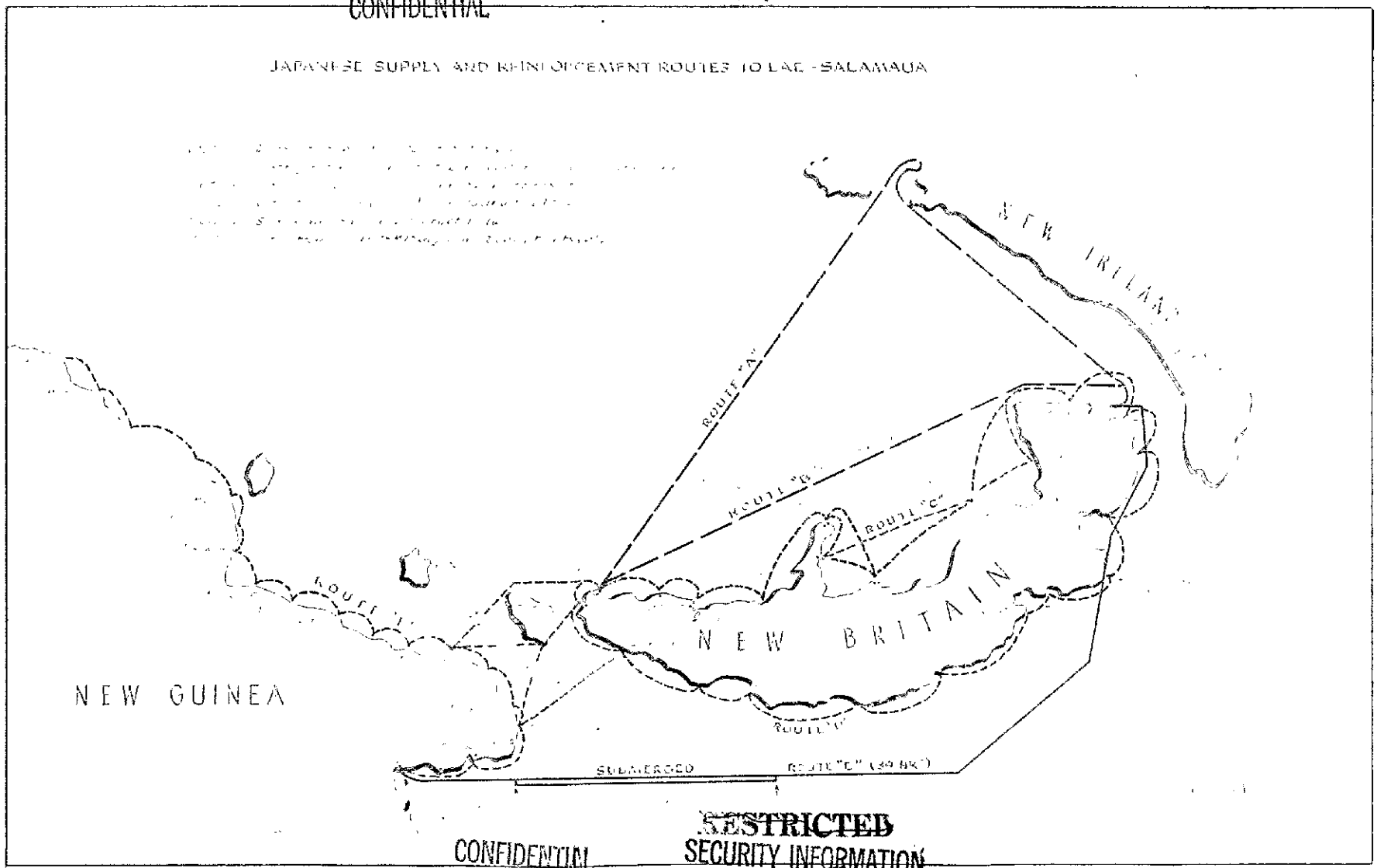
The Fifth Air Force had demonstrated by missions of 21 to 23 July that its medium and heavy bombers could carry out sustained attacks on an objective as distant as Madang. But the enemy's principal stronghold on the New Guinea mainland was Wewak, more than 200 miles farther along the coast. It was necessary to eliminate the Japanese fighter and bomber strength based on the Wewak dromes in order to destroy the potential threat that these aircraft posed to an Allied ground advance toward Lae and Salamaua. Before an air offensive against Wewak could be carried out, however, it was necessary to possess bases far enough advanced to permit fighters to accompany bombers over the objective, and extensive enough to base fighters and transports and to provide refueling facilities for medium bombers if necessary. The Fifth Air Force had been considering the possibilities of acquiring such advanced bases for several months. In general their plan was to determine the most suitable of the numerous air strips which had been scattered throughout Northeast New Guinea prior to the war, and with the help of the Australian New Guinea Administrative Unit (ANGAU), Australian patrols, and native labor, to develop them into bases.

To carry out this plan, Lt. Everette E. Frazier had been relieved from his duties as executive officer of the 857th Engineer Aviation Battalion (Negro) early in May and transferred to the Fifth Air Force.[33]

His orders read that he was "to locate one operational or staging fighter drome forward of Wau." Frazier had been a construction engineer with the Shell Oil Company of Texas prior to the war, and was thus well prepared to carry out such a mission. Soon after receiving his orders, he was flown to Bulolo, then the headquarters of the 3d Australian Division. From there he carried out his first reconnaissance patrol in the company of a number of other officers trained in airdrome construction, from whom he learned valuable tricks of the trade. This penetration of enemy territory carried him from Sunshine, 14 miles north of Bulolo, almost to Salamaua, but without success. On 31 May, therefore, he repeated the attempt in another direction with an Australian officer and several natives. This new trek took him through the densest jungle and rain forests, along the 1,000-foot deep Watut River Gorge, and across the treacherous Snake River. About a week later he reached Marilinan on the Watut River, less than 50 miles from both Lae and Salamaua. The air approaches to this point from one end were blocked off by mountains, but the site of an old drome was considered adequate for transports, with a possibility that it could be improved for fighters. The local ANGAU officer with natives recruited from a nearby village immediately began to clear and camouflage the prospective field. The tall Kunai grass was burned off, and in spite of the smoke, the Japanese were not alarmed, since natives started numerous fires on any occasion. According to Frazier, "natives like a good fire even if it is their own hut."

The natives were indispensable in the work of preparing the airdrome. Directed by ANGAU or by a native police boy, they were soon

JAPANESE SUPPLY AND REINFORCEMENT ROUTES TO LAE - SALAMAUA



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able to decide what trees needed cutting in order to clear a satisfactory approach. In some cases they needed little guidance at all. Sometimes too they contributed important intelligence which had been passed from village to village by conch-shell signals, by the beating of drums, or by a courier service run by "monkies" as they aptly called their small boys. Less useful but more entertaining were formal native ceremonies, known as "sing sings," at least one of which was given in Frazier's honor while Marilinan strip was being built.

Frazier had expected to be flown back to Port Moresby from Marilinan. When the plane failed to arrive as anticipated, however, he determined on 9 June to make the return trip to Sunshine on foot. This was a great disappointment to the friendly inhabitants of Marilinan who had hoped to see a plane land on the field which they had prepared. When Frazier left, they lined up and saluted him while a spokesman said: "Master him go now, behind him come back, along in big baloose(plane); him bring plenty kai-kai (food), plenty bong twist (tobacco) and altogether something promised boy." [34]

It was an arduous overland hike to Sunshine. But from there it was a relatively easy trip to Wau where C-47's took off regularly for Port Moresby. In this way Frazier arrived at ADVON Headquarters within a week of his departure from Marilinan. In two hours he was in conference with General Kenney, who was temporarily acting as ADVON commander while General Whitehead was in Australia, and a number of his top advisers. The question at issue was vital: where could an advanced air base be located for operations against Wewak and Lae? The

alternatives were in the Marilinan area or in the vicinity of Bena Bena. Frazier assured Kenney that a base near Marilinan, which itself was not completely satisfactory, would be adequate for proposed operations until the heavy September rains began, but that all equipment would have to be evacuated by then or else be left until the rainy season had ended. This put the question to Kenney: would another and more suitable forward area for all-weather airdromes be in Allied possession by September? Kenney and his advisers concluded that the offensive would have by then reached Nadzab, an area chosen by Australians familiar with New Guinea as an ideal site for a permanent base. By split-second timing, Nadzab could be captured, air strips prepared, and all equipment transported there from the Marilinan area before rains made that move impossible. Shortly after the conference, General Wurtsmith, V Fighter commander, and several officers flew to Marilinan in an A-24 and a P-40. They conferred with Maj. Herman G. Cox of the V Bomber Command and Capt. Everett W. King of the V Fighter Command who had reached Marilinan by foot before Frazier's departure. At this time, it was decided that Tsili Tsili, five miles southwest of Marilinan, would be a more suitable site for the new base.

Under the direction of Col. Ward T. Abbott, air engineer for the Fifth Air Force, the job was begun. Frazier, who had returned to Marilinan by transport, reached Tsili Tsili about 20 June. Again the clearing of new strips and the locating of dispersal areas, taxiways, and camp sites began. By July, C-47's were landing on the transport drome. Within 10 days, they had ferried in Company C of Lt. Col. Harry G. Woodbury's 871st Airborne Engineers equipped with specially

designed miniature bulldozers, graders, carryalls, and grass cutters. This first engineer contingent, although quite inexperienced, had equipment and some training, and with the advice and assistance of the men on hand, graded a 4,200-foot runway for transports and began another of 7,000 feet. Weather prevented the remainder of the engineer battalion from being flown into the field for 10 days, but by that time the new base could handle 60 to 150 C-47's a day.[35]

For many weeks, the existence of this field was successfully hidden from the enemy. Transports would fly through a pass to Wau and then glide down the valley to the Tsili Tsili landing field. In this way, they were hidden from the principal Japanese troop concentrations. The well-camouflaged field was protected on the ground by an Australian infantry battalion flown in to guard the land approaches and by an American automative weapons battery which provided antiaircraft protection. To prevent the Japanese learning about the activity at Tsili Tsili from the native telegraph, moreover, W/O Peter Ryan, an Australian ANGAU officer, and Frazier ventured into the enemy-patrolled Markham valley. They spent several weeks there trying to influence the natives against the Japanese, reconnoitering enemy strong-points, and learning as much as possible about new enemy penetrations into the hinterland.

Meanwhile, Tsili Tsili had become a base of rustling activity. By 1 August units of the Second Air Task Force, which was to operate out of Tsili Tsili just as the First Air Task Force operated from Dobodura, had begun to arrive. The 35th Fighter Group had received movement orders late in July. On 1 August, the 35th Fighter Control Squadron and a plotting platoon of the 565th Aircraft Warning Battalion made an

uneventful flight across the Owen Stanleys in C-47's and landed at Tsili Tsili an hour and a half after the take-off. Two days later a quartermaster platoon arrived and was joined within a few days by the 119th Quartermaster Bakery. By 11 August a signal detachment to install communications for the Second Air Task Force, and the 4th Airdrome Squadron to assist the 482d Service Squadron, had also made the almost routine flight to the new base. Thus by the middle of August, a fighter control sector and radar sets had been established, 40 miles of buried rubber cable had been dug in for local communications, a message center and radio station were in operation, and an ordnance dump and quartermaster supply room were serving more than 3,000 troops already in the area.[36]

With the base well established, the next arrivals were to be the headquarters and ground echelons of the 40th and 41st Fighter Squadrons. On 15 August, the headquarters of both squadrons set out from Port Moresby in two flights of C-47's escorted by P-39's of the 40th and 41st Squadrons. The first flight had no more than landed at Tsili Tsili when 12 Sallys escorted by perhaps an equal number of fighters (probably Oscars) roared in through passes flanked by mountains high enough to nullify the efforts of Allied aircraft warning units. Soon bombs were falling on the new field, and the incoming troop carriers were under attack. Japanese shells riddled one C-47, killed the pilot, and severely wounded others in the plane. It crashed, killing all occupants. Another transport vanished into the surrounding mountains and was never heard from again, while the remainder of the second flight turned back to Port Moresby. The unarmed C-47's, skillfully scraping the treetops

in making a getaway, still might have been at the mercy of the swift Oscars, had not P-39's of the 41st Squadron together with a few of the 40th pounced upon the Nip planes. Four P-39's and one pilot were lost, but the Japanese bomber force was annihilated. At least 11 Sallys and 2 or 3 of the fighter escort were shot down.[37]

The Japanese were no more persistent in their attacks on Allied ground positions during August than in previous months. They followed up the 15 August raid on Tsili Tsili with another on the following day, but the 431st Fighter Squadron and two squadrons of the 438th Group discouraged them on this occasion by knocking down approximately 15 of the strafing fighters. P-47's of the 348th Group in one of their first engagements providing low cover for transports, destroyed four of the enemy planes and lost one of their own. Meanwhile P-38's from the vantage point of a top-cover position had a field day in shooting down the remainder. The only complaint of the P-38 pilots was that the P-47 looked too much like the Zero. Except for these two attacks on Tsili Tsili, Japanese air raids on Allied ground positions in August were limited to little more than a few bombs dropped on the new bases on Kiriwina and Woodlark islands. Of these probably the most serious was one of 11 August against Woodlark, then protected by the 67th Fighter Squadron, a veteran unit from Guadalcanal. In this raid five enemy aircraft dropped 18 bombs, destroying one P-39 and damaging three others.[38]

Meanwhile the Allied Air Forces seemed to be studiously avoiding the rapidly developing base at Wewak. Actually the attack upon that

point was to be sudden and overwhelming. It was not to occur until medium bombers could join the heavies in more than 1,000-mile missions, until Tsili Tsili was sufficiently developed and stocked with fuel to provide a topping-off base for fighters and an emergency landing field for bombers, and until the Japanese had concentrated enough aircraft on the four Wewak dromes to make a full-scale air offensive worth while. Not until the middle of August was the stage properly set. By that time the Fifth Air Force Service Command had completed modification projects on sufficient B-25's to equip five medium bombardment squadrons; the engineers had done a remarkable job in constructing the mountain-bound Tsili Tsili base and the troop carrier units in supplying it; and intelligence reports showed that more and more enemy aircraft were being brought into Boram, But, Dagua, and Wewak.

During the first half of the month the V Bomber Command and the First Air Task Force threw their bombers against barge movements and enemy ground positions not far from Lae and Salamaua. Between 24 July and 3 August, for example, at least 94 enemy barges were destroyed and 60 others damaged. A-2 calculated that the number of barges destroyed represented a means of transporting a division of men or from 5,000 to 7,000 tons of supplies. Important as this destruction was, however, it represented only a fraction of the total enemy barge strength in the Southwest Pacific. Aerial photographs and reports of observers between 2 and 5 August had shown 250 barges, luggers, and lighters at Rabaul, 25 at Borgen Bay, 65 in Hansa Bay, and 35 to 40 in the Alexishafen-Madang area. Allied planes, therefore continued to seek out and blast

the barge hideouts, carrying out in the next 10 days at least 69 B-25 and 12 A-20 sorties against these objectives.[39]

The strikes against barge hideouts comprised only a fraction of the total number of bombing attacks during the same period. A few planes struck at points in New Britain such as Gasmata and at others against the Madang area. The greatest concentration of bombs, however, was dropped against enemy positions which the Allied ground troops in the vicinity of Salamaua were finding increasingly difficult to crack.[40] Between 1 and 17 August the Fifth Air Force carried out at least 46 B-25, 9 B-26, 42 B-17, and 154 B-24 sorties on objectives in these forward areas. In four raids the heavy bombers alone dropped over 500 tons of bombs.[41]

The results of these attacks were generally satisfactory. Anti-aircraft positions were silenced; buildings, supply points, and munition dumps were destroyed. Some of the official reports of results, however, must be used with caution. For example, on 13 August 35 B-24's and 13 B-17's carried out a coordinated attack on the Salamaua area and in conjunction with 9 B-26's dropped 173 tons of bombs. The official report reads that the attack "caused large explosions and numerous fires, photographs show 3/4's of buildings on Isthmus destroyed; airdrome also attacked, hangar destroyed, grounded bomber damaged."[42] The reports of the squadrons, however, show that the mission was not completely successful. In the first place, the designated targets on Komiatum Ridge were closed in by clouds. The lead pilot failed to establish contact with all his colleagues, and some confusion resulted in designating a

secondary target, thus most bombs were salvoed in the water. The 64th squadron, now flying B-24's, had better luck. It could not locate its primary target, but four B-24's dropped 32 x 1,000-lb. bombs in the neighborhood of Salamaua, and some landed in the dump areas. But "no damage from any of these thirty-two bombs was reported from visual observation." A fifth B-24 dropped eight bombs; two fell in the water; the others struck the Salamaua Isthmus and resulted in "one medium explosion" and a demolished house. A three-plane element of the 65th Squadron succeeded in "destroying buildings and starting fires," but a second element had no success. The 403d Squadron attacked with equal accuracy. One flight in dropping its bombs made "an overcorrection to the left," and all bombs fell into the water. The other flight, however, was quite successful in hitting Kela township and obtaining satisfactory explosions.[43]

Meanwhile the Japanese were building up their strength at Wewak. Aerial photographs on 30 July had shown only 19 light bombers on the airfield at But. Improvements on the drome, however, seemed to indicate its future use by heavy aircraft. Four days later, there were 20 fighters and several light and medium bombers at Wewak, 18 light bombers and 5 fighters at But, and a total of 56 aircraft at Dagua including the Army Type 100 medium bomber (Helen), a plane which had hitherto not appeared in the Northeastern Area. This gradual build-up continued, and on 13 August 8 medium bombers, 31 light bombers, and 69 fighters were counted at Boram and Wewak, and 34 mediums, 34 light bombers, and 23 fighters at But and Dagua.[44]

By the middle of August therefore, a fruitful target existed in the Wewak dromes. What is more, General Kenney had both the aircraft and the bases necessary to make a series of heavy strikes against those points. On 15 August, the two heavy bombardment groups in the Northeastern Area, the 43d and the 90th, had 12 B-17's and 52 B-24's in commission.[45] At the same time the 38th Group (M) and the 3d Attack Group had ready for combat 58 B-25C1's and D1's, types capable of making better than a 1,000-mile round trip.[46] By this time too, the Tsili Tsili drome was developed sufficiently to permit fighters (and bombers in an emergency) to top off there.

The stage was set for the most decisive series of air strikes carried out by the Fifth Air Force since the Bismarck Sea action. On the afternoon of 16 August final plans were made. This was to be a coordinated offensive by heavy and medium bombers. Eight squadrons of heavies were to open the assault with night attacks on the four Wewak airdromes. After this preliminary softening, five squadrons of vicious B-25 strafers, covered by a strong fighter escort, were to come in at minimum altitude to bomb and strafe every plane still on the ground.[47]

Between 2100 and midnight of 16 August, 12 B-17's and 38 B-24's of the eight heavy bomber squadrons took off from Wards and Jackson dromes near Port Moresby. The weather was generally good, although there were some clouds, and all aircraft reached the target except for two B-24's which turned back because of mechanical difficulties. Shortly after midnight, the first heavy bombers crossed the target; from then until after 0300 the attack continued with the 63d, 64th, and a part of the 65th Squadrons hitting Dagua; the remainder of the 65th and the

403d hitting But; the 319th, 321st, and a part of the 400th, Boram; and the 320th and the remainder of the 400th, Wewak drome. According to the plan, several of the leading planes were to drop incendiary bombs in order to illuminate the target for the remaining formations. Actually the attack did not conform exactly to the plan, and incendiaries and frag clusters littered the fields rather indiscriminately. Searchlights were annoying, antiaircraft fire was intense, and several night fighters attempted interception, but only three aircraft were lost, and these apparently not from enemy action.[48]

Specific results from this mission cannot be determined. Photographs taken of Wewak, Boram, and Dagua prior to the next attack showed some 204 aircraft of which "at least 18 [were] unserviceable." But the chief mission of the heavy bombers had been to keep the Nip aircraft grounded and at the mercy of a morning B-25 strike, and this was accomplished. Between 0600 and 0630, the 8th, 13th, and 90th Squadrons took off from Dobodura, and the 71st and 405th Squadrons from Durand in Port Moresby. The Moresby-based B-25's met with a number of difficulties in making the 500-mile flight to Wewak, the deepest penetration of medium bombers into enemy-held New Guinea to that date. Of the 26 B-25's which started out from Port Moresby, only three reached the targets. The 71st Squadron with But as an objective, failed to make a rendezvous with other Allied formations and turned back. Ten planes of the 405th Squadron were also forced back leaving only three to penetrate a bad weather front and hit Dagua. These three aircraft, however, were brilliantly successful. They scattered 105 x 23-lb. parafrags which smashed at least 17 aircraft on the ground, fired over

5,000 rounds of .50-cal. ammunition, and shot down one of 15 intercepting Oscars. Meanwhile, 29 Dobodura-based strafers (out of 37 which set out) were smashing at Borem and Wewak. They dropped 786 x 23-lb. parafrags and claimed 786 hits. At Wewak the 90th Squadron rather conservatively claimed about 15 aircraft destroyed or damaged. More sweeping were the reports of the other two squadrons of the 3d Group. The 8th Squadron announced that at Borem of 40 to 60 aircraft at least 15 had been totally destroyed and 25 to 30 left burning. And the 13th Squadron, which was over the same airdrome at the same time as the 8th, reported that of the 70 to 80 enemy aircraft on the Boram runway, "all /_were_/ believed destroyed or severely damaged."[49]

Except for one fighter attack, which the B-25's themselves broke up, Japanese resistance was limited to fairly heavy antiaircraft fire. The success of the heavy bombers in keeping aircraft grounded was undoubtedly in part responsible for the lack of interception, but the superiority of the Fifth Air Force's escort might also have been discouraging enough to the Nip interceptors to keep them at a distance. Almost every available P-38 contributed to make up perhaps the most powerful fighter cover yet furnished to bomber units in the Southwest Pacific. All P-38 units, the veteran 9th, 80th, and 39th Squadrons together with the 3 squadrons of the new 475th Group, participated. On 16 August, there were 127 of the twin-engine fighters in commission. Shortly after 0600 of the 17th, 99 of these planes took off from Dobodura and Moresby to form the escort. Of these, 14 planes turned back because of mechanical difficulties. The remainder, with the

comforting knowledge of adequate refueling facilities at Tsili Tsili, approximately halfway to the target, completed what to them was an uneventful flight with "nil" interceptions.[50]

On the following day, Wewak was hit again. The weather on this occasion, however, proved less cooperative, and thwarted the efforts of some of the heavy bombers. Nine B-24's of the 64th Squadron, for example, dropped only one bomb, and the 63d, although releasing more bombs, had little success in hitting a vital objective. Only 26 out of 49 heavy bombers which set out for this daylight attack reached the target at all. The B-25's, however, were more successful. Sixty-two of these planes took off only a few minutes after the B-17's and B-24's. Fifty-three reached the target. Antiaircraft fire was heavy, and Japanese fighters reappeared and savagely attacked the low-flying strafers. Ten to 15 Zekes and Oscars intercepted a flight of the 405th Squadron led by Maj. Ralph Cheli, an ace B-25 pilot. An Oscar riddled one B-25, damaging the left engine nacelle, the fuselage, the left wing, and the right propeller blade, but the plane returned safely to base. The same Oscar then attacked Cheli's plane and scored numerous hits. With flames bursting out of his right engine and wing, Cheli led his flight across Dagua drome, strafed a row of from 15 to 20 enemy aircraft, instructed his wingman to take over, and then crashed into the sea. Meanwhile, the American fighter cover of 74 P-38's had shot down 15 enemy fighters while losing 2 of their own.[51]

During the remainder of the month, the offensive continued. B-24's carried out 102 more sorties, and B-25's an additional 21 against land

targets in the Wewak area. With objectives there seriously battered, other heavy strikes were carried out against important enemy supply centers at Hansa Bay and Alexishafen. On 25 and 28 August, over 70 B-25's, 30 B-24's, and 10 B-17's hit the Hansa Bay area, and on 29 August 48 B-25's struck at Alexishafen. Luggers, launches, and barges in the harbors were destroyed. Munition and fuel dumps were left in flames. From the first Wewak raid on 17 August until the end of the month American flyers ran up an impressive score: B-25 gunners shot down 22 enemy aircraft while 2 Mitchells were lost in combat and 3 from other causes; B-24 gunners knocked down at least 35 enemy aircraft while 3 B-24's were destroyed in combat and 1 in an accident; American fighters in the Northeastern Area shot down 69 enemy planes while 6 P-38's were lost in combat and 3 P-38's and 4 P-47's from other causes. These well-substantiated figures, moreover, were dwarfed by Allied claims of Japanese planes destroyed on the ground at Wewak. The official claims are that well over 200 aircraft were destroyed on the ground. It is obviously impossible to arrive at any definite conclusion as to the accuracy of this figure, but it has been revised somewhat by calculations of statisticians at AAF Headquarters. Their figure for the total number of aircraft destroyed on the ground in the Southwest Pacific Area during August is 175. In view of the fact that the largest total in previous months was six, the record for August is impressive indeed.[52]

By the end of August, therefore, operations both by air, land, and sea were approaching a climax. Allied land forces were overcoming

strong Japanese defenses and were ready for a final push into Salamaua. An Allied naval force, the Seventh Amphibious Force, commanded by Vice Adm. Daniel Barbey, was ready for action, and several destroyers had already made a foray into the Huon Gulf to bombard a number of enemy shore positions there. The Allied Air Forces during July and August had increased their scale of effort to such an extent that in the latter month, they had performed more than twice the number of sorties carried out in June, and in so doing had softened up enemy land positions and virtually eliminated the threat from New Guinea-based Japanese air power.[53]

Chapter VIII

SALAMAUA TO FINSCHAVEN,
1 SEPTEMBER-2 OCTOBER

The series of small but significant victories won by the Allied land forces following the Japanese repulse at Wau in February had brought both Australian and American units within sight of Salamaua. Indeed, with the exception of the activities of numerous, small Australian patrols, all Allied efforts seemed bent upon the capture of that enemy base. This obvious intent of the ground forces was actually a part of the "master plan." It was hoped that the Japanese would pour men and equipment into that vulnerable peninsula in order to meet the Allied threat. To some extent at least, the enemy did just that, and a considerable number of troops were drained from the garrison at Lae into the Salamaua area.[1]

Actually the Allied offensive was not aimed at an initial capture of Salamaua. In fact, the Elkton Plan had originally envisaged an airborne force operating overland through the Markham River valley in conjunction with a shore-to-shore overwater movement leading to the capture of Lae. In this scheme of operations Salamaua was to be bypassed.[2] As the slow campaign from Wau, Morobe, and Nassau Bay toward Salamaua developed, however, original plans were modified. By the middle of August, it had been decided that the Seventh Amphibious Force, a part of MacArthur's naval strength, should land the 9th Australian Division east of Lae, that the major drive should then

commence against Lae itself, and that a subsidiary movement should strike east toward Hopoi Mission and Finschaven. Meanwhile American paratroops were to land at Nadzab, a flat, grass-covered area suitable for transport landings on the Markham River 15 miles inland. When the paratroops had secured this area, troop carrier units were to ferry in the 7th Australian Division for a second drive on Lae.[3]

For several months rehearsals had been held for the landings. By the first week in August supplies and troops were pouring into Milne Bay. On 20 August, all troops which were to land up to H-hour plus 6 began to rehearse landing operations on the south coast of Normanby Island. The 503d Paratroop Regiment, ready for combat at Port Moresby, had already undergone extensive drills. Between 21 April and 6 May it had practiced paratroop dropping missions with planes of the 317th Troop Carrier Group near Cairns in Queensland. In June more rehearsals were held prior to the regiment's departure for Port Moresby.[4]

Final tactical decisions were made at Milne Bay, some of them shortly before the actual embarkation of the amphibious force. In general, plans were completed to the satisfaction of all concerned, but there were a number of minor disagreements between representatives of the Navy and of the Fifth Air Force. For example, there were differences of opinion as to the method of providing air protection for the convoy and as to the need for pre-invasion strafing. "Senior Officers" of ADVON were at Milne Bay on several occasions to discuss these and other problems, but according to the official Navy report, did not have sufficient authority and were slow in making definite decisions.[5]

The final plan was not approved until shortly before D-day. On the subject of air escort, ADVON at first favored convoy protection by planes on ground alert, but was willing to compromise with those who desired an "air umbrella." Ultimately it was decided to provide a 32-plane cover as continuously as possible by day in addition to squadrons on constant ground alert. The solution to the thorny problem of whether or not to provide pre-invasion air and naval bombardment was also a compromise. The land forces wished to approach in darkness with the actual landing at 0515, approximately one hour before sunrise. The Navy, on the other hand, insisted that because of inadequate means of beach identification H-hour would have to be after sunrise and set it for 0630. Since this eliminated the possibility of tactical surprise, a naval bombardment and air strafing attacks on shore positions were considered desirable. However, strafers of the Fifth Air Force would be unable to reach the objective much before 0700, and so it was decided to resort only to a bombardment by five destroyers and to forego the benefits of strafing.[6]

Although decisions had thus been made on two general tactical problems, certain details for implementing them still remained. For example, the determination to provide a continuous air umbrella over the convoy did not specify how fighters maintained on ground alert would be coordinated with those participating in the escort. There were two fighter control sectors on the north coast of New Guinea, one at Lobodura and the other at Tsili Tsili. But the radar coverage of the seas through which the convoy was to proceed was far from complete.

