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ARMY AIR ACTION
IN THE
PHILIPPINES AND NETHERLAND
EAST INDIES
—♦—
1941 - 1942

— Prepared by —
ASSISTANT CHIEF OF AIR STAFF
INTELLIGENCE
HISTORICAL DIVISION

F O R E W O R D

This "first narrative" has been prepared by the Historical Division, AG/AS, Intelligence as a contribution to the history of the Army Air Forces in the current war. Like other studies in the series, it is subject to revision as additional information becomes available. The operations involved are of such outstanding historical interest, and the surviving record of them so frequently fragmentary and scattered, that the story has been retold in considerable detail. At the same time it has seemed unwise to overcrowd the narrative with the full detail of operations. Accordingly, available data on individual missions have been brought together for convenient reference in Army Air Forces Historical Studies: No. 29A, Summary of Air Action in the Philippines and Netherlands East Indies, 7 December 1941-26 March 1942.

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CONTENTS

| | | |
|--------------|--|-----|
| I | REINFORCING THE PHILIPPINES | 1 |
| II | THE PERIOD OF ADMIN, NOVEMBER 20 7 DECEMBER 1941 | 30 |
| III | OPERATIONS IN THE PHILIPPINES, 8 TO 19 DECEMBER | 52 |
| IV | ATTORNS TO REINFORCE THE PHILIPPINES, 20 DECEMBER 1941-3 JANUARY 1942 | 74 |
| V | THE AND. COMMAND | 90 |
| VI | OPERATIONS IN THE NETHERLANDS EAST INDIES, 1 JANUARY-30 FEBRUARY 1942 | 118 |
| VII | THE EVACUATION OF JAPA | 159 |
| VIII | A GAZETTE EDITION | 176 |
| NOTES | | 203 |
| BIBLIOGRAPHY | | 241 |
| APPENDICES | | 247 |
| INDEX | | 290 |

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~~SECRET~~
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ILLUSTRATIONS

| | Following |
|--|-----------|
| Air Routes to the Far East | 14 |
| Map of the Philippines | 51 |
| Proposed Ferry Route for Pursuit Planes | 74 |
| Java | 100 |
| The ABDA Area | 116 |
| Airfield Development in the Southern Philippines | 183 |

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Army Air Action in the Philippines and Netherlands East Indies

1941-1942

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Chapter I

REINFORCING THE PHILIPPINES

On 8 December 1941 (Philippine time), Japanese planes for the first time bombed American airfields in the Philippines. Within 2 weeks, enemy attack had made these bases untenable for heavy bombers, and the few remaining B-17's had retreated 1,500 miles to Australia. Outnumbered pursuits which stayed to fight in Luzon and Mindanao were destroyed or simply fell apart one by one. Meanwhile heavy bombers, dive bombers, and pursuits were flown in to the East Indies during January and February to oppose a Japanese thrust which was aimed at seizing these rich islands. But by 2 March, all American pursuits there had been destroyed or rendered unserviceable, and a few bombers had again managed to escape to Australia. Within a week organized resistance had ceased in Java; a month later Bataan had fallen; and on 6 May, Lt. Gen. Jonathan Wainwright from Corregidor called a halt to American resistance in the Philippines.

During these months, American heavy bombers had carried out high-level attack against enemy shipping and to a lesser extent against land bases; dive bombers had defied enemy pursuit protection in attempting to break up Japanese landings in the Netherlands East Indies; and pursuit planes, usually outnumbered, fought off enemy bombers and their escort, carried out invaluable reconnaissance

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missions, and with manually constructed devices even completed a considerable number of bombing raids of their own. The Philippine campaign and its sequel in the East Indies were the first campaigns of World War II in which American air units participated. The decisive defeats which they suffered were the direct result of the military unpreparedness of the United States.