Sets were located in the Dobodura area and at Cape Ward Hunt, Morobe, Bulolo, Tsili Tsili, and Bena Bena. At this time, however, the set at Morobe was inoperative, and the towering mountains limited the range of the others. The set at Cape Ward Hunt gave some sea coverage, but did not reach Lae; consequently Japanese aircraft from Wewak or Madang, could fly behind the mountains toward Lae; others from New Britain could swing across Vitiaz Strait; and neither could be picked up until it was too late for the available radar to provide adequate warning.[7]

A more effective means of providing warning and fighter control was necessary. A suggestion from an Australian wing commander furnished a novel solution to the problem. He pointed out that a destroyer, posted between Lae and Finschaven, might serve as a floating radar station and provide far better coverage of the approaches to the beachheads than any available ground station. The suggestion met with immediate approval, and the destroyer Reid, serving also as a part of the anti-submarine patrol from Buna to Lae, was ordered to proceed for the purpose to a point approximately 45 miles southeast of Finschaven.[8]

The fighter control network thus became a rather complicated one. On the destroyer were two controllers and two signal corps enlisted men armed with radar and radio sets, two loudspeakers, two voice receivers, two voice transmitters, and two SCR-188 receivers. With this equipment the controllers were in a position to monitor the normal radio channels of the fighter sectors, including the one which transmitted information to "the General's Board at Moresby." In this way, they would be warned of the approach of aircraft picked up by radar sets in addition to those on the destroyer. Then with grease pencils they could record all

suspicious plots on gridded maps covered with plexiglass. In addition to the party on the destroyer and the control squadrons at the various sectors, the 5th Tactical Air Communications Squadron furnished several parties to serve as air liaison units with the landing forces. T/Sgt. Edwin L. Lewis, for example, arrived at Tambu Bay on 28 August and immediately established radio communications with ADVON at Port Moresby. Another party, that of T/Sgt. James F. Birks, became more intimately connected with the amphibious operations when it was attached to the 9th Australian Division and placed under the command of an air liaison officer, Capt. George D. Ferrell. On 28 August, Birks's detachment boarded an LST at Milne Bay which joined the convoy bound for the landing at Lae.[9]

On the days immediately preceding the landing, the air force carried out heavy attacks on airfields, shipping, and supply points in both New Guinea and New Britain. The missions were generally protected by long-range P-38's, but P-39's and P-40's were being pushed forward in preparation for an all-out offensive. By the middle of August the air echelons of the 40th and 41st Squadrons had joined their ground crews at Tsili Tsili, and by the end of the month the 8th Squadron, now equipped with new P-40N's in place of the decrepit E's, had made the flight to that isolated base.[10]

The bombers opened their September attack on the 1st when 12 Beaufighters, 12 B-25's, and 5 B-26's struck at barges, fuel dumps, and other supply points along the southwestern coast of New Britain; on the same day more than 40 B-25's and approximately 20 B-24's started

large fires in fuel and ammunition dumps at Alexishafen, more than 20 B-24's attacked the Madang area, and 6 B-17's struck Labu Island, a strategic warning point near Lae.[11] B-25's, B-26's, and B-17's returned to the Madang targets on the following day, while B-25's of the 71st and 405th Squadrons carried out an even heavier attack on Wewak. These low-level strafers swept over the harbor at from 50 to 150 feet, under a cover of approximately 40 P-38's. They aimed 29 1,000-lb. delayed-action bombs at several small ships, and claimed 15 hits. Photos taken by the 405th Squadron, which had led the way to the objective, showed "that 1 Fox Tare Able, 1 Fox Tare Baker, 1 Sugar Baker, and one P G (gun boat) were directly hit and destroyed or sunk. 2 or 3 smaller craft and one lugger were left burning." The 71st Squadron, which attacked perhaps two minutes later claimed "2 Fox Bakers believed sunk [and] many small vessels sunk or damaged."[12]

These attacks were bitterly resisted. When 11 fighters intercepted B-17's over Cape Gloucester, the bombers shot down two of the enemy, and a P-38 cover destroyed at least five; one B-17 was lost. At least 25 fighters were still able to swarm off the much-bombed Wewak fields to intercept the B-25 attacks, and enemy AA was heavy and accurate. The 40 P-38's, which were providing top cover, shot down at least six enemy fighters and the B-25's shot down six more, while three B-25's and two P-38's were lost.[13]

While the largest Allied amphibious force yet to see action in the Southwest Pacific was gathering off Buna on 3 September, the bombers continued their strikes. Twelve Beaufighters, 18 B-25's, and 9 B-26's,

struck at Gasmata, Borgen Bay, and Cape Gloucester; 21 B-24's and 2 B-17's heavily bombed points in the Lae defense area, 9 B-25's strafed machine gun emplacements "above Lae," and 11 RAAF Catalinas littered Vunakanau and Lakunai with 500- and 1,000-lb. demolition bombs and 20-lb. frags in an attempt to keep Rabaul-based planes on the ground.

In the early morning of 4 September, while this last operation was still in progress, the convoy neared its destination. Shortly after 0500, the destroyer Reid swirled off to take up its position as an aircraft warning lookout off Finschaven; the Conyingham moved ahead to identify the beaches, and the landing craft began to find their assigned positions. By 0550 the beaches, "Red Beach," about 14 miles east of Lae near the Buso River, and "Yellow Beach," three miles east of "Red Beach," had been identified. At 0615, the destroyers began to pour hundreds of rounds of shell into the tiny beach area, and by 0630, the first Australians had touched the shore. Within a few minutes 560 assault troops had landed, and by 1030, LCP's, LCI's, LCT's, and LST's had landed 7,800 men together with vehicles, guns, and stores.[14]

Half an hour before the first wave of landing craft had touched the shore, Allied aircraft took off from fields at Tsili Tsili, Dobodura, and Port Moresby to participate in the operation. A few minutes later the ground troops crouching in their landing vessels, were comforted to see the first fighter formations, 16 P-39's from Tsili Tsili followed by 14 P-38's of the Dobodura-based 433d Squadron roaring over the landing area. At 0705 the air liaison party, preparing to land in the fifth wave, saw what they thought were more Allied planes as three

twin-engine bombers dived rapidly out of a cloud. Suddenly the approaching planes turned toward the landing craft and opened up with forward guns; they were Vals (possibly Bettys) closely covered by six Zekes. "Our reaction to this our first enemy fire was one of first, indignation, then bewilderment, not fear, that came a little later," wrote one member of the party. "We fell to the deck along with the Aussies and watched tracers bounce around us. Then the Nips released their bombs, we watched them almost curiously (we didn't know enough to be thoroughly frightened then) the bombs struck all about us, straddled our ship and one fell off the stern. A near miss on the LCI next to us blew a great hole in its port side and she broached. . . . Then it was all over: the bombers had flown off to the east with a pack of P-38's on their tails." Three naval personnel were killed and nine wounded.[15]

Allied bombing attacks began approximately an hour later. Just after 0800, 9 B-25's of the 13th Attack Squadron scattered 300-lb. demolition bombs from minimum altitude on the Hopoi landing ground near the beachheads. An hour later 24 B-24's dropped 96 tons of bombs on gun emplacements, buildings, and trucks on the Lae airdrome. The barge hideouts and airfields of southern New Britain, too, were neutralized as B-24's and RAAF Beauforts, Beaufighters, and A-20's hit the Gasmata airdrome and points in the Cape Gloucester area.[16]

Meanwhile the landing continued according to plan. By early afternoon the convoy was preparing to withdraw. Except for the early morning attack, there had been little enemy air interference, although

about 20 Japanese planes had dropped bombs sporadically around corvettes and destroyers along the coast. But at 1400, the radar on the Reid picked up a large formation of bogies* approaching from a point southwest of Gasmata and less than 100 miles away. At this time Capt. W. M. Ball, fighter controller on the Reid, did not know the exact position of the American fighters in the area. He did know however, that one squadron was escorting landing craft already returning to Buna, and that another was hovering over the land forces at Lae.

Every fighter pilot carried a grid map of the area in his cockpit and was constantly tuned in to the radio frequency of his fighter controller. Thus by sending the grid reference of the bogies over the fighter frequencies every minute to the fighter sectors at Dobodura and Tsili Tsili the Reid could trace the course of the incoming enemy, and this information could be plotted by each fighter pilot.[17]

Ball continued to watch the radar scope until it appeared that the planes would soon be close enough to observe visually. He stepped out on the Reid's deck "and sure enough there they were, about 60 of them." The destroyer at that time, without fighter cover and 45 miles from land, would have made a relatively easy target for 60 enemy aircraft. According to Ball, "that was a nasty moment for us" but after an apparent hesitation, the formation turned and headed toward Morobe.[18]

The radio operators on the Reid, meanwhile, were keeping a record of the plots flowing to the fighter sectors. Capt. David Harbour, controller at Dobodura, ordered the 433d Squadron, still on ground alert,

* Unidentified aircraft.

to join the 80th which then was patrolling the Lae area. At the same time, the 39th Squadron, which had moved from Schwimmer to Tsili Tsili for the Lae operation, was scrambled, and the 348th Squadron took off from Wards Drome. Guided by information from the Reid, at least 40 P-38's and 20 P-47's were able to intercept the Japanese attack and destroy at least 15 Zekes and 4 Bettys, the 80th Squadron alone accounting for 11 Zekes. One P-38 was shot down.[19]

This victory, however, came too late to prevent enemy bombers from causing considerable damage to the shipping off Lae. Dive bombers scored a near miss on the destroyer Conyingham, spattering shrapnel on the ship and wounding one man. Others attacked the destroyers Lamson, Drayton, and Lugford, causing superficial damage to the first-named, and scored a hit on an LST in which 26 Australians were wounded, and one naval officer and six men killed. Twelve enemy torpedo planes also skimmed over the water at an altitude of 50 feet, loosed torpedoes when 1,500 yards distant, and scored one hit on another LST. Forty-two men were killed and 30 wounded; two of the torpedo planes were shot down.[20]

At the time of this raid, troops and supplies were jammed on the beach, and had bombs struck there, great damage might have resulted. A sharp attack by an unspecified number of planes three hours later fired an ammunition dump, killed two men, wounded 12 others, and damaged two beached LCI's. By this time, however, the congestion on the beach had been somewhat relieved. Engineers had pushed something resembling a road through to Hopoi village, 400 yards distant, and priorities of travel from the beach to established positions inland were being assigned.[21]

The air liaison party had been caught in the red tape of priorities. It seemed for a while as if that small but essential party would be delayed on the beach indefinitely. However, Captain Ferrell, the ranking liaison officer, finally convinced Australian IP's that there could be no requests for air cooperation until his party reached headquarters. This brought immediate results, and it appeared that the Aussies were now "so anxious that we get in operation that if our vehicles had become mired, as a great many others did, they would have picked us up bodily and carried us to headquarters." Actually there was little need for air cooperation at this time. Australian forward elements were pushing forward so rapidly and meeting with such light resistance that no "Air support targets" were at that time available.[22]

On 4 September, therefore, one phase of the attack upon Lae was going well and according to plan. To complete the pincer movement and to cut off the Japanese at Lae and in the Salamaua area from escape routes, Allied troops were scheduled to capture Nadzab, 20 miles northwest of Lae and a key to the Markham River valley. Already a company or two of Australian troops together with some members of a Papuan infantry battalion, some of whom had come overland from Wau while others had floated down the Wampit River from Tsili Tsili, were almost within gunshot of this objective. Since these few hardy jungle fighters could not have dealt with an enemy counterattack in force, it had been planned to coordinate their arrival with a spectacular paratroop assault, the first combat drop in the Southwest Pacific.[23]

The 54th Troop Carrier Wing, charged with the transport of the paratroopers, was alerted early in the morning of 5 September. Eighty-four of its C-47's, flying from Wards and Jackson dromes, were to drop the 503d Paratroop Regiment on the Kunai grass plains of Nadzab. For a time the take-off was delayed owing to the failure of the radio on a weather plane which had gone out in advance. But at 0825 the first C-47's began to roll off the field. Within 15 minutes three flights of 79 planes were in the air, the first flight consisting of the 65th and 66th Squadrons; the second, of planes from the 375th Group; and the third, of the 41st and 46th Squadrons. Over 30-Mile Airdrome, the unarmed transports met part of their fighter cover which was to consist of almost 100 planes--P-39's, P-47's, and P-38's. From there the C-47's flew across the ranges at 9,000 feet "in 3-ship elements, in trail, on top of the broken clouds." At Marilinan they maneuvered into "6-plane elements in step-up right echelon, all three flights abreast," and dropped from 3,500 feet to between 400 and 500 feet. At 0948 the paratroopers were alerted and 21 minutes later were given the red light. At 1022 the first paratrooper made his jump.[34]

Two days later, General Kenney in a letter to General Arnold described the entire coordinated assault as follows: "You already know by this time the news on the preliminary moves to take out Lae but I will tell you about the show on the 5th September, when we took Nadzab with 1,700 paratroops and with General MacArthur in a B-17 over the area watching the show and jumping up and down like a kid. I was flying number two in the same flight with him and the operation really was a magnificent spectacle. I truly don't believe that another air

force in the world today could have put this over as perfectly as the 5th Air Force did. Three hundred and two air planes in all, taking off from eight different fields in the Moresby and Dobodura areas, made a rendezvous right on the nose over Marilinan, flying through clouds, passes in the mountains and over the top. Not a single squadron did any circling or stalling around but all slid into place like clockwork and proceeded on the final flight down the Watut Valley, turned to the right down the Markham and went directly to the target. Going north down the valley of the Watut from Marilinan, this was the picture: heading the parade at one thousand feet were six squadrons of B-25 strafers with the eight .50 calibre guns in the nose and sixty frag bombs in each bomb bay; immediately behind and about five hundred feet above were six A.20's flying in pairs-three pairs abreast-to lay smoke as the last frag bomb exploded. At about two thousand feet and directly behind the A-20's came ninety six C.47's carrying paratroops, supplies and some artillery. The C.47's flew in three columns of three plane elements, each column carrying a battalion set up for a particular battalion dropping ground. On each side along the column of transports and about one thousand feet above them were the close cover fighters. Another group of fighters sat at seven thousand feet and up in the sun, staggered from fifteen to twenty thousand, was another group of C.47's [P-47's]. Following the transports came five B-17's, racks loaded with three hundred pound packages with parachutes, to be dropped to the paratroopers on call by panel signals as they needed them. This mobile supply unit stayed over Nadzab practically all day serving the paratroops below, dropping a total of fifteen tons of supplies in this

manner. Following the echelon to the right and just behind the five supply B.17's was a group of twenty four B.24's and four B.17's which left the column just before the junction of the Watut and the Markham to take out the Jap defensive position at Heath's Plantation, about half way between Nadzab and Lae. Five weather ships were used prior to and during the show along the route and over the passes to keep the units straight on weather to be encountered during their flights to the rendezvous. The brass hats flight of three B.17's above the centre of the transport column completed the set up.

"The straffers checked in on the target at exactly the time set just prior to take-off. They straffed and frag bombed the whole area in which the jumps were to be made and then as the last bombs exploded the smoke layers went to work. As the streams of smoke were built up, the three columns of transports slid into place and in one minute and ten seconds from the time the first parachute opened the last of 1700 para-troopers had dropped. During the operation, including the bombing of Heath's, a total of ninety two tons of high explosive bombs were dropped, thirty two tons of fragmentation bombs and 42,580 rounds of calibre .50 [.50?] and 5,180 rounds of calibre .30 ammunition were expended. At the same time nine B-25's and sixteen P-38's attacked the Jap refuelling airdrome at Cape Gloucester. One medium bomber and one fighter on the ground were burned and three medium bombers and one fighter destroyed. Two ackack positions were out out of action and several supply and fuel dumps set on fire. Between five and a half and six tons of parafrags were dropped and 19,000 rounds of calibre .50

ammunition fired. Simultaneously also, ten Beauforts, five A-20's and seven P-40's from the RAAF put the Jap refuelling field at Gasmata out of action. No air interception was made by the Japs on any of the three missions. Our only losses were two Beauforts shot down by ackack at Gasmata." [25]

By 1204 all transports had returned safely to Port Moresby. Only one plane, whose cargo door had blown off in the flight, failed to complete its mission. The paratroopers, most of whom had landed in the tall Kunai grass, at first met slight resistance except for some sniper and machine-gun fire which temporarily pinned down a squad on its way to a predesignated assembly point. Soon, however, liaison had been effected with the Australians who had already reached the area by crossing the Markham River on a pontoon bridge, and by nightfall the Allies were ready to withstand a rather determined and noisy counterattack by small groups of Japanese troops. Within 24 hours Nadzab was secured. [26]

Before this first day's fighting had ceased, engineers and communications personnel had joined the paratroopers. Colonel Woodbury, whose 871st Airborne Engineer Battalion had been in part responsible for the development of Tsili Tsili, was one of the first to land a plane. He flew in with a piper cub, and under his directions some Australians and natives began clearing away the Kunai grass. On 7 September Company A of the 871st Engineers landed on the new strip, followed on the next morning by Company B and shortly thereafter by the remainder of the battalion. In one of the first transports to land on the primitive strip was an air liaison party whose leader, M/Sgt. Kenneth M. Payton, was assigned to

establish communications with cooperating air units. In spite of a delay of three hours caused by a landing accident which had rammed the only radio set and the party's jeep into the fuselage of a C-47, its radio station was on the air five hours after the party landed. Within a week of the original paratroop operation, the engineers had completed two parallel strips with one dispersal loop, and by 14 September Nadzab had acquired two parallel runways of 100 x 6,000 feet and a dispersal area capable of handling 36 transports simultaneously.[27]

By this time, the ground campaign against Lae and Salamaua was rapidly and unexpectedly reaching its climax. Troops of the 7th Australian Division had begun to pour into Nadzab by means of air transport as soon as a landing was possible, and strong elements had driven down the Markham valley toward Lae. The enemy offered strong resistance from prepared positions, but the skillful Australian troops swiftly broke them, and it was soon a race between the 7th Division and 9th Division, advancing from the east, to see which would reach Lae first. Meanwhile the American and Australian forces outside of Salamaua were relentlessly pressing toward their goal, some advancing along the coast, and others down the Francisco River. On 11 September they had reached the Salamaua airfield, and within a few hours it, the town area, isthmus, and near-by Kela Village were under a final assault.[28]

The successes on the ground during September, were particularly decisive when compared with the agonizing yard-by-yard advance of the previous months. They were accomplished after long preparation by the development of clever over-all strategy climaxed by the overwhelming

blows of 4 and 5 September. The Allied Air Forces during September contributed their share in delivering the knockout. Indeed, the spectacular paratroop drop and the successful ferrying of the 7th Australian Division was only a part of their contribution. Fighters were constantly on either patrol, escort, interception missions, or ground alert. Bombers, in addition to heavy strikes against airfields and barge hideouts in New Britain, renewed their attack on the Wewak dromes, and carried out 421 sorties in which approximately 800 tons of bombs were dropped "in support of" the Lae ground operations.[29]

The capture of Salamaua on 13 September and of Lae three days later, although decisive triumphs, did not end the threat of an enemy counterattack in that area. Moreover, these objectives were only the first of a long series which were to carry MacArthur's men far along the New Guinea coast. Japanese forces were still located at points up the Markham River valley. These forces were to be eliminated by the 7th Australian Division, transported and supplied by troop carriers. An immediate need, therefore, was for airfields which could be used by the Australians in making relatively easy hops over terrain which was almost impossible to penetrate on the ground. Again Capt. Everette Frazier was called upon to reconnoiter the area and to choose suitable sites for dromes. He immediately set out from Nadzab in a cub plane, and a few minutes later landed on a "long-level burned off place" on the Leron River a few miles from Jap-held Kaiapit. The latter village was the objective of an Australian Independent Company which was being ferried to the Leron River strip in C-47's. By 20 September the Australians aided by Papuan infantry had rooted the enemy out of their defense positions and had

assisted Frazier in improving the old airdrome. Soon transports were flying in more troops and supplies and evacuating the wounded. Frazier pushed on with the Australians to a point on the Markham River near Sagarac. Here some of the Diggers succeeded in pulling themselves across the river by a rope, but the crossing was slow and exceedingly difficult. According to an Australian officer, an airdrome across the river at Sagarac would be worth a battalion. By 25 September a field was located, and transports were again "leap-frogging the 7th Air Borne Division" forward.[30]

This process of gaining control of airfields in the Markham and Ramu River valleys was a prelude to further operations to be carried out against Madang and other points to the west. The success of these operations would secure for the Allies the land approaches to the Huon Peninsula. Meanwhile, however, the capture of Lae and Salamaua, accomplished much sooner than expected, led to a change of plans so far as amphibious operations were concerned. The original schedule had included a landing near Finschaven approximately four weeks after the fall of Lae. This point, strategically located on the Huon Gulf and approximately 64 miles beyond Lae, was to be developed as a concentration point and staging area for future advances and as a forward base for aircraft and light surface ships. The weakness that the Japanese had displayed in the area, however, encouraged the officers of the Seventh Amphibious Force and of the First Australian Corps to consider on 17 September a possible acceleration of the timetable. Three days later, General MacArthur approved plans which scheduled the Finschaven landing for 22 September.[31]

Less than five days, therefore, elapsed between the decision to stage the operation and H-hour. Obviously there was no time for a rehearsal, but the Lae operation had provided the necessary experience. Troops flushed with victory were at near-by Lae, and landing craft and destroyers had had a few days of rokeep at Milne Bay. The air force too had profited by its contribution in the capture of Lae. As the landing craft moved from Buna to Lae for the new amphibious venture and as the troops and equipment were loaded there, the Fifth Air Force provided almost continuous fighter cover at two levels, and the destroyer Reid again acted as a fighter-control ship. On this occasion, however, the Reid remained constantly with the convoy. It was believed that since a large force of fighters were to provide a constant escort, better contact could be provided there rather than from a point 60 to 70 miles away.[32]

Meanwhile, Allied bomber units carried out attacks on Japanese airfields, supply dumps, and reinforcement routes to Finschaven. On 20 September, 12 B-24's started "large fuel fires" on Wewak and Boram airdromes; and 47 B-25's, 8 B-17's, and 2 P-39's struck at bridges, trucks, and barges in the Madang area. On the following day, 16 B-25's followed up that attack, destroying four bridges and strafing camps and villages, while Beauforts and RAAF A-20's hit Gasmata and 22 B-24's bombed bivouac areas and supply dumps at Cape Gloucester.[33]

During the night of 21-22 September the convoy, which had been loaded at Lae, moved east along the coast and rounded the tip of the Huon Peninsula. The landing was to take place at "Scarlet" Beach near the Song River. Although the beach had been carefully chosen, the information

available to the amphibious force on its characteristics left much to be desired. A small party had scouted the shore from 11 to 14 September, but Japanese activity in the area had thwarted efforts to obtain information. Useful photographs also were lacking. Only one set of obliques was available to the Seventh Amphibious Force on 17 September, although special low obliques and verticals had previously been requested. Several sets of low verticals were taken and delivered during the night of 19 September, but the set of black and white prints, which was furnished, included unfortunately only one corner of the beach, and according to the naval report, "were valueless for beach information." A photograph in color covered the beach and the shoal water on the southern half of the beach. This, together with photographic interpretation previously seen by naval officers at Port Moresby, resulted in a decision to beach only 3 LST's simultaneously.[34]

The landing which occurred at 0445 on 22 September was preceded by a sharp naval bombardment. There was no pre-invasion strafing of the beaches, but long before dawn the air assault commenced against other [illegible]

passes, with the result that "all buildings were destroyed." The B-25's also hit some buildings, but the weather was cloudy and their results were generally unobserved.[35]

Meanwhile, the Australians were making rapid progress. After consolidating the beachhead, and breaking through newly prepared positions near-by, they pushed forward toward the air strip. An air liaison party under the command of Captain Ferrell had landed with the first waves, but at first there was little need for direct air cooperation. The landing was virtually unopposed, and within seven hours 5,300 troops, 180 vehicles, 32 guns (Australian 25-pounders and 40-mm. AA), and 850 tons of supplies and equipment had been landed.[36]

Shortly before noon the ships in the convoy weighed anchor, and started back toward Buna. Until now the amphibious force had met little or no air opposition. Less than an hour after the departure from the Finschhaven area, however, the fighter controller on the Reid began to chart a formidable series of plots coming from New Britain and within less than 70 miles of the destroyers. Obviously, their objective was the convoy, but the Japanese had chosen an inopportune time, from their point of view, for this attack. At least three American squadrons, the 341st with P-47's, the 35th with P-40N's, and the 39th with P-38's, had been patrolling the Lae-Finschhaven area for several hours. They were scheduled for relief within a very few minutes, but they had sufficient fuel left for perhaps an hour of combat flying. The relieving squadrons, the 9th and the 432d, were preparing to take off shortly before noon for their scheduled patrol. Thus at least five fighter squadrons were available for interception.[37]

Captain Ball and his crew on the Reid at once directed the five squadrons of fighters to take positions above the convoy. One squadron claimed that the controllers reported the enemy at the wrong altitude, but Ball had tried to provide against this contingency by staggering flights of fighters at altitudes from 14,000 to 20,000 feet. The Japanese planes, from 20 to 30 bombers and from 30 to 40 fighters, flew unhesitatingly into the trap. In less than an hour the American fighters had shot down from 10 to 14 bombers and 29 fighters. The destroyers' antiaircraft, meanwhile, had knocked out nine of 10 torpedo planes which had swept in at such a low altitude that the radar had failed to detect them. No damage was done to the Allied convoy in this attack, and out of three P-38's shot down at least one pilot was saved.[38]

Finschaven, in the meantime, was becoming the objective for another pincer operation. In addition to the Australians landed on Scarlet Beach, others were working up from their earlier landings at Hopi village. This latter advance at first made only slow progress, but by 23 September the main force had captured one of the Finschaven air strips, and an air liaison party had established its radio set at the south end. The campaign, although going according to plan, was difficult. Strong ground positions south of the swiftly flowing Bumi River had to be knocked out one by one, and Japanese air attack occasionally hampered the advance. On 24 September, for example, nine enemy bombers attacked the air liaison party's headquarters. The first warning was given by "the rip of strafing guns." Then came the frag bombs. The radio set was knocked out, and three of the party including Captain Perrell, its commander, were killed.[39]

The scale of Japanese effort, however, was insignificant when compared with that of the Fifth Air Force. Routine attacks were continued on airfields at Cape Gloucester and Gasmata, on barge hideouts in New Britain and New Guinea, and on communications in the Madang area; but the heaviest attacks, as in the previous month, were against the air and shipping facilities at Wewak. For these missions, some of the fighters which provided the escort used servicing and refueling facilities at an advanced airfield approximately three miles from the much-bombed Australian post at Bena Bena. A detachment of the 478th Service Squadron consisting of 14 enlisted men and commanded by Lt. William G. Porter had landed on that remote field, known as Nen Garoka, on 31 August. Within a few hours they had dispersed fuel drums, oxygen cylinders, and their miscellaneous equipment around the strip and prepared a campsite near-by. For the next few weeks, they had waited for the projected Wewak strikes, meanwhile enjoying an occasional softball game with the "Australian Independents" who patrolled that area. On 25 September, the Americans were instructed to prepare for servicing and refueling. By 0830 of the following day the first planes had arrived, and within a short time 42 fighters were being serviced on the strip.[40]

Thus the stage was again set for an overwhelming attack against the most important Japanese base in New Guinea. On 26 September 11 B-24's protected by 15 P-38's dropped approximately 35 tons of bombs on But and Dagua airdromes; on the following day 17 B-24's, followed an hour later by 90 to 100 B-25's, swept over airfields and harbor installations, dropping more than 160 tons of bombs. Three B-25's were shot down by antiaircraft,

but according to the official report the B-25's "left 3 tankers afire and sinking, sank or probably destroyed 4 x 1000/5000-ton merchant vessels, destroyed or severely damaged 9 luggers, 5 launches, 10/14 barges." In addition, there was an "estimated total [of] 50 grounded aircraft destroyed" on the airfields. In the meantime, an overwhelming cover of 121 Allied fighters shot down eight of 20 Japanese interceptors that ventured into the air. On 28 September, just before noon, 40 B-24's again with strong fighter protection, hit supply dumps in Wewak town and on the airdromes. Almost 130 tons of bombs were dropped, and according to the official report the main ammunition and fuel dumps were "considered destroyed." [41]

The town of Finschaven fell to the Australian veterans of the 9th Division on 2 October, 10 days after the amphibious landing. The last days of the campaign were marked by stiff enemy resistance overcome only by hand-to-hand fighting and by close cooperation of air units including a squadron of RAAF Vengeance dive bombers. Other Australians moving rapidly along the coast from their positions at Hopoi arrived in time to cut off the escape to the south of many of the Japanese garrison.

The capture of Finschaven by no means ended the campaign. A part of the garrison had escaped northward to Sattelberg, and many other Japanese strongholds in New Guinea had not yet been touched. Even Wewak had only been neutralized. The offensive had just begun. [42]

IX

CONCLUSIONS

The campaign ending with the capture of Finschaven had not only established an Allied control of the Huon Gulf area, but had already given promise of further successes which were to lead eventually to the reconquest of the Philippines. The offensive pattern outlined by General MacArthur months before, in which land and naval forces were to seize points for the progressive advance of air bases, was being proved strategically and tactically sound. This required the use of air, land, and sea forces in a close coordination in which the role of land forces was to assist in pushing air units forward. But if the role of the infantrymen expressed in these terms was a subordinate one, it was certainly the toughest of all assignments. Theirs was the task of rooting the Jap out of his cleverly constructed dugout, of performing nerve-wracking jungle patrols, and of living in constant contact with jungle insects and disease. In a theater considered secondary in importance, they had little prospect of relief. So far as the ground units immediately involved were concerned, this first great offensive campaign was primarily an Australian show. Australian independent companies, militia units, and Papuan infantry commanded by ANGAU officers had fought an unbelievably heroic campaign in the isolated Wau, Mubo, and Bena Bena areas, and the veteran 7th and 9th Australian Divisions had captured Lae and Finschaven. But some American ground units had also contributed their share. The 162d Regiment, for

example, between 29 June and 1 September had been in almost constant contact with the enemy, some for as much as 30 days without relief. Actually with the exigencies of the campaign, no rotation or relief was possible. The regiment had suffered the following casualties: 5 officers and 82 enlisted men killed, 46 officers and 343 enlisted men wounded. The T/O strength for the regiment was 130 officers and 3,374 enlisted men. The effective combat strength as of 9 September was 71 officers and 1,094 men.[1]

Although land action had been primarily in Australian hands from Buna through Finschhafen, the air operations, at least in the Northeastern Area, were predominantly American. The RAAF, to be sure, contributed at least one Beaufighter, one Beaufort, one A-20, and two or three P-40 Squadrons to the offensive, but these played a subordinate role to that of the Fifth Air Force, to which the Australian units were attached for operational purposes. Throughout the Huon Peninsula Campaign, from January to October, the functions of the Fifth Air Force remained chiefly those of a tactical air force: to defeat the enemy air force, to isolate the battlefield, and to carry out sorties in direct cooperation with the ground forces.

From January through June 1943, the Fifth Air Force had more than it could do in performing these functions. Its combat units were little more numerous than they had been throughout the fall of 1942--two heavy, one and one-half medium, and one light bombardment groups, three fighter groups, and two troop carrier groups. Moreover, many of these units were equipped with worn-out aircraft and were manned by war-weary personnel; the flow of replacements, both in equipment and personnel, could not be relied upon; and even those units ready for combat frequently had to be used for other

than true combat missions. The great majority of heavy-bombardment sorties, for example, were for reconnaissance purposes, usually flown singly. Such flights were vital, but nevertheless reduced to the number of B-17's and B-24's available to carry out bombardment missions. Medium bombers too were used for other than combat purposes. Some B-25's were employed to convoy shipping, others carried out antisubmarine patrols, courier flights, and even supply-dropping missions. Indeed in April and May, of all bomb units, there were frequently only two squadrons, one of A-20's and the other of B-25's, used entirely for combat operations.

Under these circumstances, it was fortunate that General Kenney had available a competent and adequately efficient service command. The depots at Brisbane, Townsville, and later at Port Moresby performed wonders in erecting and maintaining the equipment which constantly flowed through the numerous shops. By skillful workmanship, their engineers and "gadgeteers" contributed to the efficiency of the relatively few combat units. Moreover their ingenuity in modification added armament and fuel tanks which increased the range and the general effectiveness of bombers and fighters and thereby aided in the perfection of new combat tactics.

By midsummer the situation had rapidly improved. There was some promise of a regular flow of attrition personnel to the Southwest Pacific, and of the replacement of outmoded aircraft by new models more heavily armored and longer ranged. Numerous reinforcements too had arrived by the fall. The combat units had increased to three heavy, three medium, and one light bombardment groups, five fighter groups, and four and one-half troop carrier groups; the Service Command to five air depot groups, eight

service groups of three squadrons each, and three additional service squadrons.[2]

Thus the Fifth Air Force was rapidly becoming strong enough to carry out its tactical functions. Particularly successful were its efforts in performing what was perhaps its task of highest priority: the defeat of the enemy air force. Bombers and fighters contributed equally in establishing an air superiority over Northeast New Guinea and New Britain. Fighters in defending Allied bases and in escorting bombers and transports ran up an impressive score maintaining close to a 10 to 1 ratio of wins over losses. Bombers, generally successful in defending themselves against Japanese fighters, won perhaps their greatest victories of the campaign in August and September when they were officially credited with destroying over 250 planes on the ground, most of these at Wewak. Indeed the Japanese air forces in the area had been so completely cowed that from January to September 1943, they carried out no more than an average of one sortie per bomber per month, according to Allied Intelligence estimates.[3]

In isolating the battlefield, the Fifth Air Force met with mixed success. Following the enemy's disastrous defeat in the Bismarck Sea action of March, few if any Japanese convoys attempted to penetrate the Huon Gulf. For a time, however, all kinds of shipping poured into Hansa Bay, Wewak harbor, Hollandia, and other points in New Guinea further to the northwest. Heavy bombers carried out numerous strikes with some success against these concentrations, but not until August did medium bombers begin to sweep over Hansa Bay and Wewak at masthead level and thus threaten to establish a serious blockade of that portion of the coast. As it became increasingly

difficult for their cargo vessels to reach New Guinea, the Japanese began to rely more and more upon barges, submarines, and destroyers. The Fifth Air Force, therefore, increased the number of sorties against rivers and lagoons where small vessels could take refuge. But enemy barges were numerous and elusive, and the traffic was never entirely eliminated. With bombing efforts concentrated upon objectives in New Guinea and in Southern New Britain, other targets of importance such as Rabaul, Kavieng, and Buka received less attention from the Fifth Air Force in the summer than in previous months. Even then results had frequently been described as unobserved, although the harassing effect of the January, February, and some of the later raids must have been considerable. An entry for 5 February in a captured Japanese diary, for example, stated that "During the stay in Rabaul there was a raid every night. Allied planes usually bombed about 6 to 7,000 feet at night. During one raid two Japanese fighters and one bomber were destroyed. On another occasion between February 5 and 10, a single bomber (Fortress) glided in with engines cut, at very low altitude and bombed a line of fighters on Lakunai strip. Several caught fire and, aided by the wind, 30 or 31 fighters and 3 bombers were destroyed." [4]

Definite results of sorties carried out in direct cooperation with ground troops were also difficult to determine. Jungle country was not suited to such operations, and most bombings had to be carried out beyond a bomb line, at a safe distance from friendly troops. Liaison parties, however, were convinced of the success of many of the air attacks upon carefully selected strong-points, and there is little doubt that the constant hammering of tracks, supply points, and airfields in the Lae-Salamaua area contributed much to its speedy conquest when the offensive

54th TROOP CARRIER
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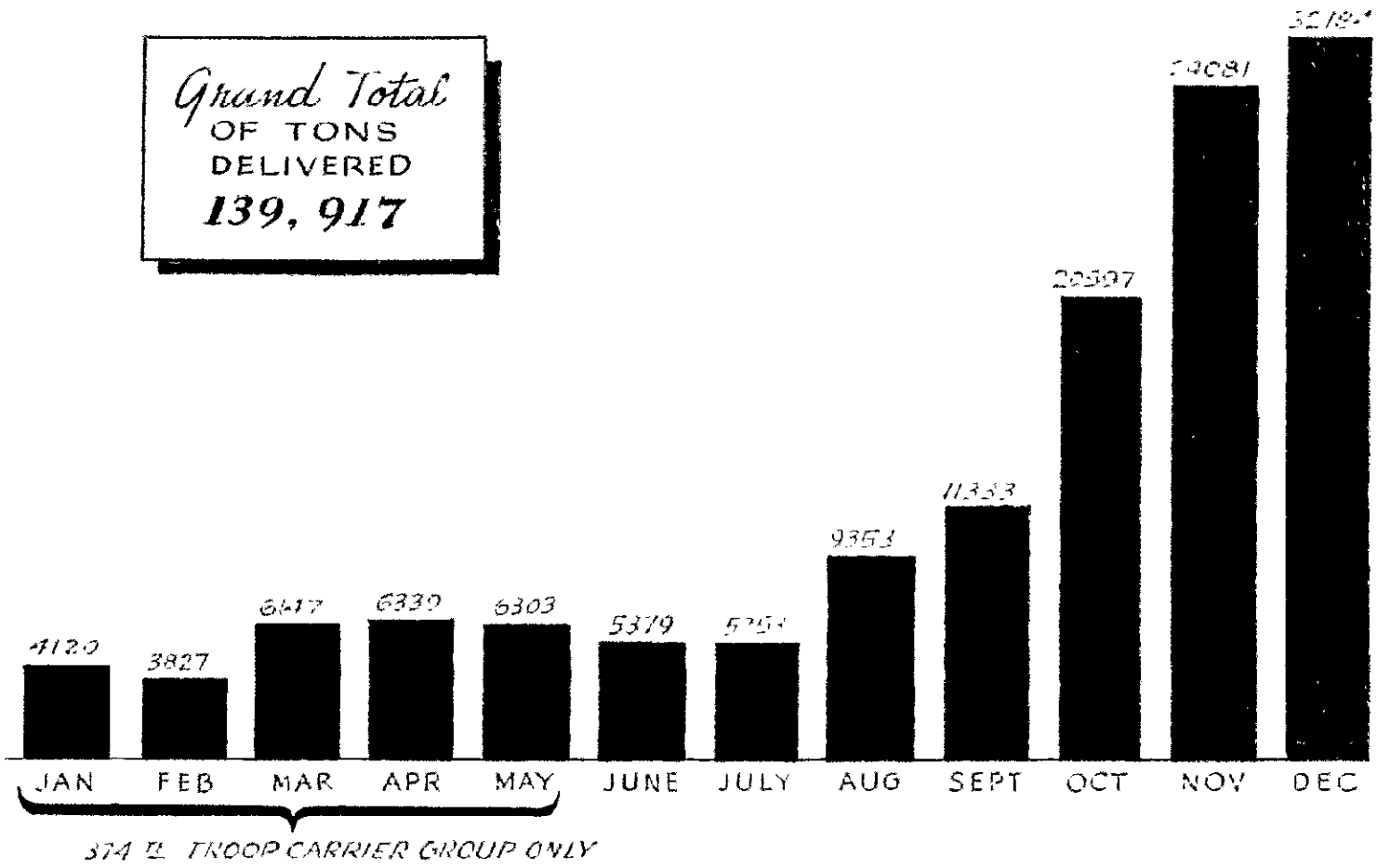

really got under way in September. The strafing of native villages, however, was possibly overdone. It is highly probable that the natives objected to it, and hostile natives multiplied the difficulties of rooting out the Jap. Moreover, it is not always clear that villages attacked were harboring the enemy. On the other hand, ANGAU officers and the Americans who patrolled in native territory had some success in explaining to the natives the reasons for Allied attacks. These explanations were frequently accompanied by assurances that if the natives cooperated in expelling the Jap, air attacks would cease.[5] The official report of the 162d Regiment on its operations from Buna to Salamaua had this to say about the general effect of air cooperation:[6]

> Close ground support by air support planes was found to be almost impossible not only because of the difficulty in designating friendly front lines and indicating the target to pilots, but the friendly troops had to be not less than 500 yards from the target. Bombing and strafing of rear areas and supply lines however was very successful as was the long range bombing program against Jap bases and fields. Air superiority is a marvelous help to ground troops.

One form of air cooperation, particularly important in the Southwest Pacific where overland transportation was so difficult, was carried out by troop carrier units. Their performance in the Nadzab operation was a spectacular success, but perhaps less significant than the routine, day-by-day transport of freight and personnel by DAT in Australia and by the troop carrier units on their supply missions to Wau, Kubo, Bena Bena, and particularly to Tsili Tsili, a base entirely dependent upon air transport for its existence. When landing strips were available, air supply, although somewhat dependent upon the whim of the weather, was highly satisfactory. This was particularly true when the troop carriers could

complement their freight-carrying activities by evacuating the sick and wounded. But when ground forces were dependent upon "biscuit-bombing," difficulties multiplied. Colonel MacKechnie, analyzing the results of supply-dropping to units of the 162d Regiment, concluded that it was both undependable and wasteful of both supplies and manpower and should be resorted to only in the greatest emergency. He stated that pilots had difficulty in locating dropping grounds and in dropping supplies on them, that recovering of supplies dropped without parachutes varied from 40 to 75 per cent, but that ammunition parachuted to the ground averaged from 85 to 95 per cent recovery. It was also wasteful of personnel, according to MacKechnie, since provisions had to be made to recover the supplies, establish dumps, and distribute the rations and ammunition to the troops. But even in this rather unfavorable report, MacKechnie admitted that one infantry battalion and one battery of 75-mm. howitzers had been supplied entirely by dropping for a period of five weeks.[7]

Another form of cooperation in which the Fifth Air Force was generally successful was in coordination with the landings carried out by the Seventh Amphibious Force. This was a new experience and required the testing of new methods of fighter cover and of supplementary bombing and strafing attacks. The planning staffs worked well together as the success of the Finschaven operation, planned and carried out in little more than five days, demonstrated. Moreover official Navy reports indicated an appreciation of the difficulties of providing continuous fighter cover, and commended the efforts of the Fifth Air Force in this regard, particularly those of the fighter controllers aboard the Reid.[8]

The principal complaint directed against the air command by those participating in amphibious landings was the lack of aerial photographs. For example, infantry battalions or companies seldom had any aerial photos, and what is more, even the 162d Regiment on several occasions had no pictures of important areas of operation. The Navy, also, believed that this function of the Fifth Air Force was being neglected. Following the Finschaven landing, a naval report stated that beach photography which should have been one of the first air force responsibilities in a joint operation had not yet been afforded the priority or technical study necessary, and that the Fifth Air Force had insufficient means to produce suitable pictures in time for proper study of an objective. This report pointed out that the only unit in the Southwest Pacific trained and equipped to make photographs useful for amphibious planning was the 8th Photo Squadron, that its commitments in other fields of photo reconnaissance permitted the furnishing of only a small fraction of the pictures necessary for planning, and that it had only one plane equipped for taking beach pictures.[9]

These and other minor complaints, however, were insignificant when compared with the Allied victories on Huon Gulf. The successes had made possible what General MacArthur considered the chief purpose of his offensives: the creation of advanced bases for land-based air power. With the cooperation of engineer troops, ANGAU officers, Australian patrols, natives, and other scouts who ventured into territory sometimes within gunshot of the enemy, an entirely new series of bases was established on New Guinea and near-by islands. ADVON still retained its headquarters at

Port Moresby; Milne Bay was still an important staging base; but neither of these points could be considered in the forward areas. From Milne Bay a series of Allied bases at Goodenough, Kiriwina, and Woodlark islands extended into the Solomon Sea in the direction of Japanese-held New Britain. From Port Moresby the main channel of communication went to Dobodura. But even that extensive and rapidly developed headquarters of the First Air Task Force, with its three airfields* and seven runways, had fallen behind the line of advance. One hundred and fifty miles to the northwest, Tsili Tsili, headquarters of the Second Air Task Force, had been hastily constructed for the express purpose of contributing to operations necessary for the capture of Lae. It was a dry-weather base, and had to be evacuated before the rainy season, but fortunately the campaign progressed rapidly enough so that when the September rains began, the units at Tsili Tsili could move forward, this time to Nadzab. Thus by the first of October, engineers again were improving runways and building taxiways and dispersal facilities to develop Nadzab as the new base for the Second Air Task Force. Others, meanwhile, were pushing up the Markham Valley first to Kaiapit and then to Gusap, destined to become the base of units attached to still another air task force.

Living conditions at these bases naturally varied with the length of time that units had been in the area. Life at Tsili Tsili, for example, was described as "rugged," but at Dobodura, there had been numerous changes for the better. Tents which at first were on the ground had been raised at least three feet; mess halls were built with cement floors; and permanent dispensaries and water towers were constructed. The incidence of

* Horanda, Borio, and Embi.

disease, which early in the year had been rather high, rapidly decreased during the summer. More emphasis on control methods contributed to this improvement. The 13th Malarial Control Unit, after its arrival at Dobodura in August 1943, drained mosquito-breeding areas, gave lectures and demonstrations, and formed antimalaria units within each organization. Recreational facilities at Dobodura were also improved. There was a softball league supplemented by provisions for volleyball and badminton. Movies were generally held three times weekly, and occasional USO shows provided highly acceptable entertainment. For example, late in August, the 49th Group enjoyed the third USO show in its "Zamboogie" theater. Harry Ross, a former night-club master of ceremonies, the Reese Brothers, and Hal Gustavison, an accordion player, entertained about 3,000 soldiers for an hour. There were some complaints when it was learned that Metropolitan Opera stars were to provide the next USO entertainment on 17 September, but Lansing Hatfield, base baritone, and Edwin MacArthur, conductor, pianist, and accordion player, electrified the audience with their first number. No entertainment at the "Zamboogie," according to the unit history, was more appreciated or met with more enthusiasm.[10]

Not only at Dobodura, but throughout the theater living conditions had improved. The delivery of mail, if properly addressed, was superior, and V-mail was received at most units in New Guinea within 10 to 14 days of its posting. The men were payed promptly, although money was of such slight importance in the forward areas that it was usually not drawn more than once every three or four months. By late summer, the all-important subject of food was viewed with more enjoyment. Food and nutrition

officers had worked wonders. They organized mess-management teams, and succeeded in providing fresh meats and vegetables in increasing amounts. Fresh milk, however, was not provided in the forward areas, and there still was almost universal complaining about dehydrated foods.[11]

The health of officers and men of the Fifth Air Force varied between the two extremes, generally depending upon the length of time spent in New Guinea. Medical records showed that between 1 June and 31 August an average of 18.24 patients a day were admitted to sick report per 1,000 officers and men in the Fifth Air Force. There was a daily average of 62.07 patients in hospitals (1.1 per 1,000 men in the air force) and an average of three men a day were evacuated to the United States for medical reasons.[12]

In spite of medical precautions, and the general reduction of the incidence of malaria, dengue, and the diarrheas, the resistance of men to disease in some of the units was low. Extended service in the tropics was probably in part responsible for this. For example, the average loss of weight of those transferred to the tropics was 10 pounds. Unit medical reports were particularly disturbing. The surgeon of the 46th Service Group stated: "The health of this command is now approaching a problem status. On occasions I have noted lower blood pressure anemia in about twenty-one per cent, and poor heart muscle tone in thirty per cent. These symptoms are not due in my opinion to specific diseases, but living over a considerable period under adverse and difficult conditions. This in time leads to carelessness with consequent innumerable accidents, bruises, lacerations, contusions, abrasions of parts of the body that cause loss of

a considerable number of man days. They simply do not care what happens being in a state of mental fatigue." [13]

This condition, generally known as combat fatigue, was one of the most critical personnel problems in the Southwest Pacific. It was apparently caused by any number of factors, including considerations of food, recreation, and physical condition. The morale of combat crews, for example, was improved when new and better equipment began to flow with some regularity to the theater, when they were given a portion of whiskey upon returning from combat, and when they were assured of awards for participating in a certain number of missions. But more important, perhaps, than any of these factors was homesickness together with the absence of a definite rotation policy. Without a set goal combat crews who flew in a torrid climate characterized by frequent rains and poor visibility became nervous and depressed. With the inconsistent replacement policy of the previous spring and early summer, General Kenney had no other resort than to keep some crews flying until they had burned out no matter how many combat hours they had flown. The crews, however, did get periodic leaves to Australia, and with the assurances of more replacement personnel, conditions improved. There was even some hope of reaching the goal which Kenney had set of sending his crews home when they had flown 300 combat hours. [14]

The state of mind of air crews was far better than that of ground and service personnel. General Kenney frequently warned the War Department of the dangers of leaving men too long in the tropics. Late in July, he pointed out that with a ground crew replacement rate of 1½ per cent, he

could not maintain unit strength, and added that the men who had been in New Guinea for a year were becoming tired and listless. Actually the 1½ per cent replacement rate was calculated to meet loss replacements only, and there had been no provision made for a rotation policy. Furthermore, little hope was held out for an early improvement. General Arnold informed Kenney on 31 August that "the manpower situation is so critical that industrial progress is threatened and increase in troop basis will be most difficult to obtain." [15]

The lack of a rotation policy was reflected on 29 July in the following extract from a directive signed by General MacArthur: "The necessity for an indefinite period for using all available shipping for the transportation to this theater of additional units and of replacements to maintain the strength of the command will operate to prevent the return of individuals or units to the United States under any rotation policy or at the end of any specified period of duty. Except for the physically unfit, for air crew personnel returned under a special policy, and for personnel definitely unqualified for duty in the command, personnel can be returned only under the most exceptional circumstances." [16] This directive was a depressing blow to the many ground and service personnel who had been in a combat theater for more than a year. A medical report of the 565th Aircraft Warning Battalion showed that the number of men on sick call increased 50 per cent after learning of the content of the directive, and in general throughout the theater "the personal outlook [of the men was] extremely depressing, and their morale low." [17]

Since there seemed little immediate chance of providing definite rotation, various efforts were made to alleviate the situation in the

theater. Perhaps the most important of these was the adoption of a plan which permitted enlisted men to have a furlough in Australia. This policy had varied from time to time, but in general, one week's furlough (exclusive of travel) was allowed for every six months in New Guinea. The existence of a policy, however, did not necessarily mean that all enlisted men would automatically obtain a furlough. "The military situation" and the lack of transportation were inconvenient obstacles. Indeed it was so difficult to obtain transportation from New Guinea to Australia that a member of a ground crew or a service unit could rarely expect his seven days until he had served for 10 months in New Guinea. Even then he could go only to certain specified areas, patrolled by MP's. Sydney was a favorite furlough area, but few could obtain transportation to that distant city. Another leave area was at Camp Mackay in northern Queensland. This camp had been constructed purposely for recreation and was well stocked with food and beer, but its construction was received with little more than moderate enthusiasm by enlisted men, principally because of the scarcity of girls.[18]

War weariness among ground crews and service personnel was probably the most serious weakness within the Fifth Air Force. In general, however, General Kenney's organization was a well-commanded, smoothly running team. Indeed, Kenney believed that even war-weary veterans, who worked about half as hard as when they had first arrived in New Guinea, were accomplishing as much as before because with time they did fewer things wrong. Experience and ingenuity together with the infusion of new blood and the arrival of new equipment had multiplied the effectiveness of the air force in the course of a few months, and by July these factors had

begun to take effect. In June the Fifth Air Force had carried out 3,703 sorties, dropped 753 tons of bombs, and destroyed 1 plane on the ground and 36 in the air. In September it carried out 10,377 sorties, dropped 2,399 tons of bombs, and destroyed 82 planes on the ground and 223 in the air. From January through September, it suffered in casualties 219 officers and 269 enlisted men killed, 160 officers and 192 enlisted men missing, and 24 officers and 52 enlisted men wounded.* Lae, Salamaua, and Finschaven, points which had been captured by the Japanese in March of 1942, had been recaptured by the coordinated efforts of all forces in the Southwest Pacific. These were only three important bases of many held by the Japanese in New Guinea, New Britain, and the Netherlands East Indies. But with their capture, and with the forward advance of air units, there seemed little reason to doubt that such successes could be repeated. In the words of General Arnold: "The sledge hammer blows of air power were impressive examples of how enemy bases can be pulverized and target areas reduced to a shambles cutting sharply the cost of victory in lives and time." [19]

* Officers in these casualty figures include members of combat crews only.

GLOSSARY

AAFSAT	AAF School of Applied Tactics
AFAAP	Assistant Chief of Air Staff, Personnel
AFACT	Assistant Chief of Air Staff, Training
AFADS	Assistant Chief of Air Staff, Materiel and Supply
AFAEP	Assistant Chief of Air Staff, Plans
AFCAS	Deputy Commander, AAF and Chief of Air Staff
AFDAS	Deputy Chiefs of Air Staff
AFDPU	AAF Program Planning
AFRAL	Allocations Branch
AFRAS	Air Support Branch
AFRDB	Bombardment Branch
AFROA	AFROM ?
AFROM	Commitments Division, Operations, Commitments, and Requirements
AFRTH	Theater Branch
AFSAS	Secretary of Air Staff
AFSHO	AAF Historical Office
ANCAU	Australian-New Guinea Administrative Unit
CCS	Combined Chiefs of Staff
DAT	Directorate of Air Transport
DC/AS	Deputy Chief of Air Staff
JANAC	Joint Army Navy Assessment Commission
JCS	Joint Chiefs of Staff
JPS	Joint Planners Staff
MID	Military Intelligence Division
OPD	Operations Division, War Department General Staff

NOTES

Chapter I

1. Incl., ltr. of instructions to CG U.S. Army Forces in South Pacific Area, dtd. 7 July 1942, OPD 334 SPA, incl. effective 8 May 1942, in AAF Historical Studies: No. 9, The AAF in Australia to the Summer of 1942, App. 1; ONI Combat Narrative, The Landing in the Solomons, p. 5.

2. "Japanese Intentions in the Pacific," a report prepared by members of the JPS shortly after the 35th meeting, 16 Sep. 1942, in AP 370.5 Pacific Theater (9-5-42); extracts from minutes, JPS 38th and 66th Mtgs., 7 Oct. 1942 and 24 Mar. 1943, and Notes on JCS 95th Mtg., 6 July 1943, in AP 600.93 (10-3-42). The AAF staff planners disapproved of the removal of the OPD paper from the agenda in March stating that the Navy had held up a decision on the paper. "Common Boundaries of Various Strategic Areas," memo from Staff Planners Sec., Hq. AAF, 24 Mar. 1943, ibid. When General Marshall suggested that General MacArthur be given operational control of the entire campaign to regain control of British New Guinea, Admiral King countered with a proposal placing MacArthur in operational control but with Admiral Nimitz in command of the entire Pacific including the Southwest. Notes on JPS 54th Mtg., 13 Jan. 1943, in 370.5 Pacific Theater (9-5-42). The following are briefed versions of messages received by the War Department from the Southwest Pacific. The originals were not available: "That visit to installation S & SW Pacific that Navy control of Army operations unsound. That Kenney doing good job but that Harmon is handicapped. Navy builds roads, naval bases and neglect build up air power. Air installations at Cactus is a national disgrace. Recommend that Kenney be appointed CG of air in Pacific and direct 5, 6, [7?] and 13 Air Forces." CM-IN-4047 3-8-43, by Lindsay, #1655, in Super Duper. "In short MacArthur to be CINC Pacific. Nimitz be under CINC. Harmon and Emmons to be under and responsible to CINC. Halsey remain same as now for US fleet to S & SW Pacific. Kenney to be CG of air and as air and as air commander have 5, 6 [7?] & 13 AF under CINC. Lindsay states above frame work of command was approved at ANFA by CCS." CM-IN-4229 3-9-43, Lindsay and MacArthur to Marshall, #0740, in Super Duper file, AAF Message Center.

3. A subcommittee of the Joint Planners was appointed in March 1943 to draw up a chart showing "the currently agreed areas" of strategic responsibility. After a number of revisions the results was finally accepted by the JCS in July 1943, the boundary between the South and the Southwest Pacific remaining at the 159th meridian. Notes on

JCS 95th Mtg., 6 July 1942, and JCS 388/1, 10 Sep. 1943, in AP 600.93 (10-3-43).

4. USA American Forces in Action Series, Papuan Campaign, The Buna-Sanananda Operation, p. 6.

5. CM-IN-4574 (1-10-43), Brisbane to MAR, #C32, 10 Jan. 43, in Super Duper.

6. Ltr., Kenney to Giles, 27 Sep. 1942, in AAG 312.1-E, Opns. Ltrs.

7. Frank Kluckhohn, "Let's Try It, and Kenney Does," in New York Times, 3 Oct. 1944.

8. Fifth Air Force Units in Southwest Pacific Area Station List, 2nd ed., 13 Feb. 1943 /Station List, 16 Feb. 1943/.

9. CM-IN-4374 (10 Jan. 43), Brisbane to War, #C32, 10 Jan. 43, in Super Duper; ltr., Kenney to Arnold, 22 Jan. 1943, in AAG 312.1-B, Opns. Ltrs.

10. Ibid; Station List, 16 Feb. 1943.

11. Ibid; AAF Historical Studies: No. 17, Air Action in the Papuan Campaign, App. 4; ltr., Kenney to Arnold, 22 Jan. 1943.

12. See n.11 above; Form 34 for January 1943.

13. Ibid; CM-IN-12053 (26 Jan. 43), Brisbane to MAF, #123, 25 Jan. 43; ltr., Kenney to Arnold, 28 Jan. 1943.

14. Interview with Maj. De Forest Van Slyck, 16 Mar. 1943, in A-2 lib.; Form 34 for January.

15. Ltr., Kenney to Arnold, 28 Jan. 1943; 46th Troop Carrier Sqn., history I; 317th Troop Carrier Gp., history.

16. Col. James C. Van Ingen, "Communications in New Guinea," in AAFSAT Intelligence Reports, #16, Oct. 1942; interview with Major Van Slyck. The first aircraft warning unit to arrive was the 6th Reporting Platoon which arrived at Port Moresby on 9 September 1942 and was stationed in the mountains at Koitaki about [illegible] miles northeast of the town. It had an SCR 516 with a maximum range of about 90 miles. The 4th Reporting Platoon arrived on 7 October without a radar. It was given a short-range SCR 288 which was modified to meet the requirements of a medium-range set and in about a month moved to Cape Rodney, on the coast about 100 miles east of Port Moresby. The 5th Reporting platoon also arrived on 7 October and was sent to Barakau Point, 90 miles southeast of Port Moresby. The 7th Reporting

Platoon, equipped with a modified SCR 268 (MAWD), arrived at Port Moresby on 13 October and was sent 70 miles northwest to Yule Island. (565th Signal AW Bn. history.) The first radar set in the Buna area was an Australian set flown in during December. It was not particularly useful, but was employed to direct fighters. Lt. R. J. Wood, "Radar in New Guinea," in AAFSAT Intel. Rpts., #22, Feb. 1944.

17. 49th Fighter Gp. history, 1943; Brisbane to WAR; CM-IN-12388 (27 Jan. 43), #C246, 26 Jan. 43; CM-IN-13101 (28 Jan. 43), #C252, 27 Jan. 43; CM-IN-13347 (28 Jan. 43), #C267, 28 Jan. 43.

18. The figures for planes destroyed are taken from the official operations report. CM-IN-8329 (19 Jan. 43), Brisbane to WAR, #C169, 18 Jan. 43. Form 34 states that one B-17E and two B-17F's of the 403d Sq., 43d Group were destroyed. The unit history of the 80th Fighter Squadron, 10 Jan. 1942-31 Jan. 1944 states that only one P-39 was destroyed.

19. Ibid; 8th Fighter Control Sq. history.

20. Interview with Major Van Slyck.

21. 4th Air Depot Gp. history; Maj. Bernard M. Donnelly, Flight Surgeon's Report of Medical Activities in the SWPA, 27 Feb. 1943, and Maj. Jon T. Klausner, 22d Gp. Flight Surgeon, Report for History of Medical Department, 23 Jan. 1943, in AAG 726.1 Bulk, Reports of the Surgeon General; Form 34, 8th Fighter Sq., 17 to 23 Jan. 1943; 1156th M. Co. (Avn.) Det. history; ltr., Col. Bascom L. Wilson, 5th AF Surgeon, to the Air Surgeon, AAF, 1 Mar. 1943, in AAG 726.1 Bulk, Reports of the Air Surgeon.