The determination of the military policy to be followed with regard to the Philippines between the two world wars had involved a consideration of three possible courses of action: the United States might attempt to maintain the status quo in the Far East; it might withdraw from there entirely; or it might attempt "to build up in the Philippine Islands a force of sufficient strength to assure enforcement of our policies, and to protect our interests in the Far East." Until 1940, a number of conditions had prevented adoption of the latter course. The intellectual and political climate prevailing in the United States during the late twenties and the thirties favored disarmament. Funds were not provided, and personnel and equipment could not be spared for the Pacific outposts. Furthermore, it was felt that even if the Army were able to establish strong forces in the distant Philippines, the Navy would be incapable of providing adequate support. The War Department, therefore, followed a policy of attempting to maintain existing strength and of undertaking "no further improvements except as a measure of economy."¹

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As the United States became more outspokenly critical of Japan's expansion in Asia, attempts were made to build up air strength in the Philippines. In September 1939, Lt. Col. Carl Spaatz, chief of Plans Division, submitted a memorandum to General Arnold in which he considered the possibilities for a strategic offensive in the Far East. Spaatz concluded that a striking force capable of carrying out sustained air operations was a prerequisite and that Luzon was the logical base. He, therefore, recommended that a force consisting of two groups of heavy bombardment, two squadrons of long-range reconnaissance, three groups of medium bombardment, three squadrons of medium-range reconnaissance, and two interceptor pursuit groups should be dispatched to Luzon "when, but not before, the entire force is organized, equipped and trained, and base facilities are adequate for its operations." In addition to these units, there should be maintained "as a part of the GHQ Air Force at least six groups of heavy bombardment and six long-range reconnaissance squadrons, available for movement to Luzon upon the threat or outbreak of hostilities."²

Actually, there were no means available in the United States to carry out such a program. During the previous month, August 1939, the Plans Division had proposed the organization of a composite wing consisting of 2 medium bombardment groups, 1 pursuit group, 2 reconnaissance squadrons, and 2 observation squadrons. It was recognized that the only means of implementing such a plan would be either to increase the current program for enlarging the Air Corps or

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4

to decrease the number of units assigned to other commands, such as that in Hawaii or the GHQ Air Force.³ In addition to this proposed organization, the possibility of ferrying heavy bombers of the B-17 type to the Philippines was being discussed at this time. A careful study of air routes was made. Of the four considered, the one from San Francisco to Manila via Hawaii, Midway, Wake, and Guam was obviously the most desirable as it was 4,000 miles shorter than any other possible route. But because of the lack of suitable airdromes, Colonel Spaatz recommended a North Atlantic route of 11,075 miles for summer ferrying and a South Atlantic route of 14,615 miles for use in the winter.⁴

These plans remained almost entirely on paper during 1940. In April of that year Col. H. H. G. Richards, air officer attached to the Philippine Department, modestly requested "a few modern airplanes in order to fit our recent graduates from the Air Corps Training Center for tactical units of the GHQ Air Force." He pointed out that the Philippine Department had at that time only a few obsolete planes (P-26, O-46, B-10), and he requested three each of the P-35, P-36, and B-18 types and "a few A-17's." Richards, however, felt little fear of Japanese aggression. "It begins to look as though we will eventually get into the war too," he wrote. "'I sat out' the last war in Atlanta, Charleston, etc. If conditions become acute, would appreciate it if you would keep me in mind and get me back to the States where I will at least get an opportunity to get into action."⁵

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5

Although the War Department recognized the inadequacy of the Philippine defenses, it could promise little immediate improvement of the situation. It was aware of the fact that no fields on Luzon, and probably on none of the other islands, could handle anything more modern than a P-26 or a B-10. It knew that even a group of medium bombers and another of light bombers would provide only a measure of defense against minor assaults, and that a much larger force would be required to hold the Philippines against a major Japanese attack. Actually during the summer of 1940 only 3 B-18's were allotted to the Philippines. Units in the United States could spare no more aircraft, even of the P-35, P-36, or A-17 types. Indeed it was felt that the 28 P-26 pursuits then assigned to the Philippine Department would have to suffice "until late in the year 1941, at the earliest."⁶

During the last six months of 1940, the urgent need for strengthening the forces in the Far East brought more tangible results. In July, Maj. Gen. George Grunert, commanding general of the Philippine Department, issued a warning as to the weakness of his air units. "Although the War Department may be aware of the Air Corps situation (personnel and materiel) in this department," he wrote, "I consider it my duty to restate the situation and emphasize the inadequacy of officer personnel and the obsolescence of the materiel. . . ." At that time, existing tables of organization for air units in the Philippines provided for 140 officers, but according to Grunert, only 33 Air Corps officers were available for organizations which