22. Ibid; Form 34, 8th Fighter Sq., 17 to 23 Jan. 1943; Hq. and Eq. Sq., 27th Air Depot Gp. history, 5 Feb. 1942; 35th Fighter Control Sq. history; 80th Fighter Sq. history, Chaps. 1-4.

23. Regulations which were published in the 80th Fighter Squadron were probably expected to refer to all units at Milne Bay, "ordering all pilots returning from hospital after a siege of malaria to remain off flying status for one month, produce three negative blood smears, and pass a form 64." Ibid. 8th Fighter Gp. history to 1 Feb. 1944; ltr., Wilson to the Air Surgeon, 1 Mar. 1943.

24. Ibid; The Marauder, a book about the 22d Bomb Group; 80th Fighter Sq. history; General Kenney's policy was to rotate his units between New Guinea and Australia as frequently as was strategically possible. Ltr., Kenney to Arnold, 23 Jan. 1943, in AAG 312.1-B, Cons. Ltrs. 8th Fighter Control Sq. history for 1943.

25. CM-IN-4597 (9 Feb. 43), Brisbane to CG AAF, #A225, 9 Feb. 43; memo to Dir. Mil. Pers. by Lt. Col. Roger L. Shearer, Office of Cable Sec.,

10 Feb. 1943, attached to above cable; CM-OUT-4777 (14 Feb. 43), Hq. AAF, AFAAP to CINC SWPA, #1143, 13 Feb. 43; CM-OUT-6000 (17 Feb. 43), Hq. AAF, A-1 to CINC SWPA, 17 Feb. 43. MacArthur had been given permission to promote some of the second lieutenants of the 19th Group above the W/O in the fall of 1942. Air Action in the Bataan Campaign, n. 13, p. 128. Almost all unit histories of this period, both of combat and service units, complain of the promotion and leave policy or lack of policy. The following plan was proposed to MacArthur as a continuance of a policy for relief of war-weary crews: to send 10 trained A-20 crews in February and 10 in March to replace an equal number in the theater. (CM-OUT-10418, CPD to CINC SWPA, #741, 29 Jan. 43) MacArthur replied that only 15 A-20 crews could be released in February and March, but that 10 should be sent from the United States in February and 5 in March. CM-IN-3749 (7 Feb. 43), Brisbane to AAF, #0370, 7 Feb. 43.

26. Ltr., Wilson to the Air Surgeon, 1 Mar. 1943. Osmar White in his thoughtful book, Green Armour, stresses the unpreparedness of the American soldier for jungle warfare.

27. Ltr., Wilson to the Air Surgeon, 1 Mar. 1943; Resume of Flight by the 7th Bomb Gp. to Java during 1942, in AAG 726.1 Bulk, Reports of the Air Surgeon.

28. Report by 38th Bomb Gp. Surgeon to Chief Air Surgeon, 5th AF, 15 Mar. 1943; Report by 3d Bomb Gp. Surgeon to the Surgeon, V Bomber Comd., 23 Mar. 43; Report by Hq. and Hq. Sq. Surgeon V Bomber Comd., 23 Mar. 1943; Report by 43d Bomb Gp. Surgeon to Surgeon, 5th AF, 30 Mar. 1943; and Report by 90th Bomb Gp. Surgeon to Surgeon, V Bomber Comd., 30 Mar. 1943, all in AAG 319.1, Reports Misc. Australia; Maj. Edward F. Hoover, "A-3 in the SWPA," AAFSAT Intel. Rpts., #17, Oct. 1943.

1. FM 100-20, Command and Employment of Air Power, 21 July 1943.

2. General MacArthur later stated that this plan had been outlined in his radio 031012 to the War Department, dated 8 July 1942. CM-IN-4574 (1-10-43), Brisbane to WAR, #032, 10 Jan. 43, in Super Duper.

3. CCS 23th Mtg. 13 Aug. 1942; Notes on JCS 25th Mtg., in AP 381 (6-24-42).

4. CM-IN-3264 (3 June 42) GHQ SWPA to C/S, #913, June 43; CM-IN-7976 (24 June 42), GHQ SWPA to AGWAR, #243, 24 June 42. For the details of a plan prepared by AC/AS Plans in June 1942 for the capture of Rabaul, see Air Action in the Papuan Campaign, n. 5, p. 104.

5. The Landing in the Solomons, pp. 1-15; "Japanese Intentions in the Pacific," a report prepared by members of the JPS shortly after the 25th meeting, 16 Sep. 1942; Air Action in the Papuan Campaign, pp. 16-17.

6. JCS 96, 31 Aug. 1942, in AP 381 Pacific Theater (8-31-42).

7. JCS 97/3, 15 Sep. 1942, in AP 370.5 Pacific Theater (9-5-42).

8. The AAF in the South Pacific to October 1942, p. 107 ff., prepared by AAF Historical Office. BOLERO was the project to build up the United Kingdom as a base for the continental assault.

9. CCS 94, 24 July 1942, in AP 381 (6-20-42). The following was the suggested number of planes to be transferred according to JPS 48, 28 Aug. 1942, in AP 370.5, Pacific Theater, (9-5-42):

	South	Southwest
3 gps. Heavy bombers	75	70
2 gps. Medium "	57	57
2 " Light "	13	101
2 " Fighter "	25	135
2 " Observation	13	155
4 " Transport		208

10. JCS 33d Mtg., 15 Sep. 1942; Brief of JCS 97/2, 15 Sep. 1942; JCS 112/1, 14 Oct. 1942; JCS 36th Mtg., 6 Oct. 1942; and JPS 38th Mtg., 7 Oct. 1942, all in AP 370.5, Pacific Theater (9-5-42).

11. See The AAF in the South Pacific to October 1942.

12. Ltr., Arnold to Kenney, 6 Dec. 1942, in AAG 312.1-A, Cons. Ltrs.; ltr., Kenney to Arnold, 23 Jan. 1943, in AAG 312.1-B, Cons. Ltrs.: JCS 97/8, 5 Jan. 1943, in AP 370.5, Pacific Charter (9-5-42).

13. CM-IN-4574 (10 Jan. 43), Brisbane to MAC, #C32, 10 Jan. 43, in Super Duper.

14. Ibid.

15. JCS 54th Mtg., 12 Jan. 1943; CCS 56th Mtg., 14 Jan. 1943; CCS 60th Mtg., 1 Jan. 1943.

16. Ibid. Admiral King indicated that Rabaul might possibly fall in May.

17. CCS 155, 18 Jan. 1943; CCS 163, 22 Jan. 1943; CCS 170/1 and 170/2, 27 Jan. 1943.

18. In AP Elkton Plan, 23 Feb. 1943.

19. Ibid.

20. Estimated enemy air strengths as of 12 March 1943: New Britain--61 fighters, 72 bombers, 3 flying boats, 9 float planes, 8 transport and observation planes; New Ireland--9 fighters, 41 bombers, 4 float planes, 6 observation and transports; New Guinea--9 fighters, 5 bombers: Solomons--73 fighters, 33 bombers, 14 flying boats, 29 float planes, 4 observation and transport planes: Timor--25 fighters, 20 bombers, 3 float planes, 4 observation and transport planes; Ambon--13 fighters, 9 bombers, 3 flying boats: Celebes--53 fighters, 41 bombers, 12 float planes, 12 transport and observation planes. CM-IN-2197 (13 Mar. 43), Brisbane to MAC, #Q4981, 13 Mar. 43.

21. General Kenney had already urged that the additional units requested by MacArthur for the Huon Peninsula campaign be sent to his air force. Ltr., Kenney to Arnold, 23 Jan. 1943, in AAG 312.1-B, Cons. Ltrs.

22. JCS 233/4, 27 Mar. 1943.

23. Ibid.

24. Extract from Minutes JCS Mtg., 21 Mar. 1943. Marshall answered King's objection to the omission of any reference to timing by saying that MacArthur feared that large-scale operations in the Solomons might require sending some of his own air forces for cooperation when they could not be spared. Marshall said, however, that the commanders on the ground should take every opportunity to push forward when Jap resistance was weak. He called King's attention to a telegram just received from Halsey which indicated that the latter had no intention of remaining idle, that he would continue to exert pressure by land-based aviation, and would be prepared to move into New Georgia and Bougainville if the enemy forces were weakened sufficiently so that a major operation would not be necessary. Ibid.

25. JCS 238/5/D, 23 Mar. 1943.

26. Extract from Minutes, JPS 34th Mtg., 13 Jan. 1943, in AP 370.5 Pacific Theater (9-5-42).

27. JPS 33/3, 16 Dec. 1942. Future deliveries to the NEI were to be 5 B-25's each in May, July, and September, 10 in November, and 11 in December. These were to be attrition replacements since no planes for new NEI units, it was decided, could be provided. Australia had planned to expand the RAAF to 71 squadrons. She accepted the decision as to 45 squadrons by 31 December 1943, but complained that she had not been given any indication of long-range plans, and that allocations of aircraft were made on availability rather than on any scheme of building up the RAAF to a balanced force. CCS 142/1, 21 Jan. 1943, in AP 452 (4-9-42); CCS 283/1, 29 July 1943, in AP 452 (10-2-42) Sec. 2.

28. JCS 233/1, 13 Mar. 1943.

29. Ltrs., Baker to Arnold, 19 Mar. 1943, and Stratemeyer to Baker, 23 Mar. 1943, in AAG 319.1-B, Conns. Ltrs.

30. JCS 278/3, 21 Mar. 1943. This was also radioed to MacArthur. South Pacific forces were to be reinforced as follows: increase both heavy groups to 4 squadrons, 12 planes each; increase medium group to 57 planes; 2 Troop Carrier Squadrons would have 13 planes each, and 1 photo squadron 13 planes, all in the second quarter. In the third quarter, the night fighter detachment would be increased to a squadron of 12 planes, and an observation squadron of 21 planes would be added. In the fourth quarter, both fighter groups would be increased to 4 squadrons 25 planes each; and 1 photo squadron of 13 planes would be added. CM-OUT-8736 (23 Mar. 43), JCS to Brisbane, 23 Mar. 43, in Super Duper.

31. Ltr. Arnold to Kenney, 30 Mar. 1943, in AAG 319.1-B, Conns. Ltrs. The heavy groups were to be equipped with 43 planes; the medium and light groups, 57 planes; the fighter groups, 75 planes; and the troop carrier groups, 75 planes. The ground force reinforcements were to consist of the 1st Cavalry Division in the second quarter, and an infantry division in the third quarter. CM-OUT 8736 (23 Mar. 43), JCS to Brisbane, 23 Mar. 43, in Super Duper.

32. Ltr., Stratemeyer to Baker, 6 Apr. 1943, in AAG 319.1-B, Conns. Ltrs. Among those participating in this Pacific Conference were Maj. Gen. R. K. Sutherland, C/S of the SWPA, Rear Adm. R. A. Spruance, C/S and Deb. CINCPAC, and Capt. Miles F. Browning (USN), C/S CO SOPAC. JCS 233/2, 20 Mar. 1943. This statement of the Pacific conferees was actually an assurance that portions of an original directive of the JCS, dated 2 July 1942, were being carried out.

33. Ltr. Kenney to Arnold, 27 Jan. 1943, in AAG 710.1-B, Opns. Ltrs.; CM-IN-888 (2 Mar. 43), Brisbane to CG AAF, #23510, 2 Mar. 43.

34. R&R, Gen. Arnold to Gen. Stratemeyer, 22 Feb. 1943, in Air AG SAS 452.1 X, Sec. II.

35. CM-OUT-8736 (23 Mar. 43), JCS to Brisbane, 23 Mar. 1943, in Super Duper; ltr., Arnold to Kenney, 30 Mar. 1943, in AAG 710.1-B, Opns. Ltrs.

36. R&R's, AFOAS to AC/AS A-3, 14 Dec. 1942; AFACT to AFOAS, 17 Dec. 1942; AFDAS to AFACT, 20 Dec. 1942; A-3 to Dep. C/AS, 6 Jan. 1943, in AAG 452.1 C, Bombers. Members of the 22d Group objected to the B-25-'s as replacements: "The only real rub here is the question at least 90% of the personnel has asked me, 'why and when do we get some more ships.' The maintenance crews prefer to work on B-26's and the flying personnel swear by them. Yet they are being wasted on B-25's. These crews, both maintenance and flying, have come up with the ship and know all the tricks of maintaining and flying them . . . , to the last man they want B-26's." Report by Thomas B. Walter, Office of the Engineering Officer, 70th Bomb Sq., 8 May 1943, in AFSHO files, Factory Representatives, #5223.

37. R&R, A-3 Div., Allocation Sec., to Dir. of War Orgn. and Movement, 5 Jan. 1943 in AAG 452.1 Bombers; CM-IN-5762 (13 Jan. 43), Brisbane to WAR, #0109, 12 Jan. 43; CM-OUT-2619 (8 Feb. 43), Ho. ASC to CINCSWPA, #995, 7 Feb. 43; R&R Allocations Br. to Theater Br., AC/AS OC&R, 1 Apr. 1943 in 452.1 B Bombers. R&R's Stratemeyer to Dir. Mil. Requirements, 25 Mar. 1943; Arnold to Stratemeyer, 23 Mar. 1943; AC/AS A-3 to Air Support, 26 Mar. 1943, in AAG 452.1 C Airplanes. Comment 13 reads: "In order that this matter may be satisfactorily concluded, is it possible to get a simple answer to General Arnold's simple original query namely: 'Is there a possibility of a swap whereby General Kenney can get A-20G's that the people in North Africa do not particularly desire?'" R&R, Dep. C/AS to AC/AS OC&R, Allocations and Programs Div., 4 May 1943. The reply in Comment 14 was: "Certain allocations of A-20G aircraft, previously set up for the 13th Air Force, now appear unnecessary due to the number of this type aircraft in or enroute to that theater. However, it also now appears that not all the aircraft so allocated will be available in the months previously indicated. Such portion of these aircraft as do become available can and will be allocated to General Kenney." R&R, Allocations and Programs, AC/AS OC&R to Dep. C/AS, 5 May 1943, in AAG 452.1 C Airplanes.

38. Combat Analysis Study #5, "Japanese Aircraft Vs. U.S. Aircraft in Aerial Combat, Southwest Pacific Theater," 5 June 1943.

39. Ltr., R. L. Jaeger to A. L. Kornoff, 3 Jan. 1943, in Factory Rep. #1943; Reported by Henry J. Madden to F. L. Kearney, 22 Dec. 1943, in Factory Rep. #4227.

40. In the original schedule P-38G's were to be sent until Mr with P-38H's thereafter. CM-CUT-5665 (16 Jan. 43), AFRCM to CINC SWPA, #390, 16 Jan. 43, CM-CUT-3523 (11 Jan. 1943), AFRCM to CINC SWPA, #339, 10 Jan. 1943; CM-IN-7236 (16 Jan. 43), Brisbane to WAR, #A79, 15 Jan. 43; CM-CUT-6395 (19 Jan. 43), AFRCM to CG SWPA, #425, 19 Jan. 43; 1st Ind. (ltr. missing) Ho. AAF, Washington, D.C. sgd. Strategemeyer to CG 5th AF, 2 Dec. 1943, in Air AG SAS 452.1 X, Sec. II. Kenney already had two twin-engine squadrons. He wanted to form another with the P-38's promised at this time, but he was warned that replacements for only two twin-engine squadrons could be sent. CM-CUT-5963 (17 Feb. 43), DPD to CINC SWPA, #1251, 17 Feb. 43; CM-CUT-9033 (25 Feb. 43), CPD to CINC SWPA, #1491, 24 Feb. 43. P-38's could now be ferried to the Southwest Pacific. The first to reach Australia in this manner (probably in January 1943) went by way of Hawaii, Hilo, Christmas, Canton, Samoa, Nandi, New Caledonia. Report by AIC to Brig. Gen. H. J. Hanley Jr., Dep. C/S, 4 Feb. 1943, in Air AG, SAS 452.1 X, Sec. II.

41. Ltr., Arnold to Kenney, 30 Mar. 1943, in AAG 312.1-B Cons. Ltrs.

Chapter III

1. ASC interview with Capt. J. T. Donnelly, 4 Oct. 1943 in A-2 lib.

2. Interview with Maj. C. W. Diehl, 8 July 1943; and with Mr. Clarence F. Barnes.

3. CM-IN-887 (1-2-43), Brisbane to MAR, #XA3819, 2 Jan. 43; CM-OUT-4932 (14 Feb. 43), Hq. ASC to CINC SWPA, #1161, 11 Feb. 43; CM-IN-6542 (13 Feb. 43), Brisbane to ASC PFO, #XA1359, 12 Feb. 43; CM-IN-6568 (13 Feb. 43), Brisbane to ASC PFO, #XA1423, 12 Feb. 43; CM-IN-8530 (17 Feb. 43), Brisbane to MAR, #XA1562, 16 Feb. 43; CM-IN-9636 (19 Feb. 43), Brisbane to ASC PFO, #XA1518, 18 Feb. 43; CM-IN-10106 (20 Feb. 43), Brisbane to ASC PFO, 19 Feb. 43.

4. 80th Service Sq. history; CM-IN-5004 (8 May 43), Brisbane to ASC PFO, #XA4052, 8 May 43; CM-OUT-6211 (14 May 43), AC/AS OCAR to CINC SWPA, #3749, 14 May 43; CM-IN-1307, Brisbane to ASC PFO, #XA6019, 2 July 43. On the last message, Arnold had noted, "Echols take action to correct," and Stratemeyer had added, "Correct this immediately." ASC replied that every effort was being made to remove winterization equipment from bombers, but that the deciding factor had been Kenney's earlier request that devinterization should not take place in the United States if such work would delay deliver. CM-IN-4587 (7 July 43), ASC PFO to Brisbane, #056, 7 July 43. The reply to the request on removal of winterization equipment from C-47's was that "upon arrival in your theater, the planes should have removed such winterization parts as deemed necessary by you and you should place the parts in proper storage. CM-IN-508 (1 Aug. 43), Brisbane to ASC PFO, #XA7191, 1 Aug. 43; CM-OUT-4918 (13 Aug. 43), AC/AS OCAR to CINC SWPA, #6734, 12 Aug. 43.

5. CM-IN-15240 (20 Aug. 43), Brisbane to CG AAF, #A1550, 20 Aug. 43; CM-OUT-592 (1 May 43), CG AAF to CINC SWPA for Kenney from Arnold and Marshall, #3380, 1 May 43.

6. Ltr., Brig. Gen. T. J. Hanley, Jr., AC/AS A-4 to CG ASC, 12 Sep. 1942; 1st Ind., ASC to CG AAF (AFADS), 13 Oct. 1942, in AAG 452.1, Repair-Maintenance of Aircraft-Overseas; Materiel Div., Memo Report #217, 20 Apr. 1943, in A-2 lib. The Australians were seriously considering the manufacture of C-47's. Kenney did not believe that any plane that could be flown across the Pacific should be manufactured in Australia. He argued that it would be "a serious mistake to split machine tools and raw materials between the two countries and expect maximum rates of production in both places." He preferred the idea of manufacturing P-47's in Australia since it would save much shipping space. Ltr., Kenney to Arnold, 27 Jan. 1943, in AAG 452.1 B, Pursuits. Arnold replied that he feared it would be impossible to get any combat aircraft in production in Australia within six months. Ltr.,

Arnold to Kenney, 19 Feb. 1943, in AAG 452.1 B, Pursuits.

7. Hq. ASC 5th AF, Circular Ltr. 42-8, 30 Oct. 1942, in Factory Representatives #1231; extract from report by Mr. W. C. Belsley to W. C. Gould, Allison Div., General Motors, /10 Feb. 1943/, in Factory Rep. #2386; memo #6, Hq. ASC 5th AF, 17 Mar. 1943, in Factory Rep. #3920.

8. AAF 201 files, Kenney.

9. The AAF in Australia, pp. 46, 103-105; V Air Service Area Comd. history, Jan. 1942-Jan. 1944.

10. Ibid; Station List, 14 July 1942; 4th Air Depot Gp. history.

11. Station Lists, 3 Nov. 1942 and 16 Feb. 1943.

12. V Air Service Area Comd. history.

13. Ibid.

14. Ibid; Station List, 3 Nov. 1942; 4th Air Depot Gp. history.

15. Ibid; GO #56, Hq. 5th AF, 24 Dec. 1943, in V Air Service Area Comd. history, Incl. 7.

16. 4th Air Depot Go history; V Air Service Area Comd. history. There were other service activities of importance on the mainland during this period. The 81st Air Depot Group in November 1942 was designated as the acting control depot for the Fifth Air Force. Its duties were to provide many of the supplies for the entire theater. As Depot No. 1, it was gradually relieved of some of its control functions in September 1943, but still was subject to the increasing demands of the Engineering and Production Control Section. Moreover many accessories and parts overhauled by the Production Control Section were requisitioned by other depots. 81st Depot Supply Sq. history. In September 1942, furthermore, an instrument shop was established at Melbourne for third echelon maintenance and factory overhaul of Norden bombsights. This shop was under the direct control of the Air Service Command Headquarters. Memo for Dir. of Bombardment by Maj. A. W. Schmitt, AAF Materiel Comd., Armament Div., Wright Fld., 14 Mar. 1943, in AAG 400-A, Australia.

17. History of the Fifth Air Force Service Comd. in New Guinea.

18. Ibid; 8th Service Gp. history.

19. 27th Depot Repair Sq. history.

20. Ibid.

21. History of the Fifth Air Force Service Comd. in New Guinea; CM-IN-5907 (13 Jan. 43), Brisbane to WAR, #0108, 12 Jan. 1943; CM-OUT-6220 (19 Jan. 43), MACPD to COMINO SWPA, #424, 16 Jan. 43. The ordnance sections had been requested by Kenney in October 1942. CM-OUT-2403 (7 Jan. 43), AFRCM to CINC SWPA, #175, 7 Jan. 43; CM-OUT-4366 (12 Mar. 43), Hq. AAF, AFRCM to CINC SWPA, #1913, 12 Mar. 43.

22. CM-IN-12485 (27 Jan. 43), Brisbane to ASC PFO, #XA361, 26 Jan. 43; CM-IN-3361 (4 Apr. 43), Brisbane to WAR, #Q7694, 3 Apr. 43; CM-IN-6121 (9 July 43), Brisbane to CG AAF, #XA6243, 8 July 43.

23. 4th Air Depot Gp. history.

24. Ibid.

25. V Air Service Area Comd. history.

26. RGR, Arnold to Meyers, 23 Mar. 1943, in Air AG SAS 452.1 X, Sec. II.

27. ASC interview with R. R. Jaeger, Bell Aircraft Factory Rep., 9 Sep. 1943; ltr., Jack Fox to F. H. Lyons, manager, Field Service Dept., North American Aviation, 2 Dec. 1942, in Factory Rep., #1000-1499.

28. Air Action in the Papuan Campaign, p. 42; 30th Service Sq. history.

29. Ibid; Air Action in the Papuan Campaign, p. 64; ltr., Jack Fox to North American Aviation, 15 Dec. 1942, in Factory Rep. #1592.

30. Ibid; CM-IN-5373 (9 Apr. 43), Brisbane to ASC PFO, #XA3193, 9 Apr. 43.

31. Ltr., Jack Fox to North American Aviation, 15 Mar. 1943, in Factory Rep. #3591. Fox said that fragmentation bomb racks were removed because there were insufficient frag bombs available, not that they were unsatisfactory. Demolition bombs of various weights were to be carried. Report by Jack Fox to Field Service Depot., North American Aviation, 4 Mar. 1943, in Factory Rep. #3412.

32. Air Action in the Papuan Campaign, p. 63; CM-IN-07306 (18 Oct. 43), Brisbane to WAR, #A818, 18 Oct. 42; Report by Ordnance Officer, 5th AF ADVON, 23 Jan. 1943, in AAG 400-A, Australia; CM-IN-10308 (24 Jan. 43), Brisbane to WAR, #A119, 24 Jan. 43; CM-IN-11259 (23 Feb. 43), Brisbane to CG AAF, #A308, 23 Feb. 43. Attached to this message was a memo to the Director of Base Services by Lt. Col. Roger L. Shearer quoting General Stratemeyer as having said: "Col. Copeland. Get out reply to this message. Lets get these fuzes to Kenney - rush -." Ltr., Eubank to H. H. Bemey, V Bomber Comd., 6 Mar. 43, in AAG 312.1 B, Cons. Ltrs; CM-OUT-3751 (11 Mar. 43), Hq. AAF, AFRBS to CINC SWPA #1359, 10 Mar. 43.

33. Air Action in the Papuan Campaign, p. 45; unrecorded interview with Col. William Hicks, Apr. 1945; interview with Col. John Davies, 9 Dec. 1942; GO #34, GHQ SWPA, 15 Sep. 1942. Kenney received a purple heart for his part in the development and employment of parafrags. Ibid.

34. CM-CUT-563 (2 Feb. 43), Hq. AAF, AFRAS to CINC SWPA, #809, 2 Feb. 43; CM-IN-2148 (5 Feb. 43), Brisbane to CG AAF, #A194, 4 Feb. 43; CM-CUT-3023 (6 Feb. 43), Hq. AAF, AFRAS to CINC SWPA, #946, 6 Feb. 43; CM-IN-3942 (8 Feb. 43), Brisbane to WAR, #A216, 8 Feb. 43; CM-IN-12618 (21 Apr. 43), Brisbane to WAR, #A693, 21 Apr. 43; CM-CUT-9329 (24 Apr. 43), Hq. AAF, CCMR to CINC SWPA, #2157, 22 Apr. 43; ltr., Kenney to Col. William L. Ritchie, CFD, 14 Apr. 1943, and ltr., Arnold to Kenney, /12 May 1943/, in AAG 312.1-B, Opns. Ltrs. Kenney insisted that the individually suspended bombs provided the following advantages over clusters: dispersion could be more accurately controlled; about 50 per cent more bombs could be carried in both the A-20 and the B-25; the vertically suspended bomb required less steel, labor, and shipping space. CM-IN-12745 (21 Apr. 43), Brisbane to WAR sgd. Kenney, #A694, 21 Apr. 43.

35. Report of Army Inspection of South Pacific Area during March 1943, in AAG 333.1-E, Inspections; ltr., Brig. Gen. B. E. Meyers, Dep. AC/AS MMD, 21 Apr. 1943, in AAG 400-A, Australia; interview with Maj. C. H. Diehl, A-4 V Bomber Comd., 8 July 1943; CM-IN-6277 (10 May 43), Brisbane to CG AAF, #A833, 10 May 43.

36. Report #3, Overseas Service Gp. #3, Hq. 43d Bomb Gp., Boeing Rep. Sec., 23 Dec. 1942, in Factory Rep. #1319; Form 34, 403d Bomb Sq., 24 to 30 Jan. 1943; Combat Evaluation Report by Hq. 5th AF, 25 Mar. 1943, in A-2 lib.; CM-IN-9421 (15 May 43), Brisbane to ASC PFO, #XA4239, 14 May 43; CM-IN-13177 (21 May 43), ASC PFO to Brisbane #ASC1651, 20 May 43.

37. Air Action in the Papuan Campaign, p. 55.

38. Ltr., Walter Illsley to Richard Gordon, Bendix Aviation Corp., 30 Jan. 1943, in Factory Rep. #2519; Report #20 by Walter Illsley to R. O. Gordon, Bendix Aviation Corp., 6 Mar. 1943, in Factory Rep. #3434; ltr., Fred Somes to R. O. Gordon, 6 Mar. 1943, in Factory Rep. #3019; Materiel Div. Memo Report #217, 20 Apr. 1943, in A-2 lib.; CM-CUT-1376 (1 Jan. 43), AFRDB to CINC SWPA, #101, 4 Jan. 43; CM-IN-5323 (11 Feb. 43), Brisbane to ASC PFO, #XA1323, 10 Feb. 43; CM-CUT-7528 (21 Feb. 43), Hq. AAF, AFRDB to CINC SWPA, #1382, 20 Feb. 43; CM-IN-12760 (25 Feb. 43), Brisbane to CG AAF, #22914, 24 Feb. 43; CM-IN-5725 (11 Mar. 43), Brisbane to ASC PFO, #XA2249, 11 Mar. 43; CM-CUT-2413 (16 Mar. 43), CG ASC to CG SWPA, #ASC097, 16 Mar. 43; CM-IN-885 (2 May 43), Brisbane to ASC PFO, #XA2340, 1 May 43.

39. Interview with Clarence E. Barnes. He reported that "the Executive officer or something of the 90th Group" objected to the ball turret because he claimed that it would change 'the flying attitude" of the B-24. He had convinced Kenney of this. According to Barnes, two squadrons of the 43d Group, later equipped with B-24's, "were crying their eyes out because they didn't have ball turrets." CM-OUT-1705 (4 May 43), Hq. AAF, OC&R to CINC SWPA, #3449, 4 May 43; CM-IN-2504 (6 May 43), Brisbane to CG AAF, #A814, 6 May 43. Attached to this cable, which quoted Kenney's statement to Emmons, is the following statement: "'Kenney is right.' Arnold."

40. CM-IN-5736 (9 May 43), ASC PFO to Brisbane, #ASC747, 9 May 43; CM-IN-8406 (13 May 43), Brisbane to ASC PFO, #XA4217, 13 May 43; CM-OUT-10260 (24 May 43), Hq. AAF, AC/AS OC&R to CINC SWPA, #4054, 24 May 43; memo for Gen. Arnold by Maj. Gen. Barney M. Giles, 28 May 1943, in AAG 313.1-A, Cons. Ltrs.; CM-IN-4267 (7 June 43), Brisbane to CG AAF, #A1025, 7 June 43; CM-IN-11706 (17 July 43), Brisbane to ASC PFO, #XA6581, 16 July 43; CM-OUT-8421 (21 July 43), Hq. AAF, AC/AS OC&R to CINC SWPA, #5960, 20 July 43.

41. CM-IN-19780 (26 Aug. 43), Brisbane to CG AAF, #XA9163, 26 Aug. 43; CM-IN-8470 (11 Sep. 43), Brisbane to CG AAF, #XA8771, 10 Sep. 43. The Thirteenth Air Force retained the ball turret, but obtained the proper center of gravity location by sacrificing the tail turret and putting in a twin flexible installation. The Fifth Air Force considered the tail turret indispensable. ASC interview with Capt. J. E. Donnelly, Armament Br., 4 Oct. 1943.

42. CM-OUT-6743 (14 Sep. 43), C/AS to CINC SWPA, from Arnold to Macarthur for Kenney, #7286, 14 Sep. 43; CM-OUT-7173 (15 Sep. 43), Hq. AAF, OC&R to CINC SWPA, sgd. Arnold, #8011, 14 Sep. 43.

43. CM-IN-13523 (18 Sep. 43), Brisbane to WAR, sgd. Kenney, #A1748, 17 Sep. 43.

44. Report of Army Inspection of the South Pacific Area during March 1943, in AAG 333.1-E, Inspections.

Chapter IV

1. Osmar White, Green Armour, pp. 16, 147.

2. Ibid, 83, 144-149.

3. Ibid.

4. Interview with Maj. De Forest Van Slyck, 26 Mar. 1943; ltr., Harry W. Booth to D. S. Sprague, Douglas Aircraft Co., 19 Feb. 1943, in Factory Rep. #3269.

5. Hq. Allied Air Forces SWPA, Intelligence Summary #65, 1 Jan. 1943, and #66, 5 Jan. 1943.

6. CM-IN-2986 (7 Jan. 43), Australia to WAR, #059, 7 Jan. 43; CM-IN-3448 (8 Jan. 43), Port Moresby to WAR, 067, 8 Jan. 43; CM-IN-4711 (11 Jan. 43), Brisbane to WAR, #071, 9 Jan. 43.

7. Allied Land Forces, SWPA, "The History of the Lae-Salamaua Garrison," in Cons. Br. AGO, (3477) 91-22.6; 35th Fighter Gp. history; 49th Fighter Gp. history, 1943. The figure of "approximately 50 planes" as given in Air Action in the Papuan Campaign, p. 61, is probably conservative, but it seems to be as accurate a figure as a compilation of the cables can give. On the other hand, a general summary of the action claims that 69 aircraft were destroyed, 38 probably destroyed, and 40 damaged. Intel. Sum. #68, 12 Jan. 1943. For a good summary of all the convoy actions during the fall and early spring see The Bismarck Sea Action, pp. 22 ff., prepared by AAF Historical Office.

8. Operations reports in SWPA cables. In addition to the 100 B-17's, there were two squadrons of "heavy bombers" which carried out the mission of 5 January. Intel. Sum. #72, 26 Jan. 1943.

9. At least one of these squadrons was the 64th of the 43d Bomb Group. GO #86, Hq. 5th AF, 12 May 1943. CM-IN-2554 (5 Jan. 43), Brisbane to WAR, #050, 6 Jan. 43.

10. Combat Diary of the 63d Sq.

11. Allied Land Forces, SWPA, "The History of the Lae-Salamaua Garrison," in Cons. Br., AGO (3477) 91-22.6; interview with Major Van Slyck, 26 Mar. 1943. Some of the flyers of the 317th Group were flying as co-pilots and observers with the 374th Group at this time. 40th Troop Carrier Sq. history. CM-IN-61 (1 Feb. 43), Brisbane to WAR, #0287, 31 Jan. 43; CM-IN-14236 (30 Jan. 43), Brisbane to WAR, #0331, 30 Jan. 43.

12. See enemy order of battle reports from the cables and the Intelligence Summaries for January 1943.

13. 35th Fighter Gp. history, 1943; 40th Fighter Gp. history, 1943; Form 34 for 7th Fighter Sq., 49th Fighter Gp., and 40th Sq., 35th Fighter Gp., 31 Jan.-6 Feb. 1943; GO #74 of 25 Apr., GO #80 of 5 May, and GO #106 of 29 May 1943, Hq. 5th AF; Intel. Sum. #76, 9 Feb. 1943; CM-IN-4375 (9 Feb. 43), Brisbane to WAR, #0371, 7 Feb. 43.

14. Ibid; Intel. Sum. #76, 9 Feb. 1943; 35th Fighter Gp. history, 1943; 49th Fighter Gp. history, 1943; Form 34 for 41st and 39th Sq., 35th Fighter Gp., and the 9th Sq., 49th Fighter Gp., 31 Jan.-6 Feb. 1943.

15. Intel. Sum. #76, 9 Feb. 1943; #77, 12 Feb. 1943.

16. Unrecorded interview by author with Colonel Hipps. The Fifth Air Force received specific directions from Washington to give all possible cooperation to the Guadalcanal operation. Ibid; Air Action in the Bismarck Campaign, n.80, p.116; The Landing in the Solomons, pp. 13 ff.

17. Intel. Sums. #74, 2 Feb.; #76, 9 Feb.; #77, 12 Feb.; #78, 16 Feb.; and #81, 27 Feb. 1943.

18. Cons. rpts. in Feb. 1943 cables; Form 34 for the 405th Sq., 38th Bomb Gp. (H); 13th and 39th Sqs., 3d Bomb Gp. (D).

19. Cons. rpts. in cables.

20. Combat Diary of the 63d Sq.; CM-IN-7765 (15 Feb. 43), Brisbane to WAR, #C454, 15 Feb. 43; CM-IN-7950 (16 Feb. 43), Brisbane to WAR, #C454, 15 Feb. 43; CM-IN-8434 (17 Feb. 43), Brisbane to WAR, #C463, 16 Feb. 43. In addition to those planes lost in combat, the following bombers were lost in accidents: 1 B-24, 3 B-25's, 1 B-26. CM-IN-888 (2 Mar. 43), Brisbane to CG AAF, #A335, 2 Mar. 43. During this period, some bombing attacks were being carried out in the Netherlands East Indies. Australian Hudsons, Dutch B-25's, and American B-24's covered the Timor-Ambon-southern Celebes area. Wewak was also receiving considerable attention. FO Cecil H. Rigsby, 8th Photo Squadron, is credited with having secured on 23 February the "first operational photographs of Wewak harbor and airdromes." GO #173, Hq. 5th AF, 10 Aug. 1943. Three days later 6 B-17's carried out a skip-bombing attack on a 5,000-ton cargo vessel, scoring a direct hit and bombing the airfield with demolition and fragmentation bombs. CM-IN-14093 (27 Feb. 43), Brisbane to WAR, #0593, 27 Feb. 43.

21. Aircraft status reports in the cables; The Bismarck Sea Action, p.286.

22. Advance Echelon Report, Incl. VI, par. 3, as quoted in ibid, p. 300.

23. 9 Operational Group operations order, as quoted in ibid, p. 158; "Mastheads Attacks Against Shipping," in AFGIB Bulletin 13 (July 1943), pp. 20-24.

24. CM-IN-11103 (21 Feb. 43), Brisbane to WAR, #C516, 21 Feb. 43; Form 34, 90th Sq., 3d Bomb Gp., 14 Feb.1942-20 Feb. 1943; CM-IN-14093 (27 Feb. 43), Brisbane to WAR, #C593, 27 Feb. 43; The Bismarck Sea Action, pp. 101-2.

25. A large amount of enemy information is available for a study of this action. Detailed operational orders and other documents were captured on Goodenough Island with the shipmaster of the Teiyo Maru, sunk in the engagement. These and others have been collected by the Allied Translator and Interpreter Section, SWPA and published as "Current Translations," as the Bismarck Sea Operations in Enemy Publications No. 7 Pts. 1 and 2, and as Interrogation Reports. These documents are analyzed in detail in The Bismarck Sea Action, pp. 59 ff.

26. Merchant vessels: Kyokusei Maru--5493 tons; Aiyo Maru--2746 tons; Hijima Nojima--9215 tons; Cigawa Maru--6493 tons; Shinai Maru--3793 tons; Gainei Maru--2883 tons; Teiyo Maru--6869 tons; Kembu Maru--953 tons. Destroyers - Asashio, Arashio, Tokitsukaze, Yukikaze, Asagumo, Shiranuki, Uranami, Shikinami.

27. According to enemy documents described in note 25.

28. Cons. rots. in cables.

29. The narrative of the attacks on the Bismarck Sea convoy is a synthesis of information taken from many documents. The following were the principal sources: the daily cable operations reports sent from General MacArthur's headquarters to the War Department; Form 34; V Bomber Command, Office of A-2, "Tactical Reports of Attacks on Bismarck Sea Convoy" /Tactical Reports/; Advance Echelon Headquarters, Fifth Air Force, "Report on Destruction of Japanese Convoy in Bismarck Sea," 6 Apr. 1943 /ADVON Report/; 49th Fighter Group history; 35th Fighter Group history; Combat Diary of the 67d Squadron. The Bismarck Sea Action contains a careful mission by mission account of the attacks on the convoy in much more detail than the present summary.

30. The Bismarck Sea Action, Chart 10. Totals exclude planes on reconnaissance or escort duty.

31. Fighters at this time could use Dobodura to "too off" before going into action over the Bismarck Sea.

32. There were no cruisers in the convoy although sightings frequently mistook the large destroyers for cruisers.

33. ADVON Report.

34. Coincident with these morning B-17 attacks, two B-24's bombed the convoy no [illegible] to contain 4 DD, 1 CL, 1 x 10,000-ton AK, [illegible] x 2,000- to 4,000-ton AK. One AK was reported as sinking and another on fire.

Another P-24 reconnoitered the convoy a few minutes later (shortly before 1100) and counted 3 CL, 4 DD, and 7 AK. ADVON Report.

35. This report stated that the remainder of the convoy was composed of 4 DD, 2 possible CL, 9 M/V. ADVON Report.

36. The geographical coordinates were 0540 S by 14730 E. At least six of these B-17's had participated in the morning attack. Ibid.

37. Tactical Reports.

38. Ibid; ADVON Report.

39. The latter was also hit by B-25's. Ibid. The following reports were made in Form 34 by the 64th, 65th, and 403d Squadrons: "Hits on AK & 1 DD seen sinking"; "Ships left burning-Exact number of hits unknown-At least 4 near misses observed"; "Due to interception results were not observed."

40. Form 34.

41. ADVON Report. Form 34 gives the following summary of the 90th Squadron's attack: hits on 11 ships--1 cruiser and 1 transport sunk, 2 destroyers damaged, 7 transports and cargo ships damaged.

42. After these attacks, the 7th and 8th P-40 squadrons covered by nine P-38's of the 9th set out on a dive-bombing mission shortly after noon. Unable to locate the convoy, they hit the Lae and Salamaua area. ADVON Report.

43. Tactical Reports.

44. Form 34 states: 4 hits on destroyer, 4 on cruiser and 1 each on 2 transports, "all left in sinking condition."

45. MacArthur quoted in Washington Post, 4 Sep. 1945.

46. CM-IN-4398 (9 Mar. 43), Brisbane to WAR, #0789, 9 Mar. 43; CM-IN-5703 (11 Mar. 43), Brisbane to WAR, #0818, 11 Mar. 43.

47. See Chart 50, 51, 53, and discussion of the statistics used in Bismarck Sea Action, pp. 262 ff.

48. CM-IN-1403, Brisbane to WAR, #0628, 3 Mar. 43.

49. It will be recalled that a B-17 from the 63d Squadron reported that two unidentified ships joined the convoy between 1530 and 1600. The ADVON Report further states: "It is interesting to recall that 7 M/V were sighted near Talasea on February 26, and that captured documents prove that the 7 M/V in the Truon Area did not leave Rabaul until March 1."

50. Also quoted in Bismarck Sea Action, pp. 237-8.

51. Assessment on 8 Aug. 1943 by JANAC.

52. Prisoner of war interrogations specifically identify all ships in the original convoy as listed in the captured documents. A fragmentary mimeographed sheet captured with other Bismarck Sea documents lists three additional vessels. This is called a Supplement to Operational Order #57, but there is no definite connection between this and the Bismarck Sea convoy except that it was captured with the Bismarck Sea documents, and that it has a similar number to #157 Operational Order which definitely refers to the Bismarck Sea convoy. Allied Translator and Interpreter Sec., SWPA #7, Pt. I, p. 73A.

53. The Allied Land Force in its History of the Lae Salamaua Garrison, based largely upon captured documents, states that the convoy consisted of 7 army transports, 1 naval transport, and 8 destroyers, and that of 6,912 troops aboard, 1,300 succeeded in reaching Lae and Finschhafen. (In Gen. Br., AGO (3477)21-22.6. The figure of 12 merchant vessels sunk is to some extent corroborated in the ADVCOM Report which states that "only 10 or 12 ships were actually sighted sinking or in obviously desperate condition." Maj. Edward F. Hoover, former A-2 of the V Bomber Command, stated in an interview that, in this battle, ship after ship was sunk. "Finally there were 12 down and only one to go. A reconnaissance plane sank that one." (In AAFSWPA Intel. Rpts. #17, Oct. 1943) On the other hand, both General Kenney and General MacArthur have insisted that the figure of 22 ships sunk is correct. In a message of 7 September, MacArthur declared that the official reports from air headquarters were the basis for the official GHQ reports. Information acquired later from captured documents, photos, and other data, he said, made minor changes in the original figures, but those changes increased rather than diminished the Jap losses. He stated that his headquarters had actual names for 21 ships sunk and named the following: Myokusei Maru, Oigawa Maru, Meiyo Maru, Shinsei Maru, Aiyo Maru, Daimei Maru, Kenbu Maru, **Arashio**, Asagumo, Tokitsukaze, Yukikaze, Urenami, Shikinami, Shirayuki, Hedima Maru, Taian Maru, Teiyen Maru, Teiryu Maru, Kuno Maru, Shichisei Maru. Presumably the Asashio was the twenty-first since that ship had actually been identified by his headquarters. The difference in spelling of some of these ships can be explained by garbling in transmittal. The message concluded: "I request that any report emanating from the Office of the Commanding General, Army Air Forces challenging the integrity of my operations reports of which the Chief of Staff is taking cognizance be referred to me officially in order that I may take appropriate steps including action against those responsible if circumstances warrant." CM-IN-3415 (7 Sep. 43), Brisbane to AGS, #GA30, 7 Sep. 43, in Super Duper. Following the Japanese surrender General MacArthur reasserted the claim of 22 ships saying in an interview: "Some people have doubted the figures in that battle. But we have the names of every ship sunk." Quoted in Washington Post, 4 Sep. 1945.

54. Excerpts from a diary kept by Marlin Spencer, AP correspondent, in A-2 lib. A later release by the Associated Press does not clarify the confusion on this subject: "Yokohama, Sept. 7 (AP). - The battle of the Bismarck Sea, when Allied planes sank an entire convoy of at least 10 warships and 12 transport-cargo ships with 15,000 troops aboard, was the greatest shock of the war to the Nipponese navy, Rear Admiral Toshitane Takata said today.

"He said of the historic March 2-6, 1943, action near Lae, New Guinea: "'You underestimated when you guessed 22 ships were sunk there. I don't know the exact number, but I think it was between 30 and 40. None escaped.'

". . . Maj. Gen. Paul B. Wurtsmith, commander of the Thirteenth Air Force, told the Nipponese no torpedoes were used by the 135 Allied planes, although skip bombing technique was employed, possibly leading the Japs to think of torpedoes." Washington Post, 8 Sep. 1945.

1. CM-IN-6197 (12 Mar. 43), Brisbane to WAR, #C85, 12 Mar. 43. See Situation Reviews in Intel. Sums. for March and following months.

2. Ibid.

3. CM-IN-16225 (30 Mar. 43), Brisbane to WAR, #A521, 30 Mar. 43.

4. 35th Service Gp. history. The school was not officially activated until 18 Apr. 1943. GO #14, Hq. Allied Air Forces, ibid; 80th Fighter Sq. history; Form 34, 8th Fighter Sq., 49th Gp., 21-27 Mar. 1943.

5. See ibid for bombardment squadrons, March through May 1943.

6. CM-OUT-11051 (28 Mar. 43), AFDPU to CINC SWPA, #2402, 28 Mar. 43; ltr., TAG to CINC SWPA, 29 Mar. 1943, in AAG 312.1-M, AGO Ltrs.; CM-IN-12636 (21 Apr. 43), Brisbane to WAR, #C1850, 21 Apr. 43; CM-IN-13858 (23 Apr. 43), Brisbane to WAR, #C1907, 23 Apr. 43; memo to OPD by Col. O. P. Weyland, Allocations and Programs Div., AC/AS OCOR, 6 Apr. 1943, in AAG 452.1 C, Airplanes; CM-OUT-1234 (3 May 43), AC/AS AFRTH to CINC SWPA, #3423, 3 May 43.

7. Ibid; CM-OUT-1234 (3 May 43), AC/AS AFRTH to CINC SWPA, #3423, 3 May 43; memo for AC/S OPD by Asst. Air AG, 29 Mar. 1943, and memo for CG AAF by OPD, 31 Mar. 1943, in AAG 322 B, Groups.

8. CM-IN-1345 (4 Feb. 43), Brisbane to WAR, #C335, 4 Feb. 43; CM-OUT-2195 (6 Feb. 43), OPD to CINC SWPA, #959, 6 Feb. 43; memo for the JCS by Maj. Gen. G. E. Stratemeyer, 5 Feb. 43, in AAG 452.1-B, Pursuits; 27th Depot Repair Sq. history; Capt. W. H. Ivey, "P-38 Pilot in New Guinea," in AAFSAT Intel. Rpts., #25, Mar. 1944; Report by V Fighter Comd., 1 Aug. 1943, in AAG 370.2C, Opns. and Reports.

9. Ibid.

10. Unrecorded interview with Maj. John Trotter, 26 May 1944; Engineer Construction in the Southwest Pacific Area, GHQ SWPA, Off. of the Chief Engineer, 1 Mar. 1944, p. 24. [Engineer Construction].

11. Interview with Col. Frederick Smith, Dep. C/S 5th AF, 11 May 1943.

12. 1158th QM Co. history; 440th Signal Bn. history; Lt. R. J. Wood, "Radar in New Guinea," in AAFSAT Intel. Rpts., #22, Feb. 1944; 565th Aircraft Warning Bn. history; 46th Service Gp. history; History of the Fifth Air Force Service Command in New Guinea.

13. Ibid; 49th Fighter Gp. history.

14. Ibid; Form 34 for the 7th, 8th, and 9th Squadrons of the 49th Gp.

15. See ibid. for the 9th Sq., 22-20 Mar. 1943; 46th Service Gp. history; 49th Fighter Gp. history.

16. Ibid.

17. Col. James C. Van Ingen, "Communications in New Guinea," in AAFSAT Intel. Rpts., Oct. 1943; 440th Signal Bn. history.

18. Unrecorded interview with Lt. Col. W. F. Coleman, 17 May 1945; Maj. Herbert O. Johansen, "Our Air Task Force," in Air Force, Dec. 1944, p.7.

19. Ltr., Kenney to Col. William L. Ritchie, 14 Apr. 1943, in AAG 312.1 B Opns. Ltrs.

20. Ibid; Coleman interview; Johansen, "Our Air Task Force."

21. Form 34; interview with Col. Frederick Smith, 11 May 1943; 8th Bomb Sq. history, April 1944.

22. CM-OUT-3073 (9 Feb. 43), OPD to CINC SWPA, 9 Feb. 43; CM-IN-269 (1 Mar. 43), Brisbane to WAR #C640, 1 Mar. 43; ltrs., Kenney to Arnold, 28 Feb. and Arnold to Kenney 16 Mar. 1943, in AAG 312.1 B Opns Ltrs.; 5th Tactical Air Communications Sq. history.

23. CM-IN-9326 (21 Jan. 43), Brisbane to WAR, #C188, 20 Jan. 43; CM-OUT-7685 (22 Jan. 43), WDOPD to CINC SWPA, #541, 22 Jan. 43; CM-IN-3015 (6 Feb. 43), Australia to WAR, #C365, 6 Feb. 43; CM-OUT-2742 (8 Feb. 43), OPD to CINC SWPA, #1004, 8 Feb. 43; CM-IN-8505 (17 Feb. 43), Brisbane to WAR, #A271, 18 Feb. 43; CM-OUT-6589 (19 Feb. 43), OPD to CINC SWPA, #1313, 18 Feb. 43; ltr., TAG to CINC SWPA, 26 Feb. 1943, in AAG 312.1J, AGO ltrs.; CM-OUT-9393 (26 Feb. 43); TAG to CINC SWPA, #1524, 26 Feb. 43.

24. 54th Troop Carrier Wing history.

25. Ltr., Kenney to Ritchie, 14 Apr. 1943, in AAG 312.1 B, Opns. Ltrs.

26. Ibid.

27. Engineer Construction, pp. 50-51.

28. Australian Directorate of Public Relations, Battle of the Ridges.

29. FO #1, 2, 3, 5 dtd. respectively 20 Feb., 25 Feb., 8 Mar., and 24 Mar. 1943, 162d Reg. War Journal, in Opns. Br., AGO, 5081 - B 341 - 70.3.

30 Mar. and

30. FO #1 and 2/6 Apr. 1943, Eq. MacKechnie Force, ibid. 162d Reg. War Journal; GO Order #1, Eq. MacKechnie Force, 28 Mar. 1943.

31. See Situation Reviews in Intel. Sums. for March, April, and May.

32. CM-IN-4930 (10 Mar. 43), Brisbane to WAR, #C800, 10 Mar. 43; CM-IN-6277 (12 Mar. 43), Brisbane to WAR, #C850, 12 Mar. 43; CM-IN-8642 (17 Mar. 43), Brisbane to C/S, #C935, 16 Mar. 43; CM-IN-10677 (20 Mar. 43), Brisbane to WAR, #C1045, 20 Mar. 43; Intel. Sums. #85 and 90, 13 and 31 Mar. 1943. The Operation Report puts the last raid on 27 March rather than the 28th. CM-IN-15965 (30 Mar 43), Brisbane to WAR, #1272, 29 Mar. 43; 49th Fighter Gp. history.

33. Intel. Sums. #91 and 92, 3 and 7 Apr. 1943.

34. Ibid. #93, 10 Apr. 43; CM-IN-7236 (13 Apr. 43), Brisbane to WAR, #C1640, 13 Apr. 43; 49th Fighter Gp. history.

35. Ibid.; 35th Fighter Control Sq. history; CM-IN-7659 (13 Apr. 43), Brisbane to WAR, #C1668, 13 Apr. 43; Form 34 for the 9th, 39th, 40th, and 41st Fighter Sqs., 11 to 17 Apr. 1943; 30th Fighter Sq. history.

36. Ibid.; ltr., 5th AF, ADVON, Off. of the Engineer, to CG 5th AF, 23 Apr. 1943, in AAG Misc. A, Australia.

37. Intel. Sums. #94 and 95, 14 and 17 Apr. 1943; CM-IN-8936 (16 Apr. 43), Brisbane to WAR, #C1714, 16 Apr. 43.

38. Intel. Sums. #95, 97, and 100, dtd. 17 and 24 Apr., and 5 May 1943.

39. 49th Fighter Gp. history; 35th Fighter Gp. history.

40. Ibid.; Intel. Sum. #100, 5 May 1943; CM-IN-1691 (3 May 43), Brisbane to WAR, #C2159, 3 May 43; of the 49th Fighter Gp. history.

41. Ibid.

42. Ibid.; 90th Fighter Sq. history; 5th Tactical Air Communications Sq.; Form 34 for 35th Fighter Sq., 16 to 22 May 1943; Intel. Sum. #104, 19 May 1943.

43. Ibid.; #100, 104, 105, and 107, dtd. 5, 19, 22 and 29 May 1943.

44. Form 34; 9th Photo Sq. history.

45. These figures do not pretend to be exact. They are, however, a fairly accurate approximation taken from cable operations reports and Form 34. See also Combat Diary of the 63d Squadron.

46. CM-IN-1786 (3 Apr. 43), Brisbane to WAR, #C1407, 7 Apr. 43; CM-IN-2606 (5 Apr. 43), Brisbane to WAR, C1443, 4 Apr. 43; CM-IN-3118 (6 Apr. 43), Brisbane to WAR, #C1458, 5 Apr. 43. The squadron reports in Form 34 are not quite so sweeping as the official operations reports. The following are the pertinent extracts: for the 63d Squadron on 1 April, a "5/6000 cargo damaged," on 4 April, 17 hits were claimed with a 5/6,000 ton cargo "skip bombed," "one hit on probable cruiser . .. one hit on destroyer, one hit on cargo vessel"; for the 64th Squadron on 4 April, "three direct hits on either C.L. or C.A.," "C.A. or C.L. sank in five minutes. [There is no indication as to whether this is the same C.L. or C.A. mentioned above]," "two direct hits on a destroyer."

47. Form 34, Opns. rpts. in cables.

48. Brisbane to WAR; CM-IN-7315 (14 Mar. 43), #C896, 14 Mar. 43; CM-IN-14799 (27 Mar. 43), #C1220, 27 Mar. 43, CM-IN-9556 (16 Apr. 43) #C1745 16 Apr. 43; CM-IN-10298 (17 Apr. 43), #C1774, 17 Apr. 43; CM-IN-8646 (12 Apr. 43), #C1611, 11 Apr. 43; CM-IN-12692 (21 Apr. 43), #C1863, 21 Apr. 43; CM-IN-2945 (5 May 43), Brisbane to C/S, #C2302, 5 May 43. Again the reports in Form 34 do not make as sweeping claims as do the official report.

49. See Form 34 for the 320th Sq. Brisbane to WAR; CM-IN-7659 (13 Apr. 43), #C1663, 13 Apr. 43; CM-IN-8367 (14 Apr. 43), #C1683, 14 Apr. 43; CM-IN-8936 (15 Apr. 43), #C1714 (15 Apr. 43).

50. These approximate figures have been taken from the cable operations reports and from Form 34.

51. See Opns. rpts. in cables and Form 34. CM-IN-3548 (6 May 43), Brisbane to WAR, #C2219, 6 May 43.

52. 5th Tactical Air Communications Sq. history.

53. Ibid.

54. Form 34, 90th Bomb Sq., 4 to 10 Apr. 1943; 41st Div., 162d Reg. War Journal for 7, 12, and 17 Apr. 1943, in Opn. Br. AGO, 3081 - B 341-70.3. It may be that the attack on the island noted in the report was merely a practice bombing run carried out by Dobodura-based aircraft.

55. 5th Tactical Air Communications Sq. history.

56. CM-IN-16365 (27 Apr. 43), Brisbane to CG AAF, #A733, 27 Apr. 43; CM-IN-19933 (31 May 43), Brisbane to WAR, #A990, 31 May 43.

Chapter VI

1. Memo by the JCS, 14 May 1943, CCS 220, circulated 19 May to the CCS and approved in 90th Mtg. as a basis for a combined study and elaboration for future plans.

2. CCS 239 considered by CCS on 20 May 1942. Approved in CCS 92d Mtg. subject to amendments which appear in 239/1.

3. Ibid.

4. Ibid.

5. CM-OUT-6093 (15 June 43), OPD, Strategy and Policy Gp., to CINC SWPA, CG SOPAC, and CG Hawaiian Dept., #4769 (14 June 43), in Super Duper.

6. CM-IN-13149 (21 June 43), Brisbane to WAR (Marshall from MacArthur), W03202, 20 June 43, in Super Duper.

7. MacArthur pointed to the battle of Midway as an example of the hazards of amphibious operations such as the campaign against the Mandates would entail.

8. CM-OUT-9240, 9241 (22 June 43), AC/AS Plans to CINC SWPA and CG SOPac, #5011, 22 June 43, in Super Duper.

9. CM-IN-15013 (24 June 43), Brisbane to WAR, 03413, 24 June 43, in Super Duper.

10. Memo to OPD by Col. O. P. Weyland, AC/AS OCAR, 6 Apr. 1943, in AAG 452.1 C, Airplanes.

11. Ibid; ltr., Kenney to Col. William L. Ritchie, OPD, 14 Apr. 43, in AAG 312.1 B, Opns. Ltrs.

12. CM-OUT-928 (2 May 43), AC/AS OCAR to CINC SWPA, #3402, 2 May 43; CM-IN-3457 (6 May 43), Brisbane to WAR, #A809, 6 May 43; CM-OUT-2358 (6 May 43), Sec. WDGS (sgd. Marshall) to CINC SWPA, #3438, 6 May 43; CM-OUT-3102 (7 May 43), AC/AS OCAR to CINC SWPA, #3435, 7 May 43; CM-IN-10146 (16 May 43), Brisbane to WAR, #02468, 16 May 43.

13. CM-IN-3379 (5 July 43), Brisbane to CG AAF, #A1215 (5 July 43); CM-IN-2911 (5 Aug. 43), Brisbane to CG AAF, #A1413, 3 Aug. 43; extract from ltr., Kenney to Arnold, 29 June 43, in AAG 312.1 C, Opns. Ltrs.; memo for Colonel Burgess by [348th Fighter Gp.], 7 Feb. 1944, in Col. W. M. Burgess Report, AAG 333.1 Bulk, Inspections, filed under an RAR dated 3 Aug. 1943.

14. 47[illegible]th Fighter Gp. history. The 43[illegible]st and 43[illegible]d Squadrons arrived at Dobodura on 7 October and 1 September respectively. Ibid.

15. CM-OUT-12874 (30 June 43), AC/AS OCAR to CINC SWPA, #5277, 29 June 43; CM-IN-5494 (9 July 43), Brisbane to CG AAF, #A1229, 9 July 43; CM-OUT-4149 (10 July 43), AC/AS OCAR to CINC SWPA, #5603, 10 July 43; memo for OCD by Lt. Col. H. O. Chmra, OC&R, 15 July 1943, in AAG 322 C, Groves; CM-IN-23569 (31 Aug. 43), Brisbane to CG AAF, #A1335 (31 Aug. 43); CM-OUT-918 (3 Sep. 43), AC/AS OCAR to CINC SWPA, #7511, 3 Sep. 43.