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required 72 to function efficiently. Actually there were not enough combat crews to put more than 21 planes in the air at one time, and then only by stripping ground organizations. Furthermore, it is to be doubted that 21 serviceable aircraft could have been found in the Philippines, and of those in commission the majority were obsolescent.⁷

| <u>Number</u> | <u>Type combat</u> | <u>Year of manufacture</u> |
|------------------------|-------------------------------|----------------------------|
| 10 | Douglas O-46A Observation | 1935 |
| 5 | Thomas-Morse O-19 Observation | 1931 |
| 28 | Boeing P-26A Pursuit | 1933 |
| 17 | Martin B-10B Bomber | 1934, 1935 |
| <u>Type non-combat</u> | | |
| 1 | ZB-3A Keystone | 1928 |
| 1 | OA-4 Douglas Amphibian | 1930 |
| 1 | OA-9 Grumman Amphibian | 1938 |

A knowledge of the weakness of the Philippine defenses, however, could not alter the realities of the Air Corps expansion program in the summer of 1940. Before the 24-Group Program of 1939 could be completed, the 41-Group Program of May 1940 and subsequently the 54-Group Program of July had replaced it.⁸ Additional personnel for overseas units, it was felt, could be obtained only by depleting tactical units or by modifying pilot training activities in the United States. Moreover, few aircraft could be spared, although General Arnold in August 1940 did believe that a quota for the Philippine Department of 3 B-18's, 33 P-26's, 17 B-10B's, 17 O-46A's, 4 O-49's, and 4 amphibians might be reached by July 1941.⁹ He made every effort, furthermore, to supplement this quota, and in October directed that 48 P-35's, part of a Swedish contract, be withheld

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7

and diverted to the Philippines. This necessitated additional personnel, and before the 1st of November the 17th and 20th Pursuit Squadrons received orders to proceed to San Francisco with 40 officers and 314 enlisted men. They were to sail on or about 4 November 1940.¹⁰

The arrival in the Philippines of what almost amounted, under the circumstances, to a new air force required an assessment of the available fuel supply. In the late fall of 1940 a survey was made. It revealed an alarming situation: 95 per cent of civilian storage space for all types of gasoline was concentrated in "one small easily bombed area" in the city of Manila, 98 per cent of all aviation gas was stored in the same area. Only a partial remedy was made possible when, in February 1941, the Philippine Department received \$34,000 for construction of more adequate facilities.¹¹

Developments in the Far East during the fall of 1940 and the spring of 1941 spurred on those who favored a stronger policy toward Japan. In November 1940 Adm. Thomas Hart, Commander in Chief of the Asiatic Fleet, submitted a study to the Navy Department which prophesied further Japanese aggression probably in a southerly direction. Hart wavered in this opinion for a few weeks in the early spring, thinking that signs pointed to an attack upon Siberia, but soon returned to his original thesis. He felt that the Japanese were being squeezed economically by the Americans, British, and Dutch, that they had failed in their attempt to obtain sufficient oil for their war machine by peaceful means, and that the situation

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8

"bade fair to become menacing."¹²

Plans Division in Washington had made a realistic estimate of the situation. The Air Corps garrison in the Philippines was known to be a token force only. It had never been visualized as capable of meeting "serious contingencies." This point was emphasized in a study made by Colonel Spaatz, after reading which Maj. Gen. George Brett stated in February 1941 that "the minimum air garrison for an effective defense should comprise not less than one long range bombardment wing of three or more groups and one pursuit wing of three or more groups, together with such additional ground and air components as may be required to constitute a balanced force."¹³

It was impossible at this time, however, to provide either the necessary personnel or the planes for these admitted needs. Nevertheless, during the spring and summer of 1941 there was some piecemeal reinforcement. In March the commanding general of the Hawaiian Department received orders to ship 18 B-18's by transports which were to leave Hawaii for the Philippines on 15 and 17 April. And on 19 April, the merchant ship, American Manufacturer, sailed from the United States carrying 31 P-40B's to the same destination.¹⁴

With the prospect of receiving modern aircraft, it was decided to create a more modern air organization. The undermanned units which served as the air garrison for the Department had hitherto been organized into the 4th Composite Group. The 17th and 20th Pursuit Squadrons, upon arriving in the Philippines late in November 1940, had been incorporated into that group and had been based at Nichols