16. Form 3[illegible] for July and August, 389th Bomb Gp. (H), 345th Bomb Gp. (H), and 73[illegible]th Bomb Gp. (H).

16a. CM-IN-5315 (9 June 43), Brisbane to CG AAF, #A1057, 9 June 43; CM-OUT-5627 (1[illegible] June 43), AC/AS OCAR to CINC SWPA, #4[illegible]9, 17 June 43. This program for delivery of the B-25G's was concurred in by General Kenney. CM-IN-13847 (25 June 43), Brisbane to CG AAF, #A1146, 25 June 43.

17. CM-OUT-10937 (27 July 43), Hq. AAF, OC&R to CINC SWPA, #6169, 27 July 43; CM-IN-1803 (3 Aug. 43), Brisbane to [illegible], #A1412, 3 Aug. 43; CM-OUT-9127 (3[illegible] Aug. 43), OC&R to CINC SWPA, #7107, 31 Aug. 43.

18. Kenney to Arnold, 7 Sep. 1943, in AAG 713.1 Gens. Ltrs. General Arnold made the following reply to Kenney's objections: "With reference to the B-25H, the first three-hundred airplanes will have four .50 caliber guns in the nose, plus the 75mm cannon, and two .50 caliber guns on the right side of the fuselage . . . After the three hundredth "H", all subsequent airplanes will have two additional blister guns on the left side of the fuselage, making a total of eight fixed forward firing guns in addition to the cannon . . .

As regards the cabin heater, we were unsuccessful in getting all other theaters to concur in removing it, and it will, of necessity, remain in as a production item. Just at present modification centers are unusually busy, but we will arrange for an Air Service Command depot to remove the heater from your airplanes . . .

Regarding the elimination of the copilot from the B-25H, this airplane was designed for tactical use principally as an attack bomber . . . Other bombardment airplanes with a similar mission are flown by one pilot, and single pilot operations was considered in making plans for the B-25H.

Before building the airplane without copilot provision, the advantages and disadvantages were carefully weighed. The elimination of the copilot was strongly indicated, for the following reasons:

(1) The new armament added a great deal of weight in the nose. Any possible reduction of weight forward of the C.G. was mandatory. A saving of over 300 lb. was possible through the elimination of the copilot's seat, armor plate and controls.

(2) The airplanes improved defensive armament, consisting of waist guns and tail turret, compelled the shifting of the upper turret to maintain proper balance. Moving the upper turret forward to the

former navigator's compartment not only solved the balance problem but provided a better turret location. However, with this installation, and the addition of the cannon ammunition and cannon loading provisions in this compartment, no space for the navigator was available. It was possible to provide a jump seat and a navigator's table at the copilot's position. Placed here, the navigator would be admirably positioned to function as a navigator on low altitude missions and to assist the pilot in any possible way as well as acting as cannoneer.

(3) Since in this airplane the copilot does the bombing, it was necessary to locate all bombing equipment in the cockpit. Also the radio compass was removed from the former navigator's compartment and placed in the cockpit. These installations made the elimination of the copilot's provisions unavoidable.

(4) Because of the attack nature of the airplane, it was important to give the pilot more armor protection. To have provided a copilot's position with more than normal armor was out of the question, again from the weight standpoint.

(5) If possible to eliminate the copilot, the consequent elimination of trained personnel would be of considerable value.

(6) A test was conducted at Eglin Field to determine the need for a copilot in the B-25. The conclusions reached as a result of the test were that the airplane could be handled satisfactorily in combat without a copilot; that it could be flown in all positions of close V formation and close echelon formation day or night; that evasive action could be taken; that landings and takeoffs day or night could be accomplished satisfactorily, and that cannon and machine guns could be fired efficiently. The test report recommended elimination of the copilot from cannon-bearing B-25's. The single adverse comment resulting from this test was to the effect that pilot fatigue is greatly increased by single pilot operation especially when flying formation.

(7) A cable was sent 17 February 1943 to all theaters scheduled to receive B-25 airplanes. In this was set out the plan for making B-25H's and the airplane proposed features were outlined, including the fact that there would be but one pilot. Theaters were asked to submit their recommendations for allocation of these airplanes. In direct reply to this cable, all theaters queried sent replies, giving their percentage requirements for the cannon-bearing B-25. In none of these replies was an objection raised to the elimination of the copilot.

Decision to proceed with production was made after consideration of the above projects.

Wright Field states that to provide for copilots in B-25H's now would mean a great deal of work with consequent delay, and no assurance that the result would be satisfactory. Kits could be made up and shipped to the Field, although this too would take time, and the same problems would be encountered there.

Many people have felt that an influence in the demand for copilots is the fact that B-17's have always had copilots. The B-25H differs in many respects from earlier B-25's, and it is believed that the

theaters should try the airplane as it is being built." Ltr., Arnold to Kenney, 26 Sep. 1943, in AAG 312.1 D Cons. Ltrs.

19. Ltr., Arnold to Kenney, sent 13 May 1943, in AAG 312.1 B, Cons. Ltrs.; Memo for the CG AAF by Col. F. W. Smith Jr., 3 May 1943, in AAG 452.1 C, Airplanes.

20. CM-CUT-6113 (14 May 43), CPD to CINC SWPA, #3744, 13 May 43; CM-IN-10801 (17 May 43), Brisbane to MAR, #2507, 17 May 43; CM-CUT-9263 (21 May 43), WDGS to CINC SWPA, #3969, 21 May 43; CM-IN-17888 (28 May 43), Brisbane to MAR, #2754, 28 May 43; CM-CUT-412 (1 June 43), AC/AS AFRIM to CINC SWPA, #4321, 1 June 43; ltr., Arnold to Kenney, 5 July 1943, in Air AG SAS 370.2, South Pacific; CM-IN-6920 (11 May 43), Brisbane to MAR, #02362, 11 May 43; CM-CUT-4102 (10 May 43), CPD to CINC SWPA, 10 May 43.

21. CM-CUT-6341 (16 June 43), OC&R to CINC SWPA, #4787, 15 June 43; CM-OUT-10601 (25 June 43), OC&R to CINC SWPA, #5108, 25 June 43; CM-OUT-12048 (30 July 43), CPD to CINC SWPA, #6272, 30 July 43; CM-CUT-6557 (17 Aug. 43), AFROA to CINC SWPA, #6914, 16 Aug. 43; CM-OUT-8717 (21 Aug. 43), OC&R to CINC SWPA, #7075, 21 Aug. 43; CM-IN-18021 (24 Aug. 43), Brisbane to CG AAF, #A1574, 24 Aug. 43; CM-CUT-10528, CPD to CINC SWPA, #7223, 25 Aug. 43; 55th, 56th, 57th, 58th, Troop Carrier Sq. histories; 375th Troop Carrier Gp. history; 54th Troop Carrier Wing history.

22. Extract from ltr., Kenney to Arnold, in RSR, Arnold to Giles, 29 June 1943, in AAG Misc., Australia.

23. Ltr., TAG to CG AAF etc., 6 June 1943, in AAG 312.1 S, AGO Ltrs.; CM-OUT-3125 (9 June 1943), OC&R to CINC SWPA, #4545, 7 June 43; memo for Gen. Giles by Col. O. P. Weyland, 1 July 1943, in AAG Misc., Australia; notes on a staff meeting with Gen. Arnold, in memo for Col. Gross, etc. by Brig. Gen. H. A. Craig, 11 Aug. 1943, in AAG 337 F, Conference.

24. CM-IN-19933 (31 May 43), Brisbane to CG AAF, 31 May 43; CM-IN-3379 (5 July 43), Brisbane to CG AAF, #A1215, 5 July 43; CM-OUT-3002 (7 May 43), AFRAL to CINC SWPA (from Arnold for Kenney, #3526 , 7 May 43; CM-CUT-3531 (9 July 43), OC&R to CINC SWPA, 9 July 43.

25. CM-IN-9455 (14 July 43), Brisbane to MAR, #A1274, 13 July 43; CM-CUT-5637 (14 July 43), OC&R to CINC SWPA (AFRAL to MacArthur for Kenney sgd. Arnold), #5730, 14 July 43; ltrs., Kenney to Arnold, 23 July, and Arnold to Kenney, 31 Aug. 1943, in AAG 312.1 D, Cons. Ltrs.

26. Ibid; CM-CUT-3252 (9 Aug. 43), OC&R to CINC SWPA (sgd. Arnold), #6637 9 Aug. 43; CM-IN-10269 (14 Aug. 43), Brisbane to CG AAF (sgd. Kenney), #A1501, 14 Aug. 43; CM-CUT-6590 (17 Aug. 43), OC&R to CINC SWPA (sgd. Arnold), [illegible], 16 Aug. 43.

27. CM-IN-20436 (27 Aug. 43), Brisbane to CG AAF (sgd. Kenney), #A1598, 27 Aug. 43; CM-OUT-12379 (29 Aug. 43), Hq. AAF to CINC SWPA (sgd. Arnold), #7759, 29 Aug. 43; CM-IN-624 (1 Sep. 43), Brisbane to WAR (sgd. Kenney), #A1656, 1 Sep. 43; CM-OUT-1373 (3 Sep. 43), Hq. AAF to CINC SWPA (sgd. Arnold), 3 Sep. 43.

28. See n. 27 above.

29. CM-IN-2911 (5 Aug. 43), Brisbane to CG AAF, #A1413, 3 Aug. 43; CM-IN-23507 (31 Aug. 43), Brisbane to CG AAF, #A1622, 31 Aug. 43; Reports to Gen. Kenney by John M. Gibson, 4 July 1943 and by Paul V. McNamara, 8 July 1943, incls. to ltr., Kenney to Arnold, 28 July 1943, in AAG 312.1 D, Opns. Ltrs.

30. Ltr., Kenney to Arnold, 28 July 1943, in AAG 312.1 D Opns. Ltrs. It is interesting to note that on 10 December 1943, OC&R reported that if the P-40's and P-39's were not counted in Kenney's fighter strength, he was 189 fighters short for the same number of units that he had in July. R&R, AC/AS OC&R to AFSAS, 10 Dec. 1943, in AAG 337 J, Conferences.

31. Extract of ltr. from Gen. Kenney in R&R, Arnold to Giles, 29 June 1943, in AAG Misc., Australia.

32. The memo for General Giles by Col. O. P. Weyland, Chief of Allocations and Programs Div., AC/AS OC&R, 1 July 1943, in AAG Misc., Australia, as cited in note 23 above, was incorporated in a letter from Arnold to Kenney 5 July 1943, in Air AG SAS 370.2, South Pacific.

33. CM-OUT-5375 (15 June 43), DC/AS to CINC SWPA, #4748, 14 June 43; CM-OUT-2566 (20 June 43), C/AS to CINC SWPA (for Kenney from Arnold), #4952, 20 June 43.

34. CM-IN-14605 (23 June 43), Brisbane to CG AAF, #A1133, 23 June 43; CM-OUT-5622 (14 July 43), Hq. AAF to CG SWPA (to MacArthur for Kenney sgd. Arnold), #5724, 11 July 43; CM-IN-5361 (8 July 43), Brisbane to CG AAF, #A1232, 8 July 43.

35. Ltr., Kenney to Arnold, 28 July 1943, in AAG 312.1 D, Opns. Ltrs.

36. CM-IN-14080 (20 July 43), Brisbane to WAR, #A1316, 20 July 43.

37. Ltr., Kenney to Arnold, 28 July 1943.

38. Memo for C/AS by Brig. Gen. H. A. Craig, 17 Aug. 1943, in AAG 321.2 B, Rotation, Replacement; ltr., Arnold to Kenney, 31 Aug. 1943, in AAG 312.1 D, Opns. Ltrs., R&R, DC/AS, to AC/AS OC&R, 10 Aug. 1943, in AAG 312.1 D Opns. Ltrs.

39. Kenney to Arnold, 28 July 1943, in AAG 312.1 D, Opns. Ltrs.

40. CM-IN-5515 (9 June 43), Brisbane to CG AAF, #A1057, 9 June 43; V Air Service Area Comd. history; CM-IN-6164 (9 Sep. 43), Brisbane to War, #A1677, 9 Sep. 43.

41. Report by Lt. Col. P. I. Gunn to CG 5th AF Service Command, 7 Aug. 1943, in AAG 312.1 D, Cons. Ltrs.

42. V Air Service Area Comd. history.

43. Ibid. The modification was described in a cable message as follows: 2 each fired 50 caliber machine guns installed in 1 blister on each side of aircraft between stations numbers 276 and 335 with concussion plate backed with rubber shockpad installed from station number 276 to approximately 2 inches in front of station 199. Each gun has blast tube similar to those installed on P-40 aircraft. Guns are manually charged individually from pilots cockpit. Ammunition cans are mounted in aft of bomb bay between stations numbers 390 and 204. Concussion plates with rubber shockpad are installed on bombbay doors; this necessary so guns can be fired without damage to bomb bay doors when open nacelles necessitating addition of greater number of stringers between front gear station number 224 and station 256.34 and having an additional layer of .040 ST skin over original skin to prevent skin failure. CM-IN-6164 (9 Sep. 43), Brisbane to WAR, #A1677, 9 Sep. 43.

44. CM-IN-19875 (26 Aug. 43), Brisbane to CG AAF, #A3139, 26 Aug. 43. A note attached to this message apparently by Colonel Ferrin is addressed to Major Kricker of the Air Service Command: "Kricker - Why can't we do what Kenney is doing?"

45. CM-IN-9442 (16 Apr. 43), Brisbane to WAR, #A654, 16 Apr. 43; CM-IN-1604 (3 Aug. 43), Brisbane to CG AAF, #A1415, 3 Aug. 43; ltr., Kenney to Arnold, 23 July 1943, in AAG 312.1 D, Cons. Ltrs.

46. CM-CUR-909 (3 Aug. 43), Wa. AAF, AC/AS MAD to CTFO SWPA, #6403, 3 Aug. 43; ltr., Kenney to Arnold, 7 Sep. 1943, in AAG 312.1 D Cons. Ltrs.

47. Arnold to Kenney, 26 Sep. 1943, ibid.

48. Ltr., Kenney to Arnold, 7 Sep. 1943, ibid.; CM-IN-11914 (16 July 43), Brisbane to CG AAF, #XA6563, 16 July 43; CM-IN-20909 (29 July 43), Brisbane to CG AAF, #XA7030, 29 July 43; 27th Service Sq. history.

49. 27th Air Depot Repair Sq. history; CM-IN-10871 (15 July 43), Brisbane to CG AAF, #XA6573, 15 July 43; CM-IN-7924 (6 July 43), Brisbane to CG AAF, #XA6124, 6 July 43; CM-IN-11406 (16 July 43), Brisbane to CG AAF, #A1287, 16 July 43; CM-IN-11983 (17 July 43), PFO to Brisbane, 1633, 17 July 43; CM-IN-14076 (21 July 43), PFO to Brisbane, #2042, 21 July 43; CM-IN-20375 (31 July 43), PFO to CG SWPA, 3053, 31 July 43; ltr., Kenney to Arnold, 23 July 1943, in AAG 312.1 D, Cons. Ltrs.

50. Ibid.; 37th Depot Repair Sq. history; CL-IN-20719 (29 July 43), Brisbane to CG AAF, -XA7060, 29 July 43; CL-IN-515 (1 Aug. 43), Brisbane to CG AAF, -XA7139, 1 Aug. 43; CL-IN-9561 (13 Aug. 43), Brisbane to CG AAF, -XA7613, 13 Aug. 43. Lack of certain other parts, such as tail-wheel casings and tubes were also delaying the entrance of the P-47 into combat. Kenney's request for a rush shipment of those items resulted in authorization for Patterson Field "to alter P-47 equipment priorities on shipments to U.S. sufficiently to prevent the grounding of airplanes in Australia, due to the lack of spare parts, tires and maintenance equipment. Ltr., Lt. Col. L. D. Moreland, MAD to CG ASC, Patterson Fld., 14 Aug. 1943, in AAG 452.1 D, Pursuits.

51. Gen. Arnold's comment in RAR, AC/AS to AC/AS OCMR, 10 Aug. 1943, in AAG 312.1 D, Cons. Ltrs.

52. CL-OUT-924 (2 July 43), AC/AS MAD to CINC SWPA (sgd. Marshall), 75572, 2 July 43; CL-IN-9147 (17 July 43), Brisbane to WAR (sgd. MacArthur), 03009, 13 July 43; CL-IN-5197 (7 Sep. 43), Brisbane to WAR, 05470, 7 Sep. 43; CL-OUT-4390 (10 Sep. 43), Ho. AAF, MAD to CINC SWPA, -7252, 10 Sep. 43.

Chapter VII

1. This campaign was to be the outgrowth of the Elkton Plan covered by the code word CARTWHEEL. South Pacific Forces were to carry out the operations on the eastern axis in two phases: Phase A--Operations leading to the control of New Georgia; Phase B--enveloping operations leading to landings in Empress Augusta Bay on Bougainville. Southwest Pacific forces were to carry out the operations on the western axis; Phase 1--landings on Kiriwina, Woodlark, and Tassau Bay, the last as a preliminary to a pincer movement against Salamaua; Phase 2--an amphibious landing near Lae, followed by a paratroop drop at Tadzeb, and movements along the coast toward Finschhaven and through the Ramu Valley toward Madang; Phase 3--landings on Cape Gloucester and near Gasmata in New Britain. CCS 420, 4 Dec. 1943.

2. Form 34 for 8th Photo Sq., June-September 1943; 8th Photo Sq. history.

3. A photo plane of the 8th Squadron first photographed Buka on 5 June 1943. Ibid. By 4 July two P-38's were on loan for escort purposes from the 39th Fighter Squadron; by the end of the month a P-38F was assigned from the 70th Fighter Squadron, and by 12 September six P-38F's were also assigned. Form 34. See also GO #186, Hq. 5th AF, 26 Aug. 1943.

4. Intel. Sums., #110, 9 June 1943, thru #135, 4 Sep. 1943; for September statistics, see operations reports from the cables. Figures from Form 34 differ slightly from those used in the text, probably because of differences in the reports of aircraft which failed to reach the target owing to weather or mechanical difficulties.

5. Intel. Sums. as in n.4 above.

6. Ibid., #111, 12 June 1943; statistics from Form 34.

7. Ibid.

8. Form 34, 18-24 July 1943, Hq. Sq. and 528th Sq., 380th Gp.

9. Ibid., 8-14 and 15-21 Aug. 1943, 528th, 529th, 530th, 531st and Hq. Sqs., 380th Gp. "The mission was well in excess of 2,500 statute miles and called for the aircraft to be airborne for 16 hours on the average. Airplanes on take off carried in excess of 66,000 lbs. which is believed to be the maximum safe wing loading, if not in excess of it. It is not known that any other mass strike has encountered the same conditions of distance and weight." Account of Mission Fenton #21 on 12 Aug. 1943, 380th Bomb Gp. (H).

10. Operation Plan #7-43, 18 June 1943, by Vice Adm. Aubrey W. Fitch, Hq. U.S. Pacific Fleet, South Pacific Force, Task Force 33, plan derived from Commander Third Fleet's Operation Plan #14-43.

11. Australian Army Directorate of Public Relations, Battle of the Ridges.

12. Brisbane to WAR; CM-IN-10010 (16 June 43), #03214, 16 June 43; CM-IN-10622 (17 June 43), #03249 (17 June 43); CM-IN-11328 (18 June 43), #03268 CM-IN-12945 (21 June 43), #03318, 20 June 43; CM-IN-13205 (21 June 43), #0352, 21 June 43.

13. Form 34 for June, 8th, 35th, and 49th Fighter Gps.; 49th Fighter Gp. history. Note that while only 1 fighter was lost from enemy action, 14 fighters were lost in accidents. CM-IN-3379 (5 July 43), Brisbane to WAR, #41215, 5 July 43.

14. Form 34 for June; Intel. Sums. for June; conns. rpts. in cables, June 1943.

15. Intel. Sum. #118, 7 July 1943; Form 34, 27 June-3 July 1943, 8th, 17th, and 89th Sqs.; ONI Weekly II, #27, (7 July 1943), pp. 1922-23. 89th Fighter Sq. history. Brisbane to WAR; CM-IN-3932 (6 July 43), #3732, 6 July 43; CM-IN-13572 (19 July 43), #04076, 19 July 43.

16. Msg., Regtl. S-3 to G-3 41st Div., 26 June 1943 and FO #3, 26 June 1943, in 163d Regt., 41st Div. War Journal; and Notes on Operations--Morobe, Nassau Bay Area, 13 July 1943, by Colonel MacKechnie, both in Conns. Br. AGO, 2081-B-341-70.3.

17. Ibid.; "Exchange of Information," (Army and Navy Combined Operations), a report by Brig. Gen. W. F. Heavey, CO 2d Engr. Special Brigade, 13 July 1943, in Conns. Br. AGO, 2-5,1911/43.

18. MacKechnie, Notes on Operations--Morobe, Nassau Bay Area; msg., Regtl. CO to CG 41st Div., 20 June 1943, in 163d Regt. War Journal; Form 34 for 27 June-7 July 1943, all squadrons of 8th, 35th, and 49th Gps. It unquestionably would have been impossible to keep a fighter cover over the beach at all times, and it may have been the policy to keep the fighters on the ground until morning units picked up hostile plots. There apparently were no Japanese attacks on the Nassau Beach area on 30 June. 5th Tactical Air Communications Sq. history; 49th Fighter Gp. history.

19. Intel. Sums. #118 and 119, and 10 July 1943; Conns. rpts. in cables; Combat Diary of the 67d Sq.; Form 34 for 27 June-3 July 1943, 89th Sq.

20. Intel. Sums. #117 and 119, 3 and 7 July 1943; Msg., Regtl. S-3 to G-3 41st Div., 2 July 1943, in 163d Regt. War Journal, in Conns. Br. AGO, 2081-B-341-70.3; 49th Fighter Gp. history; Form 34 for 27 June-3 July 1943, 7th Fighter Sq.

21. During these operations the 163d Regiment was attached to and under the operational control of the 2d and 5th Australian Divisions which operated under command of the New Guinea Force with headquarters at Port Moresby. 163d Regt. Report of Operations, 29 June to 12 Sep. 1943, in (3032) 341-70.3, Conns. Br. AGO.

22. MacMechnie, Notes on Operations.

23. Ibid.; Lt. Col. Harry K. Miller, "Ground Force Tactics in New Guinea," in AAFSAP Intel. Bnts., #35, Jan. 1945; Entry, in 162d Regt. War Journal, 11 July 1943; 162d Regt. Report of Operations.

24. Ibid.; MacMechnie, Notes on Operations; Entry, in 162d Regt. War Journal, 15 July 1943; msg., 17th Brigade to Regt. CO., 5 July 1943; msg., Regt. S-2 to G-3 41st Div., 10 July 1943; msg. #993, 3d Aus. Div., sgd. Roeski to Kate, 19 July 1943; and msg. #917, 25 July 1943, 3d Aus. Div., to Cosme, all in 162d Regt. War Journal.

25. Intel. Sum. #121, 17 July 1943; ONI Weekly, II, #28, 29, and 30 (14, 21, and 28 July 1943); Plan for Operations to secure Tembu Bay by Cosme Force, 15 July 1943, in 162d Regt. War Journal; msg. #315, to RAF Base Moroba sgd. Caulfield, 20 July 1943; msg. #348, Lt. Mulliken to Gen. Cosme, 21 July 1943; msg. #1005, 3d Aus. Div. to Cosme Force; 27 July 1943, and msg. #1026, to GOC 3d Aus. Div., 28 July 1943, ibid.

26. 67th Sq. History; Form 34 for July, all fighter squadrons; Opns. rpts. in cables.

27. Ibid.; 35th and 49th Fighter Grps. histories; 90th Fighter Sq. history; Form 34 for July, all fighter squadrons.

28. Brisbane to MAF; CM-IN-17306 (19 July 43), 04050, 15 July 43; CM-IN-17572 (19 July 43) 04075, 19 July 43; 8th Bomb Sq. history; ONI Weekly, II, #30 (23 July 1943); Intel. Sums. and Opns. rpts. in cables for July.

29. Ibid.; Form 34, 25-31 July 1943, for 8th, 17th, and 90th Sqs.

30. Intel. Sums. for July. These figures are approximate. There are some differences between these and the figures derived from Form 34. In cases of obvious error, the Intelligence Summary figures have been adjusted.

31. Ibid.; Form 34, 11-17 July 1943, for 71st, 398th, 399th, 400th, 401st, and 90th Sqs.; CM-IN-2526 (12 July 43), Brisbane to MAF, 03395, 12 July 43; CM-IN-2122 (13 July 43), Brisbane to MAF, #03216, 12 July 43.

32. Intel. Sums. #124 and 133, for 28 and 31 July 1943. For example, on 31 July 85 fighters and 57 bombers were reported on Wewak drones. Intel. Sum. #123, 24 July 1943.

33. The account of the development of Tsili Tsili as a base is taken largely from Capt. Everette E. Frazier's account, "Experiences on the Location of Airdromes in New Guinea," in History of the Fifth Air Force Service Command in New Guinea, September 1942-January 1944.

A considerable amount of space is devoted to Frazier's adventures because they are perhaps the most outstanding of those experienced by men of the service command and other American and Australian organizations whose contribution to the war was to spend little-advertised months and even months within the enemy's forward areas.

32. Ibid.

33. Ibid.; "Tsili Tsili, a Tribute to Aviation Engineers," in Impact, I, 7 (October 1942); Historical Summary of the Aviation Engineers; ltr., Brig. Gen. J. C. Godfrey, Air Engineer to CO's of Engineer Aviation Unit Training Centers, etc., 13 Nov. 1942; unrecorded interview with Capt in Frazier.

34. Histories of the 73th Fighter Bn.; 385th Signal Aircraft Warning Bn.; 23th Fighter Control Sq., 419th JI Platoon (AD), 440th Signal Bn., and the 4th Airdrome Sq.

37. 33th Fighter Sq history; C.-IN-11930 (16 Aug. 43), Brisbane to MAR, 34837 (16 Aug. 43); Form 34, 15-31 Aug. 1943, 40th and 41st Fighter Sqs.

38. 475th Fighter Gp. history; Form 34, 1-31 Aug. 1943, 340th, 341st, and 431st Fighter Sqs.; cable opns. rpts. for August.

39. CM-IN-3653 (4 Aug. 43), Brisbane to MAR, 34473, (4 Aug. 43); Intel. Sums. 127 and 130, 7 and 23 Aug. 1943.

40. Account of Mission 324-F on 17 Aug. 1943, 407d Bomb Sq. (H).

41. Intel. Sums. 127, 7 Aug., thru 131, 21 Aug. 1943. The four raids occurred on 7, 9, 13, and 14 Aug. 1943. Cable opns. rpts.

42. C.-IN-10542 (14 Aug. 43), Brisbane to MAR, 34704, 14 Aug. 43.

43. Account of Mission No. 324-F on 17 Aug. 1943, 67d, 64th, 65th, and 4076 Bomb Sqs. Mission Reports are not available for the 390th, 391st, and 400th Squadrons which also participated in the raid, and it is possible that they achieved better results. Form 34, however, simply says that the target was bombed.

44. Brisbane to MAR: C.-IN-10[illegible] (9 Aug. 43), 34[illegible], 9 Aug. 43; CM-IN-[illegible] (4 Aug. 43), 34[illegible], 4 Aug. 43; C.-IN-10541 (11 Aug. 43), 34784, 11 Aug. 43.

45. Form 34. The cable status report gives 19 B-17's and 46 B-24's.

46. Cable status report gives 61 B-25D1's and D1's. The 345th Group had, only a few weeks before, sent their B-25D's to Townsville to be modified into the D1 type and consequently had only 11 B-25D1's in commission, while the 38d Group had 13 B-26's and 11 B-25D's and D's. Form 34.

47. Account of Mission No. 22[illegible]-3 on 16 Aug. 1943, 63d, 64th, 65th, and 402d Bomb Sqs.

48. Ibid.; Form 34, 13-21 Aug. 1943, 63d, 64th, 65th, 312th, 320th, 321st, 400th, and 407d Sqs.

49. Ibid.; 5th, 17th, 71st, 80th, and 403th Sqs.

50. Ibid.; 9th, 22th, 80th, 431st, 432d, and 433d Sqs. Our unit histories, with the exception of that of the 475th Group, are very inaccurate concerning this escort mission. See also Brisbane to AF, CM-IN-1280 (13 Aug. 43), 34572, 13 Aug. 43, and CM-IN-12497 (17 Aug. 43), 11518 (17 Aug. 43).

51. Form 34; Aq. Allied Air Forces, SWPA, Narrative Mission Reports [illegible], 61, and 62.

52. Form 34; Intel. Sums.; cable cons. rots.; Diary of Operational Statistics, Pt. IIIA, Olsing Against Tacloban—1943, in Office of Statistical Control.

53. CM-IN-13199 (21 Aug. 43), Brisbane to AF, 63051; Diary of Operational Statistics, Pt. 1, Tons of Bombs Dropped, Sorties, in office of Statistical Control.

Chapter VIII

1. Australian Army Directorate of Public Relations, Battle of the Bismarcks.

2. In Clinton Elkin, 22 Feb. 1947. See also n. 1, Chap. VII.

3. Australian Army Directorate of Public Relations, The Australian Army at War.

4. Fo. Sq., V Fighter Comd.; 40th Troop Carrier Sq. history; Report by CO, 7th Amphibious Force to CINCSWPA, 22 Oct. 1943, "Lae Operation."

5. Ibid.

6. Ibid.

7. Capt. William H. Bell and Capt. David T. Perkour, "Amphibious Control," in AAFSAT Intel. Rpts. #25, March 1944.

8. Ibid.

9. Ibid.; 5th Tactical Air Communications Sq. history.

10. Form 34, 9th, 40th, and 41st Squadrons; 35th and 49th Fighter Gp. Histories.

11. CM-IN-1261 (8 Sep. 43), Brisbane to MAR, GA2, 8 Sep. 43; Form 34.

12. Ibid.; 23 Aug. to 4 Sep. 1943, 71st and 403th Sqs.

13. CM-IN-3023 (8 Sep. 43), Port Moresby to MAR, 8 Sep. 1943; 36th Fighter Sq. History.

14. "Lae Operation"; 5th Tactical Air Communications Sq. History.

15. Ibid.; Form 34, 23 Aug.-4 Sep. 1943, 40th and 43rd Sqs.; "Lae Operation."

16. Ibid.; Form 34, 23 Aug.-4 Sep. 1943, 18th Sq.; CM-IN-3993 (5 Sep. 43), Port Moresby to MAR, GA13, 5 Sep. 1943.

17. "Amphibious Control."

18. Ibid.

19. Ibid.; Form 34, 23 Aug.-4 Sep. 1943, 39th, 90th, 342d, and 433d Sqs.; CM-IN-3999 (5 Sep. 43), Port Moresby to MAR, GA13, 5 Sep. 43.

20. "Lae Operation."

21. Ibid.; 5th Tactical Air Communications Sq. history.

22. Ibid.

23. History of the Fifth Air Force Service Command in New Guinea. Unrecorded interview with Capt. Everette Frazier.

24. Report by Maj. A. J. Beck, Operations Officer, 54th Troop Carrier Wing, in Ferntroop Dropping at Nadzab, 5 Sep. 1943, Dec. 24, in 54th Troop Carrier Wing history.

25. Ltr., Kenney to Arnold, 7 Sept. 1943, in AAG 319.1. Cons. Mtrs. Several of General Kenney's figures are somewhat different from those in the squadron reports. For example, he mentions 96 transports which differs from the report of the 54th Wing. (See n. 22 above.) And he mentions six A-20's whereas Form 34 specifies seven. Form 34, 4-11 Sept. 1943, 90th Sq. But there are minor inaccuracies; his account otherwise gives a good picture of the action. The seven A-20's were equipped with two M-10 smoke tanks filled with FS under each wing. Three 4,000-foot screens were laid down, one along the flank of each wooded area. The planes flew at 225 miles per hour, 250 feet above the ground. CTG Theater of Operations, Opn. Ltr. 7, 8 Nov. 1943, in Cons. Br. AGO, 8-6.7/43.

26. Frazier interview; report by Maj. A. J. Beck, 5 Sep. 1943, in 54th Troop Carrier Sq. history; interview with Sgt. George Novelick, 7 Aug. 1944, in AAF lib.

27. Extract from ltr. by Lt. Col. M. C. Woodbury, 25 Oct. 1943, in ltr., Brig. Gen. J. C. Godfrey, Air Engineer to Chief of Engr. Avn. Unit Training Centers, etc., 12 Nov. 1943, 5th Tactical Air Communications Sq. history.

28. Frazier interview; cable cons. mots. for September, 1943 Dept. War Journal.

29. Summary of Joint Air Operations in Support of Lae Ground Operations, in Intel. Sum. of Operations Lae Area from 5th AF, Fe., 13 Sep. 1943.

30. History of Fifth Air Force Service Command in New Guinea.

31. "Amphibious Operations during the Period August to December 1943," published by Headquarters, United States Fleet, 22 Apr. 1944.

32. Ibid.; "Amphibious Control."

33. CM-IN-17429 (21 Sep. 43), Fort Moresby to MAF, 276, 21 Sep. 43; CM-IN-13150 (22 Sep. 43), Fort Moresby to MAF, 40466, 21 Sep. 43.

34. /Combined Operations Sq./ Bulletin #Y/10, Operations 'Postern' and 'Diminish,' 24 Nov. 1943 /Operation Diminish/; 5th Tactical Air Communications Sq. history.

35. Form 34, 19-25 Sep. 1943, 34th, 403d, 8th, 17th, 22nd, and 90th Sqs.; CM-IN-16932 (23 Sep. 43), Port Moresby to WAR, #CA74, 23 Sep. 43. Twelve RAAF P-40's concurrently bombed Gasmata on the 22d also. Ibid.

36. Operation Diminish.

37. Form 34, 19-25 Sep. 1943 for all fighter sqs.; Amphibious Control.

38. Ibid.; Form 34, 19-24 Sep. 1943, 9th, 35th, 39th, 341st, and 433d Sqs.; CM-IN-16930 (23 Sep. 43), Port Moresby to WAR, #CA74, 27 Sep. 43; CM-IN-18958 (27 Sep. 43), Brisbane to WAR, #C6095, 27 Sep. 43.

39. CNI Weekly, II, #39 (29 Sep. 1943); 5th Tactical Air Communications Sq. history.

40. These "Australian Independents," had had a strenuous history. They had formed the garrison of Timor when that island was captured by the Japanese in the spring of 1942. They had almost miraculously escaped to Australia several months later, and after a brief rest, had been sent to Beni Beni. 478th Service Sq. history.

41. Form 34, 26 Sep.-2 Oct. 1943, all bomber sqs.; CNI Weekly for bomb loads; Brisbane to WAR; CM-IN-19166 (27 Sep. 43), #C6103, 27 Sep. 43; CM-IN-19237 (28 Sep. 43), #C6140, 28 Sep. 43; CM-IN-20550 (29 Sep. 43), #C6183, 29 Sep. 43.

42. CNI Weekly, II, #40 (6 Oct. 1943).

Chapter IX

1. Memo to Col. Kenneth S. Sweeney, C/S 41st Div., by Col. A. R. MacMechnie, 10 Sep. 1943, in 162d Regt. War Journal, Cons. Br. AGO 7091-B 341-70.2.

2. Office of Statistical Control, Listing of Air Corps and AAF Arms and Services Organizations Overseas by Theater, as of 30 Sep. 1943.

3. See Appendixes, 4, 9, and 10: Intel. Sum. #135, 4 Sep. 1943.

4. Ibid., #107, 29 May 1943.

5. The natives were at the mercy of the side which had the most powerful forces in their vicinity; moreover they were fully aware of this fact. On one occasion, for example, a formal delegation of natives came to Captain Frazier who was reconnoitering in the vicinity and politely requested him to leave that area unless he could produce forces which were more powerful than the near-by Japanese. Unrecorded interview with Capt. Everette Frazier.

6. Col. A. R. MacMechnie, Notes on Campaign 162d Infantry in New Guinea, in Cons. Br. AGO (3020) 341 - 70.2.

7. Ibid.

8. Operation Diminish.

9. Ibid.; 7th Amphibious Force Action Report, Finschhafen Operation, 23 Oct. 1943, in Cons. Br. AGO, A 670 C-6.2310/45.

10. Histories of the 46th Service Sq., 18th Material Control Unit, 49th Fighter Gp., and the 5.th, 57th, and 58th Troop Carrier Sqs.

11. Col. George F. Baier, Report of Inspection of the Medical Activities of the Fifth Air Force, 27 Nov. 1943 [Baier Report], in AAG Bulk, Reports of the Air Surgeon.

12. Ibid.

13. Ibid.; 46th Service Gp. history.

14. Baier Report. Ltr., Kenney to Arnold, 23 July 1943, in AAG 312.1 D Cons. Ltr.

15. Ibid.; Ltr., Arnold to Kenney, 21 Aug. 1943, ibid.

16. Directive by General MacArthur, F.O.G. 210.68, 29 July 1943, subject: "Return of Personnel to the United States."

17. 440th Sig. Bn. history: Fighter and bomber crews received the air medal for 25 and the DFC for 50 additional missions. If they chose not to take the air medal they would receive the DFC at the completion of the first 50. Troop Carrier pilots received the DFC at the completion of 50 combat missions, a cluster for each 50 additional, while the medal was awarded to the crews for 50 missions. (Baier Report.) "The Morale of the ground echelon of this squadron is very low, due to the fact that there are no prospects of their being returned to the states, after twenty (20) months in foreign service. No organization in any air force in any theater has a record of seventeen months continuous combat operations of which thirteen (13) months has been spent in 'Jungle Lines.'" Form 34, 19-25 Sep. 1943, 89th Sq.

18. Baier Report. In August 1943, many of the men of the 440th Signal Battalion received the first furloughs since coming overseas. 440th Sig. Bn. history.

19. Kenney to Arnold, 28 July 1943, in AAG Gen'l Cons. Ltrs.; G-Gen-9368 (30 Sep. 43), CG AAF to CINC SWPA (sgd. Arnold), -8173, 20 Sep. 43; Diary of Operational Statistics, Pt. 1, Tons of Bombs Dropped, Sorties and Pt. IIIA, Claims against Enemy--1943, in Combat Analysis Br., Statistical Control; Tabulation of Overseas Casualties of AAF Personnel, 24 Jan. 1945, in Personnel Statistics, Statistical Control.

BIBLIOGRAPHICAL NOTE

This study is based upon documents located in repositories at Headquarters, AAF, together with those sent in by AAF historians from the Southwest Pacific theater. These sources give satisfactory coverage for a narrative of operations, although reports on bombardment operations are surprisingly incomplete. At the time of the preparation of this study, for example, no bombardment unit had submitted a history covering the period, and narrative mission reports on operations before August 1943 had not been received. But cable and radio messages, intelligence summaries, statistical reports, and several good fighter group histories provided the essential details.

The sources used for the planning and policy portions of the study were also incomplete. Documents in the office of AC/AS-5 gave good coverage of the over-all planning at headquarters, but other material in Operations Division of the War Department General Staff was not made available. The principal weakness, however, was in the dearth of information on policy-making in the theater. Records of staff meetings, operations instructions, and correspondence among staff officers within the theater have been for the most part unavailable for the period before late 1943.

In this study, the notes generally give the location of the document cited. The following are the principal collections or repositories used:

AC/AS-5 files

AAF Office of Statistical Control: Combat analysis studies, operational and personnel statistics.

Air Adjutant General

Mail and Records Division, Classified Records Section: Collections of letters, memos, MMR's, etc., filed under the decimal system and cited AAG with decimal.

Administrative Services Division: A collection similar to the above and cited Air AG with decimal.

The Adjutant General, Operations and Training Division, Operations Branch: Records of the 41st Infantry Division.

Cable and radio messages in the office of the AAF Cable Secretary and AFSHO.

AC/AS-2, Air Information Division, Library Branch: Interviews, intelligence summaries, and miscellaneous reports, cited A-2 Library.

AAF Historical Office, Archives: Cable messages, unit histories, correspondence from factory representatives, special studies, and other miscellaneous documents received from the theater.

Appendix 1 — Location of Combat Units 1943*

Unit	16 Feb	1 June	30 Sep
317th Troop Carrier Gp	Until 28 September, the squadrons of this group flew with Directorate of Air Transport; between 28 September and 4 October, they exchanged location with the 374th Group.		
Hq	Garbutt	Garbutt	Garbutt
39th Sq	Archerfield	Archerfield	Archerfield
40th	Garbutt	Garbutt	Garbutt
41st	"	"	Garbutt**
46th	"	"	Garbutt**
374th Troop Carrier Gp			
Hq		Port Moresby	Wards
6th Sq	Wards with Det at Townsville	"	Wards
21st	Archerfield	"	Jackson
22d	Port Moresby	"	Wards
33d	Wards	"	Wards
375th Troop Carrier Gp			
Hq		On 12 July 1943, 375th Groups assigned to 54th TC Wing at Port Moresby.	Dobodura
55th Sq			"
56th			"
57th			"
58th			"
403d Troop Carrier Gp			
Hq		Assigned to South Pacific Area	
65th Sq		On 13 August 1943, these squadrons assigned to 54th TC Wing at Port Moresby.	Jackson***
66th			Jackson***

* Station List, 16 Feb 1943; Form 34; History of the 54th Troop Carrier Wing.
** On detached service with 374th Group, 26 August-5 September.
*** Air echelons at Tsili Tsili.

Appendix 1 (Contd)

Unit	16 Feb	1 June	30 Sep
433d Troop Carrier Gp			
Hq		On 1 September, air echelons arrived Port Moresby and assigned to 54th TC Wing.	Jackson
67th Sq			"
68th			"
69th			"
70th			"
3d Bombardment Gp (D)			
Hq	Port Moresby		Dobodura
8th Sq	Kila	Dobodura	"
13th	Schwimmer	"	" (Horande)
89th	Kila	"	" "
90th	Durand	"	"
22d Bombardment Gp (M)			
Hq	Reid River	Reid River (?)	"
2d Sq	Reid River	"	"
13th	Woodstock	Woodstock	"
33d	"	"	"
40th	Reid River	Reid River	"
38th Bombardment Gp (H)			
Hq	Durand		Durand
71st Sq	"	Durand	"
405th	"	"	"
822d		Initial reports made from Durand on 26 June. No aircraft assigned.	"
823d			"
345th Bombardment Gp (H)			
Hq			Jackson
498th Sq		Woodstock	"
499th		Reid River	Schwimmer
500th		Woodstock	Jackson
501st		Reid River (6 June)	Schwimmer

Appendix 1 (Contd)

Unit	16 Feb	1 June	30 Sep
43d Bombardment Gp (H)			
Hq	Jackson		Jackson
63d Sq	"	Jackson	"
64th	"	"	"
65th	"	"	"
403d	Maruba	"	"
90th Bombardment Gp (H)			
Hq	Port Moresby		Wards
319th Sq	Fenton(Darwin)	Fenton	"
320th	Port Moresby	Wards	"
321st	Port Moresby	"	"
400th	Iron Range	" (?)	"
320th Bombardment Gp (H)			
Hq		Wards	Fenton
528th Sq		Fenton	"
529th		Manbullo (20 June)	Manbullo
530th		Fenton (20 June)	Fenton
531st		Manbullo (6 June)	Manbullo
8th Fighter Gp			
Hq	Gurney		Schwimmer
35th Sq	"	Durand	Kila
36th	"	Wards	Wards
80th	Turnbull	Kila	Kila
35th Fighter Gp			
Hq	Johns Gulley		Johns Gulley
40th Sq	Berry	Berry	Tsili Tsili
41st	Jackson	Jackson	Jackson-Tsili Tsili
79th	Schwimmer	Schwimmer	Schwimmer

Appendix 1 (Contd)

Unit	16 Feb	1 June	30 Sep
49th Fighter Gp			
Hq	Durand		Dobodura
7th Sq	"	Dobodura	" -Horanda
8th	Kila	"	Tsili Tsili
9th	Schwimmer	"	Dobodura-Horanda
348th Fighter Gp			
Hq	Group arrived Brisbane on 14 June 1943, and flew to Port Moresby from 14 to 24 July.		Schwimmer
340th Sq			Jackson
341st			Durand
342d			Wards
475th Fighter Gp (T)			
Hq	Group activated on 14 May, 1943. Organized and trained in Australia until August.		Dobodura
431st Sq			Dobodura: Take-off from Berry
432d			"
433d			"
Det "A" Night Fighter		Kila	Berry: Take-offs from Jackson and Horanda
67th Fighter Sq		Wards	Woodlark
8th Photo Sq		Schwimmer	Schwimmer

Appendix 2

Fighter Escort of Transports to Wau*

24 January-1 February 1943

Date	Time	Base	Squadron	# Planes	Remarks
24	0800	Schwimmer	39th	2 P-38	
	0910	Kila	8th	8 P-40	
	1045	Durand	7th	8 P-40	"Contacted transports at Wau."
	1120	Berry	40th	8 P-39	
	1250	Jackson	41st	5 P-400 3 P-39	"Bad weather. No visual or radio contact made with transports."
	1410	Durand	7th	8 P-40	Incomplete, weather.
	1435	"	"	4 P-40	" "
25	1234	Schwimmer	9th	2 P-38	" "
26	0730	"	"	8 P-38	" "
	0820	"	"	4 P-38	Area south of Wau.
27	0735	"	"	8 P-38	
	0858	Kila	8th	8 P-40	
	0935	Durand	7th	8 P-40	Transports failed to wait at rendezvous point.
	1025	Berry	40th	6 P-39	Visibility, poor. Turbulence, rough.
	1105	Jackson	41st	6 P-400 2 P-39	Contact made with transports.
28	0745	Schwimmer	39th	8 P-38	4 DC-3's.
29	0700	"	"	2 P-38	"Spotting weather for next mission."
	0845	"	"	7 P-38	
	0955	Durand	7th	8 P-40	Transports failed to wait at rendezvous point.
	1035	Berry	40th	8 P-39	1 fighter lost, "other causes."
	1150	Kila	8th	8 P-40	
	1300	Jackson	41st	1 P-38, 7 P-400	
	1330	Durand	7th	8 P-40	
	1420	Berry	40th	7 P-39	Visibility, clear. Turbulence, rough.
	1500	Schwimmer	9th	7 P-38	Incomplete, weather.

* Although 13 fighters were forced back to base because of mechanical difficulties, only 1 was lost from accident, and no enemy opposition was encountered. All information from Form 34.

Appendix 2 (Contd)

Date	Time	Base	Squadron	# Planes	Remarks
30	0725	Schwimmer	39th	8 P-38	12 DC-3's.
	0800	Durand	7th	8 P-40	
	0820	Jackson	41st	7 P-400	
				1 P-39	
	0855	Kila	8th	8 P-40	
	0900	Berry	40th	8 P-39	
	1145	Durand	7th	8 P-40	
	1225	Berry	40th	6 P-39	
	1312	Kila	8th	8 P-40	
	1330	Jackson	41st	7 P-400	
				2 P-39	
	1350	Durand	7th	8 P-40	
	1415	Berry	40th	8 P-39	
31	0715	Schwimmer	39th	8 P-38	
	0748	Kila	8th	8 P-40	
	0820	Berry	40th	8 P-39	
	0900	Durand	7th	8 P-40	
	1000	Jackson	41st	6 P-400	Flight did not con-
				1 P-39	tact transports until after arrival at Wau.
	1055	Kila	9th	8 P-40	
	1115	Berry	40th	6 P-39	
	1155	Durand	7th	8 P-40	
	1250	Berry	40th	8 P-39	
	1345	Kila	8th	8 P-40	
	1440	Jackson	41st	5 P-400	
				3 P-39	
	1450	Schwimmer	9th	3 P-38	Last transports in clouds. Contact at Wau. Covered landing and take-off.
1 Feb	0745	Schwimmer	39th	8 P-38	
	0858	Kila	8th	8 P-40	
	0925	Berry	40th	8 P-39	
	1005	Jackson	41st	8 P-400	
	1042	Kila	8th	8 P-40	
	1100	Durand	7th	8 P-40	
	1125	Berry	40th	6 P-39	
	1205	Durand	7th	8 P-40	
	1335	Berry	40th	8 P-39	Incomplete, weather.
	1400	Kila	8th	8 P-40	" "
	1430	Jackson	41st	5 P-400	" "
				3 P-39	
	1500	Schwimmer	9th	8 P-38	"Cu clouds to 25,000' over pass. Trans returned due weather."

Appendix 3

Summary of Bombardment Operations in Support of Lae Ground Operations, 3-16 Sept 1943*

Sorties by Type

B-24	.....	139
B-17	.....	54
B-25	.....	188
B-26	.....	24
A-20	.....	16
Total	.....	421

Sorties by Unit

90th Bomb Gp (H)	.....	84 B-24
43d " " "	.....	55 B-24, 54 B-17
345th " " (M)	.....	126 B-25
38th " " "	.....	36 B-25
22d " " "	.....	24 B-26
3d Attack Gp (A)	.....	26 B-25, 16 A-20

Rounds Fired

267,900 x .50 cal 38,860 x .30 cal

Our Losses

1 B-17 missing. No enemy interception on any missions.

Number & Weight of Bombs Dropped

755 x 1000-lb inst dml
366 x 1000-lb 1/10-sec delay
235 x 500-lb inst dml
21 x 500-lb 1/10-sec delay
246 x 500-lb 4/5-sec delay
12 x 500-lb 6-hour delay
4 x 500-lb 12-hour delay
227 x 300-lb 1/10-sec delay
176 x 150-lb frag clusters
534 clusters 6 x 20-lb frags
234 clusters 3 x 23-lb parafrags
42 clusters 6 x 23-lb "
20 x 20-lb frags
251 x 20-lb parafrags

Total Tonnage

1,597,942 lbs = about 799 tons

Average Tonnage

57.1 tons per day

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* Intelligence Reports of Operations Lae Area, Fifth Air Force Hq., 16 Sept 1943

Appendix 3 (Contd)

A = Inst dml (lbs) C = Frag clusters (lbs) E = 20 lb frags G = Forafrags (23-lb or 20-lb
B = 1/10-sec delay (lbs) D = 4/5-sec delay dml (lbs) F = 6-hour delay dml (lbs)

Date	Unit	Aircraft	Time	Altitude	Lorbs	A/A	Results
3 Sept	90th Gp	24 B-24	1040-1046	12000-15000'	151 x 1000 A 16 x 1000 B	Intense, accurate	57 bombs in target area. All buildings believed destroyed. Smoke over target.
Target: Lae Terrace							
3 Sept	498th Sq	9 B-25D1	1040-1145	1000-2000'	106 x 150 C	Nil	Native huts strafed. Church at Gabmatzung "which held many supplies" destroyed.
Target : Gabmatzung, Nerakapor, Yalu							
4 Sept	90th Gp	24 B-24	0902-0916	11000-15500'	96 x 1000 A 96 x 1000 B	Moderate, intense, accurate and inaccurate	82 bombs in target area. Buildings and possibly bridge destroyed.
Target: Webb's at Lae							
4 Sept	13th Sq	9 B-25D1	0755-0830	Minimum to 300'	60 x 300 D	Nil	Thoroughly strafed.
Target: East bank of Buhem River, Hopoi landing ground & mission							

Appendix 3 (Contd)

Date	Unit	Aircraft	K Time	Altitude	Bombs	A/A	Results
5 Sept	90th & 43d Gps	24 B-24 1 B-17	1039-1117	7500 to 14000'	142 x 1000 A 46 x 1000 B 15 E	Mixed	156 bombs on target; Plantation house "obliterated," AA guns silenced.
Target: Heath's (Lae)							
5 Sept	3d, 38th, 345th Gps	64 B-25 7 A-20	1018-1620	150 to 1500'	534 x 20 G 70 x 150 G	Slight, inaccurate	28 x 305 tanks of smoke dropped around Nadzab prior to parachute dropping. Buildings, motor pool, supplies, huts covered.
Target: Nadzab-Narakapor (Markham Valley)-Valley Road							
6 Sept	43d Gp	6 B-17 18 B-24	0956-1010	9000-11500'	80 x 1000 A 80 x 1000 B	Mixed to heavy	All but 10 bombs on target. Direct hits on building. Dust & heavy smoke.
Target: Jacobsen's (Lae)							
6 Sept	345th Gp	48 B-25D1	1020-1038	50-125'	234 x 500 D 12 x 500 F	Light, inaccurate	233 bombs on target, direct hits on buildings.
Target: Malahang							

Appendix 3 (Contd)

Date	Unit	Aircraft	X Time	Altitude	Bombs	A/A	Results
7 Sept	90th Gp	24 B-24	0940-1020	12000-15500'	120 x 1000 A 72 x 1000 B	Mixed of a barrage type	Little assessment of damage because of heavy smoke. One AA position apparently silenced.
Target: Lae Terrace							
7 Sept	22d Gp	9 B-25	0947-1015	4000-10600'	54 x 500 A	Slight, inaccurate	No bombs on target. Large fire, but clouds obscured result.
Target: Diddyman's Bridge							
7 Sept	38th Gp	8 B-25C1	0802-0821	Minimum - 1000'	72 x 23 G	Nil	Bombs on roadway, other results unobserved.
Target : Markham Valley Road							
7 Sept	3d Gp	10 B-25D1	1320-1350	Minimum to 1000'	80 clusters of 6 x 23 lb frags	Nil	Grass & huts on fire. Heath's reported as being destroyed. Results otherwise unobserved.
Target: Markham Road (Nadzab-Heath's)							
8 Sept	43d Gp	10 B-17	1025-1040	9800-11700'	12 x 1000 A 8 x 1000 B 28 x 500 B 12 x 500 B	Mixed to heavy	35 bombs in target. Two large explosions, buildings destroyed. Smoke & clouds obscured damage.
Target: Chinatown Lae							

Appendix 3 (Contd)

Date	Unit	Aircraft	K Time	Altitude	Bombs	A/A	Results
8 Sept	38th Gp	12 B-25D1	1045-1105	50-200'	28 x 300 D 12 x 500 D 40 Clusters G 4 x 500 lb 12 hour delay	Mixed to medium	Generally unobserved. Bridge in Heath's place blown up. AA on Lae wreck silenced by strafing.
Target: Markham Valley Road							
8 Sept	43d Gp	15 B-24	1036-1132	12500-15000'	162 x 500 A 4 x 1000 B 5 E	Mixed to intense. 3 B-24's hit	100 bombs concentrated on runway. An AA battery ceased firing. Clouds obscured results.
Target: Lae Area							
8 Sept	22d Gp	7 B-26	1120	7500'	42 x 500 A	Mixed	38 bombs in target, smoke rising to 1500'. Direct hit on AA.
Target: Webb's & Chinatown (Lae)							
12 Sept	43d Gp	10 B-24 12 B-17	0958-1039	8000-12000'	70 x 1000 A 48 x 1000 B	Mixed to intense	House demolished, AA hit, bridge at Diddyman's destroyed, area well covered.
Target: Emery's & Diddyman's (Lae) Defense Area #4							

Appendix 3 (Contd)

Date	Unit	Aircraft	K Time	Altitude	Bombs	A/A	Results
13 Sept	345th Gp	12 B-25D1	1545-1600	Minimum	72 x 300 D	Medium and inaccurate	Tari village in flames, thorough strafing.
Target: Tari (Lae)							
14 Sept	345th Gp	9 B-25D1 3 returned to base	1220-1230	50-150'	67 x 300 D	Mixed, 2 aircraft holed	58 bombs on Jacobsens plantation, other results unobserved.
Target: Edward's and Jacobsen's Plantations at Lae							
15 Sept	43d Gp	13 B-17	1020-1055	7000-8200'	32 x 1000 A	Mixed	21 bombs on target, AA silenced, 1 B-17 unreported.
Target: Chinatown (Lae)							
16 Sept	43d Gp	12 B-17	1044-1100	4750-6500'	48 x 1000 A	Nil	41 bombs on target, explosions & fires, target probably destroyed.
Target: Chinatown (Lae)							
16 Sept	22d Gp	8 B-26	0910	3500'	9 x 500 A 9 x 500 B	Nil	12 bombs on target, explosions.
Target: Webb's (Lae)							

Appendix 3 (Contd)

Date	Unit	Aircraft	K Time	Altitude	Bombs	A/A	Results
16 Sept	3d Gp	7 B-25D1	1136-1150	Minimum to 1000'	42 clusters G 42 clusters G	Nil	378 bombs in target area.
Target: Defense Area #6							
16 Sept	3d Gp	9 A-20	1159-1212	Minimum	351 x 20 G	Nil	All bombs on target.
Target: Defense Area #7							

Appendix 4

Status Reports 1943*

Month	P-38	P-39	P-40	P-400	P-47	P-70	A-4	A-5	A-20	A-25	B-26	A-17	B-24	Aircraft Lost: By air	Aircraft Lost: By sea	Aircraft Lost: Combat	Aircraft Lost: Missing	Aircraft Lost: Accident	Aircraft Lost: Other
Jan	83	73	63 P-40 E 35 P-40 F	72			12		[illegible]	55	29	54	56	[illegible] C-47	1[illegible] [illegible] 1 A-4 [illegible] L-45	2 A-17 [illegible] A-25 1 P-40	1 B-26, 1 [illegible] 1 B-17, 1 B-24 1 A-30, 1 P-39	5 B-25, 2 B-26 1 B-17, 2 B-24 3 C-47, 1 [illegible] 2 A-20, 9 A-29 1 A-32, [illegible] P-400 1 P-40	2 B-17, 1 B-24 2 P-39, 1 C-47 bombed on ground
Feb	100	72	63 P-40 E 34 P-40 L	63			12		27	54	25	52	53	5 C-47 2 B-25	21 P-39	2 B-17 1 B-25	2 B-24 1 C-47	4 P-400, 1 P-39 1 P-40, 3 P-38 1 B-24, 3 B-25 1 B-26, 1 C-47	
Mar	98	69	61 P-40 E 33 P-40 L	65			11	4	21	61	27	49	52	12 B-25 8 B-24 1 C-47	8 P-38 4 F-5A	4 P-39 1 B-25 1 B-17	1 P-400, 1 A-20 1 B-17	3 P-38, 3 P-39 3 P-40, 2 P-400 1 A-30, 1 B-25 1 B-26, 1 B-17 3 B-24, 1 F-4 9 transports	3 P-38 bombed on ground
Apr	88	60	57 P-40 E 33 P-40 K	60		6	11	4	19	65	27	47	69	23 B-24 13 B-25 1 P-70 6 C-47		2 P-38 2 P-40 1 P-400 3 P-39	1 A-20, 1 B-25 1 B-17, 7 B-24	8 P-38, 7 P-39 2 P-40, 4 P-400 1 A-20, 2 B-25 1 B-17, 7 B-24 1 C-56, 1 C-53	3 B-25 bombed on ground
May	83	72	54 P-40 E 29 P-40 K	51		5	10	4	15	155	26	42	96	94 B-25 31 B-24 17 C-47	15 P-39 3 C-61 18 L-45		1 B-25, 5 B-17 2 B-24	5 P-38, 3 P-39 7 P-40, 9 P-400 1 P-70, 4 A-20 2 B-25, 1 B-26 2 B-24, 1 F-4 2 C-47	

* Monthly status reports from the cables. The report for September [illegible] in which only losses and arrivals are recorded.