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9

Field on the outskirts of Manila. In addition to these newly-arrived squadrons, the 4th Group consisted of a Headquarters and Headquarters Squadron and the 3d Pursuit Squadron based at Nichols Field, and the 28th Bombardment and 2d Observation Squadrons at Clark Field, approximately 60 miles north of Manila.¹⁵ The first of a series of important steps in reorganization occurred on 6 May 1941, when the units composing the 4th Composite Group together with the 20th Air Base Group and miscellaneous supporting units were incorporated into the Philippine Department Air Force. To command this newly constituted organization, the War Department had transferred Brig. Gen. Henry B. Clagett from his previous assignment as commanding officer of Selfridge Field, Michigan.¹⁶

General Clagett had had long experience as a flyer and an administrator. When a temporary major in the Signal Corps in 1918, he had acquired flying status and was rated as a junior aviator. During the twenties and thirties he had held numerous administrative positions and at the same time had retained his flying status.¹⁷ He went to the Philippine Department with the understanding that one of his first tasks would be to participate in a mission to investigate aerial requirements in China. He arrived in the Philippines during the first week in May and left almost immediately for China, returning to Manila a month later. Not until then was he able to make a thorough survey of his own requirements. He found that he had been given, as he said, "one hell of a job." He had

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an insufficient number of experienced staff personnel; he was over-strength in enlisted men and trainees, but had too few authorized units; airbase facilities were inadequate; and he believed that in order to obtain necessary cooperation from civilians he had to entertain them, and even then felt that his efforts had "to be greased through officials of the Philippine government."¹⁸

A second important step in the reorganization of the Philippine Department demonstrated the growing importance of the Far Eastern theater. On 27 July 1941, Gen. Douglas MacArthur, who had been serving as military adviser to the Philippine government, assumed a new command, that of Commanding General of the United States Army Forces in the Far East (USAFEF). This prepared the way for a further reorganization of American air units. On 30 June, the War Department had received a request from the Philippine Department for a more flexible air command. It had suggested the establishment of an air force headquarters with a composite group and a pursuit group composed of the pursuit squadrons then in the Philippines. Spaatz, now a brigadier general and Chief of the Air Staff, heartily concurred with the suggestion, describing it as a type of organization "capable of easy control and expansion." Shortly after the creation of USAFEF, therefore, Clagett's command was reorganized. On 4 August, the Philippine Department Air Force was redesignated the Air Force, United States Army Forces in the Far East. It was to operate directly under MacArthur "except for routine administration and supply," which would still function under Headquarters Philippine Department.¹⁹

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11

The new organization was still only a token force. Only the 31 P-40B's which had arrived in May could be considered modern aircraft; the others were obsolescent: 21 P-26's, 56 P-35's, 10 O-46's, 3 O-19E's, 10 A-9's, 1 C-39, 9 A-27's, 14 B-10B's, and 18 B-18's. The number of trained pilots was gradually increasing and by the middle of August totaled approximately 230. At the same time, airdrome facilities were being improved. Nevertheless only Clark Field was suitable for heavy bombers, although it was planned to complete the runways at Nichols Field by 1 October. Pursuit planes could use six fields within 80 miles of Manila, but these lacked all fuel and repair facilities, and six additional fields scattered throughout the Archipelago were principally useful for dispersal.²⁰

The need for airfields extensive enough to base modern aircraft was becoming acute since plans for the further reinforcement of the Philippines were rapidly maturing. These plans were based upon a liberal interpretation of "Hemisphere Defense." According to General Spaatz, "the integrity of the Western Hemisphere . . . is paramount to such an extent that it determines the propriety of all national effort." Since air power played "the paramount role" in this concept, the distribution of available aircraft, according to Spaatz, should be determined with that principle clearly in mind. The Air Staff in late August calculated, on the basis of the progress of the European war, that March 1942 was the earliest likely date for an active threat against the Western Hemisphere. Under existing programs, however, sufficient aircraft would not be available by

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12

then. "Since there is no assurance that aid rendered nations opposing the Axis powers will prevent success by the Axis," concluded Spaatz, "such aid should be viewed as a gamble . . . until minimum forces for Hemisphere Defense are available. The future diversions of aircraft to other nations, therefore, should no more than suffice to keep "such nations in active opposition to the Axis."²¹

The concept of Hemisphere Defense, however, was broad enough to include both the Hawaiian and the Philippine Departments. Hawaii, "the most vital outpost" in the west, according to the Air Staff, would face the threat of attempted landings "in the event of an Axis victory." But a strong bombardment force, with a minimum of three heavy groups, could make that outpost secure. It was also believed that a sufficiently strong bombardment force in the Far East would constitute a further and necessary guarantee of security. For this reason, four heavy bombardment groups, consisting of 272 aircraft and 68 in reserve, together with two pursuit groups of 130 planes each had been set up in the plans to maintain "a strategical defensive in Asia and for the protection of American interests in the Philippines."²²