Appendix 4 (Contd)

Month	P-38	P-39	P-40	P-400	P-47	P-70	P-4	P-5	A-20	B-25	B-26	B-17	B-24	AIRCRAFT LOST By air	AIRCRAFT LOST By sea	AIRCRAFT LOST Combat	AIRCRAFT LOST Missing	AIRCRAFT LOST Accident	AIRCRAFT LOST Other
June	156	114	52 P-40 E 28 P-40 K	50	59	3	9	5	14 A-20 A 7 A-20 C	203	23	36	100	64 B-25 10 B-24 57 C-47	79 P-38 45 P-39 59 P-47 7 A-20C 3 F-5A 3 C-61	1 P-38 1 B-24	3 B-25, 6 B-17 2 B-24, 1 F-4 2 F-5A	5 P-38, 3 P-39 3 P-40; 1 P-400 2 P-70; 1 A-20 8 B-25, 3 B-24 1 B-17C	
July	176	110	50 P-40 E 65 P-40 K & N	47	114	3	9	5	13 A-20A 6 A-20C	213	36	35	132	171	17 B-25 33 B-24 47 C-47 11 B-26 from 13th AF	36 P-38 40 P-40K 56 P-47D 8 L-3C	1 P-38 1 P-40K 1 B-25	8 P-38 2 P-39 2 P-400 4 B-25 1 B-17 5 B-24 1 C-47	7 P-38 2 P-39 4 P-40 1 P-47 1 P-400 2 A-20 5 B-25 1 B-26 2 B-24 4 C-47	1 B-25 from A/ 4 B-24 bombed on ground
Aug	207	131	151		105	4	12		10	172 C1 D1 27 C & D 41 G	27	131	214	1 P-70 19 B-25C & D 28 B-25G 22 B-24 49 C-47 1 B-26 from 13th AF	47 P-38 56 P-39 53 P-40 3 A-20A 6 C-47	3 P-39 1 B-17	8 P-38 2 C-47 4 B-25 5 B-24 1 F-4 2 C-47	12 P-38 5 P-39 7 P-40 4 P-47 2 A-20 4 B-25 4 B-24 5 C-47	1 A-20 from A/
Sept															23 P-38 H 13 P-39 Q 41 P-40N5 37 P-47D2 & 3 48 A-20 G 40 L-5 A 65 B-24 14 B-25 G 19 B-25 D 42 C-47 1 P-70	6 P-38 2 B-25D1 1 B-24	9 P-38 2 P-40 4 B-25D1 1 B-17 4 B-24D	10 P-38 3 P-39 7 P-40 2 P-47 3 P-70 9 B-25D1 1 B-25D 1 B-25G 3 B-17F 6 B-24 2 C-47 1 F-5A	1 B-25D1 and 1 B-24 from A/

Appendix 5

Planes in Commission 1943*

Date	23d Gp	[illegible]	[illegible]	[illegible]	2d Gp	780th Gp	345th Gp	8th Gp	38th Gp	43th Gp	348th Gp	475th Gp	Det A	67th Sq	8th Photo
1 Feb	11 B-25 15 A-20	4 B-26	14 B-25	17 B-17	1[illegible] B-24			22 P-400 27 P-39	16 P-38 13 P-400 14 P-39	46 P-40 [illegible] K					4 P-4
[illegible] Feb	17 B-25 [illegible]	[illegible]	[illegible]	[illegible] B-17	1[illegible] B-24			10 P-400 23 P-39	7 P-400 36 P-39 18 P-38	42 P-40 [illegible] K 21 P-38					2 (? P-4
15 Mar	17 B-25 16 A-20	6 [illegible]	[illegible]		1[illegible] B-24			3 P-38 5 P-400 14 P-39	16 P-38 6 P-400 34 P-39	16 P-38 39 P-40					3 P-4
5 Apr	14 B-25 18 A-20	10 B-26	12 B-25	[illegible] B-17	19 B-24			9 P-39 6 P-400 13 P-38	5 P-400 30 P-39 16 P-38	14 P-38 30 P-40 [illegible] K			0 P-70		6 P-4
[illegible] Apr	11 B-25 12 A-20	11 B-26	9 B-25	1[illegible] B-17	27 B-24			10 P-38 5 P-400 7 P-39	14 P-38 13 P-400 29 P-39	16 P-38 42 P-40 [illegible] K			4 P-40		5 F-4 and F-5A
30 Apr	6 B-25 11 A-20	9 B-26	6 B-25	36 B-17	34 B-24			8 P-38 8 P-400 14 P-39	20 P-38 14 P-400 28 P-39	21 P-38 42 P-40			4 P-70		6 F-4 and F-5
10 May	2 B-25 11 A-20	3 B-26	16 B-25	1[illegible] B-17	31 B-24	24 B-24		14 P-38 9 P-400 14 P-39	19 P-38 12 P-400 30 P-39	30 P-38 40 P-40			4 P-70		5 F-4 and F-5
31 May	12 B-25 13 A-20	10 B-26	16 B-25	19 B-17 4 B-24	36 B-24	5 B-24		9 P-38 7 P-400 9 P-39	18 P-38 8 P-400 24 P-39	18 P-38 39 P-40			3 P-70		5 F-4 and F-5

* The number of planes in commission in each unit fluctuated daily. The dates used in this table have been selected arbitrarily using the daily status reports as found in the cables. The significance of the figures becomes clear when compared with the number of aircraft on hand as tabulated in Appendix 4.

Appendix 3 (cont'd)

Date	1st Gp	2nd Gp	7th Gp	4th Gp	90th Gp	20th Gp	345th Gp	8th Gp	9th Gp	49th Gp	348th Gp	475th Gp	Det A	67th Sq	8th Photo	18th Sq**
15 June	11 B-17 12 [illegible]	8 B-[illegible]	[illegible] B-24	15 B-17 1 B-24	[illegible] B-24	3 B-24		15 P-38 7 P-400 9 P-39	18 P-38 9 P-400 16 P-39	16 P-38 39 P-40			3 P-70			
30 June	14 B-26 11 A-20A	10 B-26 5 B-25	17 B-25	11 B-17 1 B-24	37 B-24	5 B-24	15 B-25	15 P-38 6 P-400 9 P-39	17 P-38 4 P-400 27 P-39	11 P-38 37 P-40			2 P-70		3 F-4 & F-5	
25 July	20 B-25 [illegible] A-20	10 B-26 11 B-26	10 B-25	11 B-17 14 B-24	37 B-24	5 B-24	47 B-25	16 P-38 17 P-400 15 P-39	14 P-38 39 P-39	19 P-38 33 P-40	74 P-47		2 P-70	24 P-39	8 F-4 & F-5	3 B-25
31 July	21 B-25 10 A-20A	5 B-26 13 B-26	10 B-25	12 B-17 9 B-24	40 B-24	11 B-24	45 B-25	18 P-38 15 P-400 14 P-39	18 P-38 42 P-39	13 P-38 30 P-40	56 P-47		2 P-70	20 P-39	7 F-4 & F-5	3 B-25
8 Aug	34 B-25 8 A-20A	16 B-26 13 B-25	22 B-25	14 B-17 8 B-24	35 B-24	15 B-24	4 B-25	22 P-38 11 P-400 18 P-39	19 P-38 39 P-39	17 P-38 43 P-40	61 P-47	58 P-38	3 P-70	17 P-39	9 F-4 & F-5	3 B-25
31 Aug	40 B-25 6 A-20	16 B-25	25 B-25	14 B-17 17 B-24	34 B-24	20 B-24	41 B-25	12 P-38 15 P-39	18 P-38 44 P-39	11 P-38 46 P-40	74 P-47	54 P-38	2 P-70	8 P-39	6 F-4 & F-5	3 B-25
15 Sept	45 B-25 11 A-20	26 B-25	27 B-25	13 B-17 21 B-24	37 B-24	20 B-24	53 B-25	19 P-38 17 P-39 16 P-40	20 P-38 46 P-39	18 P-38 42 P-40	75 P-47	60 P-38	3 P-70	12 P-39		2 B-25
27 Sept	32 B-25 8 A-20	22 B-25	23 B-25	10 B-17 32 B-24		15 B-24	48 B-25	22 P-38 24 P-39 19 P-40	20 P-38 46 P-39	14 P-38 36 P-40	75 P-47	45 P-38	4 P-70	14 P-39	6 F-4 & F-5	2 B-25

** 67th Fighter Squadron and 18th Mapping Squadron on loan from the Thirteenth Air Force.

SECURITY INFORMATION

Appendix 6

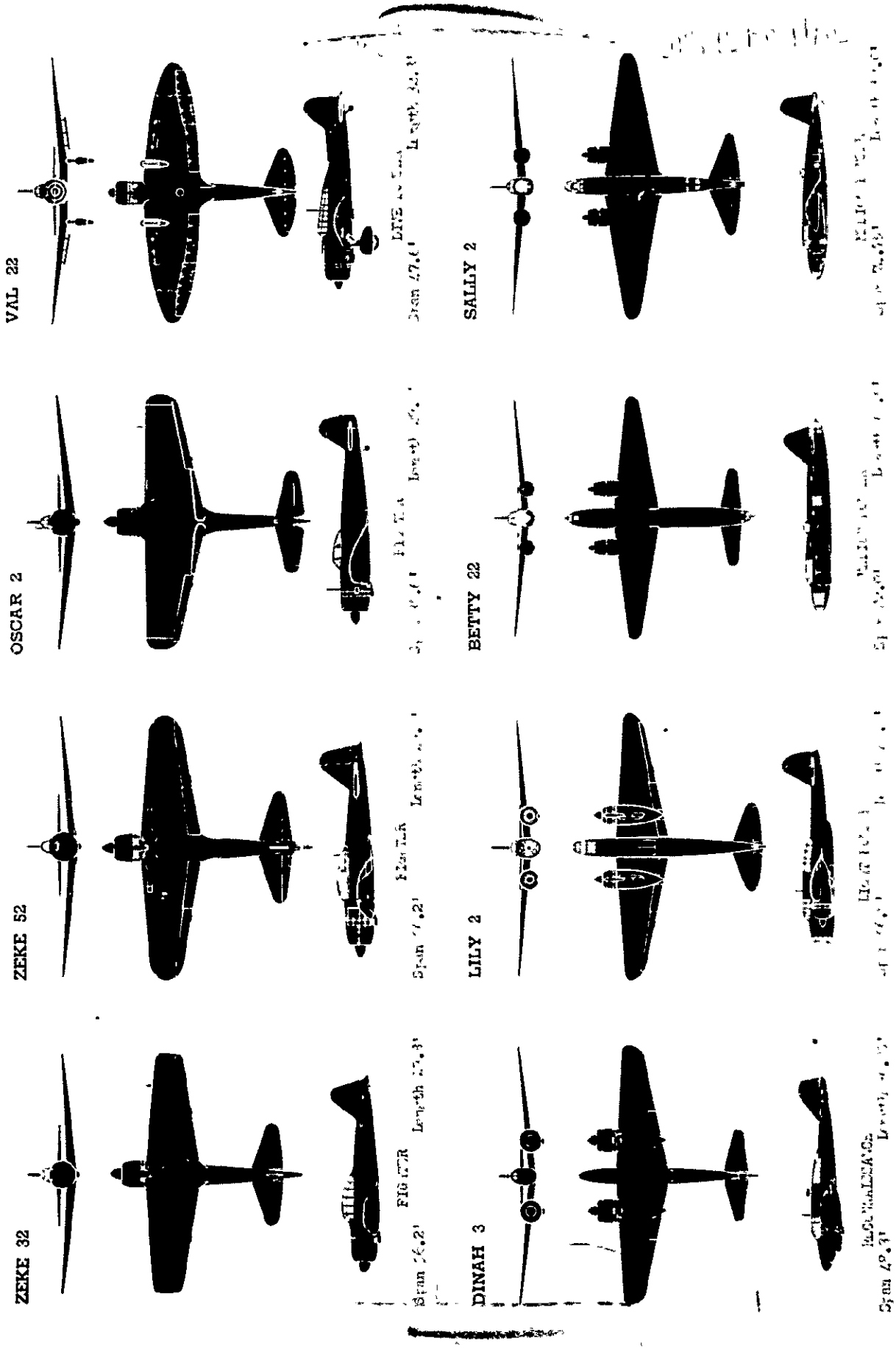
Estimated Enemy Air Strength

	F	B	FB	FP	O or T	F	B	FB	FP	O or T	F	B	FB	FP	O or T
	23 Jan 43					5 Feb 43					12 March 43				
New Britain New Ireland	143	57	12	13	8	63 9	71 20	8	9 4	8 6	61 9	73 41	8	7 4	8 6
New Guinea	13					13					9	5			
Solomons	30	17	10	30	4	52	55	14	23	4	75	23	14	23	4
Timor	19	29				19	17		3	4	25	20		3	4
Ambon	22	9				12	9		4		18	9	3	4	
Celebes	45	38	4	27	[illegible]	42	33		12	11	32	41		12	12
	2 April 43					30 April 43					4 June 43				
New Britain	111	128	6	13	13	94	91	6	17	19	[illegible]	11[illegible]	4	11	18
New Ireland	[illegible]	[illegible]		4		[illegible]	1		4		9	9		4	
New Guinea				4		50	6		5		90	60		5	
Solomons	54	23	8	14	4	56	18	7	30	4	18	17	2	34	
Timor	22	20			4	23	8		3	4	17	6		3	
Ambon	18	1[illegible]	3	9		14	1[illegible]	7	11		14	1[illegible]	3	12	
Celebes	59	40		11	12	34	4[illegible]		12	1[illegible]	61	44			18
Dutch New Guinea											19	9		3	
Java											60	65	9	18	9
	3 July 43					6 Aug 43					29 Aug 43				
New Britain	142	96	4	11	14	119	144	4	12	13	100	142	4	11	13
New Ireland				4			34		9		9	36		9	
New Guinea	52	59		5		25	53		5	8	28	59		5	5
Solomons	50	12	2	27		49	21	2	30		52	12	2	24	
Timor	24	12				14	18				16	16			
Ambon	5	9	3	7		6	9	3	7		6	9	3	6	
Dutch New Guinea	13	9				6					9				
Celebes	43	48			18	4	24		9	27	18	14		9	26
Java-Bali	36	81	9	24	18	30	78	9	24	18	30	78	9	24	18
	10 Sep 43					24 Sep 43									
New Britain	129	175	4	12	13	93	126	4	12	13					
New Ireland	9	45		9		9	9		9						
New Guinea	90	95		6	3	64	109		6	7					
Solomons	50	11 (*)	2	34		50	38	2	32						
Timor	24	18				24	18								
Ambon	6	9	3	9		6	9	3	15						
Dutch New Guinea	9					9									
Celebes	18	24		9	26	18	14		9	25					
Java-Bali	50	60	9	24	18	47	60	9	24	18					

* Taken from cable reports.

F = Fighters FB = Flying Boat O or T = Observation or Transport

B = Bombers FP = Float Plane



Appendix 7

Fifth Air Force Sorties, 1943*

	B-17	B-24	B-25	B-26	A-20	P-38	P-39	P-40	P-47	A-24	P-70	Total
Prior to 1943	1,218	282	1,216	784	700	297	3,714	3,979		1,010		13,200
Jan	214	210	243	69	136	495	1,514	1,160				4,041
Feb	308	133	150		95	497	773	675				2,531
Mar	368	157	148		97	1,108	833	1,158				3,769
Apr	175	160	90		41	939	947	603				2,955
May	149	252	230		64	1,138	967	545			21	3,366
June	132	276	303		82	1,076	1,267	542			25	3,703
July	85	370	964	33	99	1,111	1,703	1,032	26		4	5,427
Aug	168	673	655	48	77	1,918	2,652	965	1,651		4	8,811
Sept	144	672	761	92	73	2,467	2,858	1,625	1,662		23	10,377
Oct	56	739	981	35	70	1,927	2,502	1,882	1,431		22	9,645

* Diary of Operational Statistics, Part I.

Appendix 8

Tons of Bombs Dropped* by Fifth Air Force, 1943

	B-17	B-24	B-25	B-26	A-20	P-38	P-39	P-40	Total
Prior to 1943	659	742	478	255	101	9	7	34	2,285
Jan	285	203	191	46	17	11		2	755
Feb	330	163	74		22				589
Mar	308	249	65		24			4	650
Apr	168	237	46		17				468
May	153	375	101		15				644
June	166	456	112		19				753
July	130	840	762	39	18				1,789
Aug	268	1,692	332	58	16		1		2,367
Sept	191	1,574	505	93	27		8	1	2,399
Oct	14	1,430	434	32	25		3	3	1,941

* Diary of Operational Statistics, Part I.

Appendix 9

Enemy Aircraft Destroyed in the Air by Fifth Air Force Planes, 1943*

	B-17	B-24	B-25	P-38	P-39	P-40	P-47	Other	Total
Jan	10	35				13		93	151
Feb		17		2	15	7			41
Mar	33	10		19		11		13	91
Apr	7	16	1			1		45	70
May	2	17		6				4	29
June	10	10		16					36
July		10	2	42	5	9			68
Aug	3	40	16	91	12		4		166
Sept		64	14	109	2	25	9		223
Oct		86	75	154	11	20	39		385

Appendix 10

Enemy Aircraft Destroyed on the Ground*

	B-17	B-24	B-25	B-26	A-20	P-39	P-40	Other	Total
Prior to Jan 43	7	4	9	5	17	15	7	79	143
Jan		2		3				1	6
Feb	3		2						5
Mar									
Apr			6						6
May	1	1	2						4
June					1				1
July		1	1						2
Aug		22	153						175
Sept								82	82
Oct		41	209					P-47 6	256

* Diary of Operational Statistics, Part III A. Total number of enemy planes destroyed in air in 1942 was 235.

Appendix 11

AAF Officer Casualties in the Southwest Pacific, 1943*

	Dead	Missing	Returned to Duty Previously Missing	POW	Wounded	Returned to Duty Previously Wounded
Jan	23	25	1	1	5	13
Feb	9	11	1		1	3
Mar	20	10	1		4	16
Apr	29	1	1		1	3
May	18	21			1	3
June	23	24	3	1	3	5
July	31	13	5		3	4
Aug	31	36		2	2	15
Sept	35	19	1	2	4	6
Oct	49	27	7		3	27
Nov	60	50	1		3	17
Dec	9	31			5	17

* Tabulation of Overseas Casualties of AAF Personnel, Personnel Statistics, 24 Jan 1945. These casualties are combat crew members only.

Appendix 12

AAF Enlisted Casualties in the Southwest Pacific, 1943*

	Dead				Missing Status Undetermined				Returned to Duty from Missing				POW			Returned to Duty from POW			Wounded				Returned to Duty from Wounded			
	Combat Crews	Probable Combat Crews	Other AC	ASWAAF	CC	PCC	Other AC	ASWAAF	CC	PCC	Other AC	ASWAAF	CC	Other AC	ASWAAF	CC	Other AC	ASWAAF	CC	PCC	Other AC	ASWAAF	CC	PCC	Other AC	ASWAAF
Jan	2	19	7			20	7						1	2						1	4			4	7	2
Feb		6	4			15	2			1															3	
Mar	6	17	17			6	7		1											1	11			2	7	1
Apr		26	7	1								1									1			1	9	
May	2	9	80	22		15	13										1			4	1			2	7	
June	4	20	7			22	8							1						3				2	4	
July	5	17	7			17														1	1		1	7	3	
Aug	18	12	8	1	22	16	1							1					1	5		9	2	8	7	3
Sept	37	1	5	2	19	2													3	3	3		2	1	7	2
Oct	49	1	8	2	18				3				1						4	1	5	1	10		27	29
Nov	49	1	9		38		1														8	2	4		27	5
Dec	10				29				1										1	1	7	1	2		16	1

* Tabulation of Overseas Casualties of AAF Personnel, Personnel Statistics, 24 Jan 1945.

Appendix 13 Operational Data on Bombing Activities*

B-17's Month	Sorties	Bombs Dropped	Tons of Bombs	Jap Losses	Our Losses
1943					
June	119	4656	173.2	7	3
July	75	1728	123.0	2	1
August	148	1915	244.0	5	2
Sep	125	5539	218.0	3	1
Oct	10	56	14	-	-
Totals	477	13894	772.2	17	7

B-24's					
1943					
June	230	9976	831.4	2	4
July	323	8512	712.9	8	1
Aug	572	10495	1568.0	91	6
Sep	582	11993	1622.2	61	2
Oct	547	21086	1178.8	92	13
Nov	622	15102	1352.1	18	3
Dec	1573	19105	4718.4	11	5
1944					
Jan	1024	10882	2810.6	39	4
Feb	1032	26716	3179.0	1	3
March	1210	60118	3692.7	32	7
Totals	7715	193990	21663.1	355	48

B-26's					
1943					
July	33	352	38.4		1
August	34	238	48.2		
Sep					
Oct	19	404	20.2		
Nov	73	863	9.5		
Dec	231	1128	268.3		
1944					
Jan	55	293	73.3		-
Totals	445	3278	457.9		1

* A Study of Bombing Activities from 1 June 1943 to 31 Mar. 1944, Report by 2d Operations Analysis Sec. to Kenney, 2 May 1944.

Appendix 13 (contd)

B-25's Month	Sorties	Bombs Dropped	Tons of Bombs	Jan Losses	Cur Losses
1943					
June	177	1866	98.1		
July	740	5347	759.3	16	5
Aug	561	6729	320.8	31	5
Sep	648	9482	494.5	14	6
Oct	651	10655	418.7	64	12
Nov	758	10097	709.8	31	15
Dec	1588	12697	1733.5	9	6
1944					
Jan	1400	23639	1563.8	3	6
Feb	854	6611	901.4	1	9
Mar	748	5910	1074.4	1	3
Totals	8125	93033	8074.3	170	67

A-20's					
1943					
June	73	1331	18.2		2
July	78	599	17.8		
Aug	51	336	16.8		
Sep	59	1079	25.5		
Oct	52	309	16.4		
Nov	119	430	8.3		
Dec	597	2472	325.6		1
1944					
Jan	490	1913	315.6		
Feb	631	2829	524.2		6
Mar	1087	4391	915.1	2	17
Totals	3219	15689	2182.5	2	26

Appendix 14

Bomber Utilization*

TIME	ASSIGNED TO COMBAT SQUADRONS	AVAILABLE FOR COMBAT		BOMBERS EMPLOYED			BOMBERS REACHING TARGET	% UTILIZATION (1 MISSION IN 2 DAYS = 100%)
		No.	%	No.	% AVAILABLE	% ASSIGNED		
1943								
Jan	164	79	48	26	33	16	23	32
Feb	152	93	61	20	22	13	18	26
Mar	135	80	59	23	29	17	19	34
Apr	130	84	65	16	19	12	13	25
May	188	108	58	22	20	12	18	23
June	211	142	67	29	20	14	23	27
July	272	200	74	48	24	18	42	35
Aug	278	205	74	51	25	18	43	37
Sep	337	269	80	60	22	18	55	36
Oct	378	309	82	61	20	16	46	32
Nov	381	299	79	80	27	21	61	42
Dec	374	308	82	152	49	41	136	81
1944								
Jan	343	275	80	112	41	33	102	65
Feb	34[illegible]	263	77	103	39	30	88	60
Mar	466	336	72	126	38	27	112	54
Apr	502	413	82	149	36	30	137	59

* "Bomber Utilization," 2d Operations Analysis Sec., FEAF, Report #11, 18 June 1944.

Appendix 14 (contd) **Crew, Mission, and Time Data, Jan thru April 1943**

PERIOD	BOMBERS ASSIGNED	CREWS ASSIGNED	CREWS AVAILABLE	% CREWS AVAILABLE	FLYING TIME HOURS	SORTIES	HOURS/SORTIES	CREWS/BOMBER
Light Bombers								
Jan	67	89	64	72	1823	555	3.29	1.3
Feb	69	123	95	77	2162	688	3.14	1.8
Mar	144	272	209	77	3890	1241	3.14	1.5
Apr	166	271	210	78	6813	1872	3.64	1.6
Total	446	755	578	77	14688	4356	3.37	1.7
Medium Bombers								
Jan	146	220	160	73	5767	1730	3.33	1.5
Feb	135	141	101	72	5112	1017	5.02	1.0
Mar	140	133	98	74	4997	1161	4.30	0.90
Apr	147	136	[illegible]1	67	5084	1002	5.08	0.93
Total	576	630	450	71	20960	4910	4.27	1.1
Heavy Bombers								
Jan	131	212	136	64	8299	1197	6.94	1.6
Feb	140	200	133	64	9511	1288	7.39	1.5
Mar	172	266	184	69	10112	1488	6.80	1.5
Apr	188	287	189	66	11292	1597	7.07	1.5
Total	631	974	642	66	39214	5568	7.04	1.5

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~~[illegible]~~ACTED

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]:

[illegible]:

1. [illegible]

2. [illegible]

(1) [illegible]

(2) [illegible]

(3) [illegible]

(4) [illegible]

(5) [illegible]

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* [illegible]

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Appendix 15 (contd)

(6) Anticipated close support missions will include strafing of tracks leading to both landing areas.

b. Paragraph 3 d. (1) (e): Sea and overland routes or reinforcement will be denied the enemy by:

(1) Destruction of enemy barges engaged in coastwise traffic.

(2) Bombing and strafing of enemy overland routes of advance when supply and troop concentrations are discovered.

(3) Attacks on all enemy naval movements which may appear to threaten the area concerned.

(4) The scale of effort is in proportion to the targets and forces available.

c. Paragraph 3 d. (1) (c): There are ten troop carrier squadrons now permanently stationed in New Guinea. During the period of these operations two additional squadrons will be despatched to New Guinea from the Australian mainland making a total of 12 squadrons available. The total effort of these troop carrier squadrons is devoted to the maintenance of fighter squadrons at [illegible]* and support of the [illegible]* operation. Preliminary plans for the movement of land force troops and supplies together with the maintenance of existing garrisons has already been prepared. These schedules are not included herewith since they are subject to change according to the progress of preliminary operations in the stockage of [illegible] and the forces in the [illegible] area.

d. Paragraph 3 d. (1) (d): Anti-submarine patrol will be supplied by aircraft based at [illegible]*, [illegible]*, [illegible]* and [illegible]*. The method of furnishing this cover for anti-submarine work will proceed as usual upon the request of appropriate Naval Headquarters. Air protection by fighter cover for over-water movements have been covered in some detail by 2nd Indorsement to your Headquarters, 19 August 1943, in connection with letter of Commander, Allied Naval Forces, 16 August 1943, concerning air support during the [illegible] operation; copy is attached.

e. General support missions in the [illegible]* area include daylight raids on targets in that area. These permit the development of suitable fighter bases in western and central [illegible]*.

f. General support missions in the Northern [illegible]* and eastern [illegible] are as follows:

[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]

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AUTHORITY INFORMATION

Appendix 1 (cont'd)

(1) It is now planned to commence large scale attacks against hostile air and naval forces in the eastern ARABIC area on about 15 October, 1943. This date is dependent upon completion of airfield facilities at BYPRODUCT.* NOTE - Minimum of three (3) runways and one (1) crash landing strip required on BYPRODUCT in order that one hundred (100) to one hundred twenty (120) P-38's may land quickly. These planes will be low on fuel after combat over Eastern ARABIC.

(a) Duration of all out effort about one week.
(b) All bombardment (except A-20 and B-26) and twin engine fighter squadrons available will be utilized.
(c) Single-engine fighters based on BYPRODUCT and LEATHERBACK* will be utilized within the limits of their operational range. (None can reach ARTHRITIS or eastern ARABIC).

(2) Targets in northern ARTHRITIS are well within the range of SCPAC air elements. It is therefore felt that targets in eastern ARABIC must be considered as primary objectives for Allied Air Forces, SWPA. Since the main enemy air concentrations are in the eastern ARABIC area, SCPAC's operations against enemy airdromes in northern ARTHRITIS should be co-ordinated with Fifth Air Force attacks on eastern ARABIC airdromes.

(3) Detailed plans for the attacks on eastern ARABIC are now in process of formulation.

c. General supporting missions in the Northern CHERAL* area are as follows:

Attacks to be carried out through a period of from two (2) to three (3) days starting 17 August, 1943 and three (3) to five (5) days prior to D Day, will commence with a pre-dawn strike of heavy bombers on the main fighter airdromes.

(1) First day: Five (5) strafer squadrons escorted by five (5) squadrons of P-38's, bomb and strafe grounded airplanes at the four (4) airfields.

(2) Second day: Eight (8) heavy bomber squadrons and two (2) to five (5) squadrons escorted by suitable force of P-38's, bomb and strafe grounded airplanes, airfields and supply concentrations in the town and dock area.

(3) Third day: So much of bomber and fighter force as is required to complete destruction of lucrative targets in PIPSQUEAK* area.

BYPRODUCT: [illegible] LEATHERBACK: [illegible]
CHERAL: [illegible] PIPSQUEAK: [illegible]

Appendix 15 (cont'd)

(4) In the event it is decided to commence this series of attacks five (5) days prior to D day, an additional attack using four (4) heavy bomber squadrons will be run on the fourth day and an attack using four (4) squadrons of strafers will be run on the fifth day. Both missions will be escorted by fighters.

(5) Lucrative targets in area between PIPSQUEAK and EQUILIBRIUM will be destroyed as soon as possible after (1), (2), and (3) are completed. The EQUILIBRIUM area will be likewise disrupted if weather conditions permit the required continuity of air force operations.

h. Aerial reconnaissance is now being undertaken by this Air Force as described in one which was forwarded to you by 2nd Indorsement referred to above. The scale of effort in this reconnaissance is as follows:

(1) Daily	Every Three Days	Weekly
2 B-24's 2 Beauforts 2 Catalinas 1 F-4	1 Beaufort	1 B-24 6 F-5's

(2) Anti-submarine patrol and special reconnaissance missions are additional to the above and involve the use of ten (10) airplanes per day on an average.

i. Anti-aircraft plans for these operations have been under study by staff members of your Headquarters in conjunction with our requirements. A revised list of anti-aircraft units made available to this Air Force has been approved by your G-3 Section and is to be issued in the immediate future.

2. During all these operations no cessation of effort will occur in the Northwestern and Eastern Areas of the mainland of Australia.

GEORGE C. KENNEY
Lieutenant General,
Commander.

[illegible]

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(This index does not include references to textual matter in Notes.)

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