Steps to implement these plans for further reinforcement of the Far East had already been taken. Early in August 1941 the Secretary of War approved a program which would send modern planes and equipment when available to the Philippines. At the same time, General Spaatz had arranged for 50 P-40's to be sent directly from the factories, and for 28 P-40's, taken from operating units, to be

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13

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boxed, crated, and shipped to the same destination in September. More efforts, however, were focussed on providing MacArthur's command with a group of heavy bombers. The possibilities were not very extensive, and a logical choice was that of the 19th Group, a group which probably had had more experience than any other in flying B-17's. It was more difficult to find sufficient aircraft to equip a complete group. The 19th itself had only 14 planes, B-17D's; in Hawaii, the 5th and 11th Groups had approximately 20 of the same type; the 7th Group was at Fort Douglas, Arizona, with 8 B-17C's and 5 B-17D's; the 39th Group at Geiger Field was flying 5 B-17C's; while approximately 25 additional B-17B's and C's were at factories and air depots being modified for combat. Since these planes were the only ones available, it was recommended that the Air Force Combat Command assign sufficient B-17 D's, C's, and B's, in that order of preference, to bring the 19th Group up to its authorized strength of 35 planes, and that the 19th Group, less one squadron, be transferred "at the earliest practicable time" to the Philippine Department, with the air echelon effecting the transfer by air.²³

No Army heavy bombers had hitherto made the flight from the United States to the Philippines. In fact in March and April 1941, a plan for a mass flight of B-17's to Hawaii from San Francisco was at first unfavorably considered because of a fear of public reaction should the flight fail. This, it was felt, would have been damaging to the prestige of the Army Air Corps, particularly since the Navy had already completed a number of successful flights to Honolulu.

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14

Nevertheless, plans were finally completed and 21 B-17's, flown by members of the 19th Group, made the 2,400-mile flight to Hawaii on 13 May 1941.²⁴

By the end of July, it had been decided that crews in Hawaii organized into a provisional squadron, rather than the 19th Group, would pioneer the air lanes to the Philippines with nine of the Hawaiian B-17's. The chief delaying factor was the dearth of information on certain portions of the route. A 2-year-old plan of following an Atlantic route had given way to the more logical one of reaching Manila via Midway, Wake, and Darwin, Australia. In August 1941, however, no one in Hawaii or the United States apparently knew what facilities were available in Australia; moreover since the hop from Wake to Darwin would have been dangerously long, some one had to determine what intermediate airfield was available. Telephone conversations with Australian authorities yielded insufficient information; consequently two Army officers were flown by Navy plane from Honolulu with orders to survey the facilities at Rabaul in New Britain, at Port Moresby in New Guinea, and at Darwin. Meanwhile the Fourteenth Naval District was rushing runway construction on Midway and Wake in the hopes that the B-17's could take off from Hawaii for Midway on 5 September.²⁵

By September the War Department and the Hawaiian authorities were completing preparations for the trip. Picked crews, under the leadership of Maj. Emmett O'Donnell, Jr. were reaching a high state of training, and on 1 September the provisional organization was

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designated the 14th Bombardment Squadron (H). By the first of the month, too, their route had been chosen. The planes were to fly to Manila via Midway, Wake, Port Moresby, and Darwin, and progress was to be reported regularly by radio. The fuel supply was expected to be a problem, for it was not known if a sufficient quantity of aviation gasoline was available in Australia. If, as was expected, it became necessary to use 90-octane gas, the crews were instructed to use the maximum 100-octane possible. In such a case, the main tanks were to contain the best blend while the poorest would be placed in the bomb bay. A few details of a diplomatic nature also had to be settled. On 3 September the Hawaiian Department learned that Australian authorities had granted the necessary permission to fly over their territory and territorial waters, but O'Donnell was ordered to notify the Air Board at Melbourne of the expected time of arrival at Port Moresby and Darwin. He was to route these messages through the United States Navy and the Australian Naval Board. Before departing from Darwin, he was to warn the governor of the Netherlands East Indies at Batavia that the B-17's would soon be flying over his territory. It was emphasized that ^{the} movement was of such a delicate nature that all details were to remain secret even after the arrival at Clark Field.²⁶

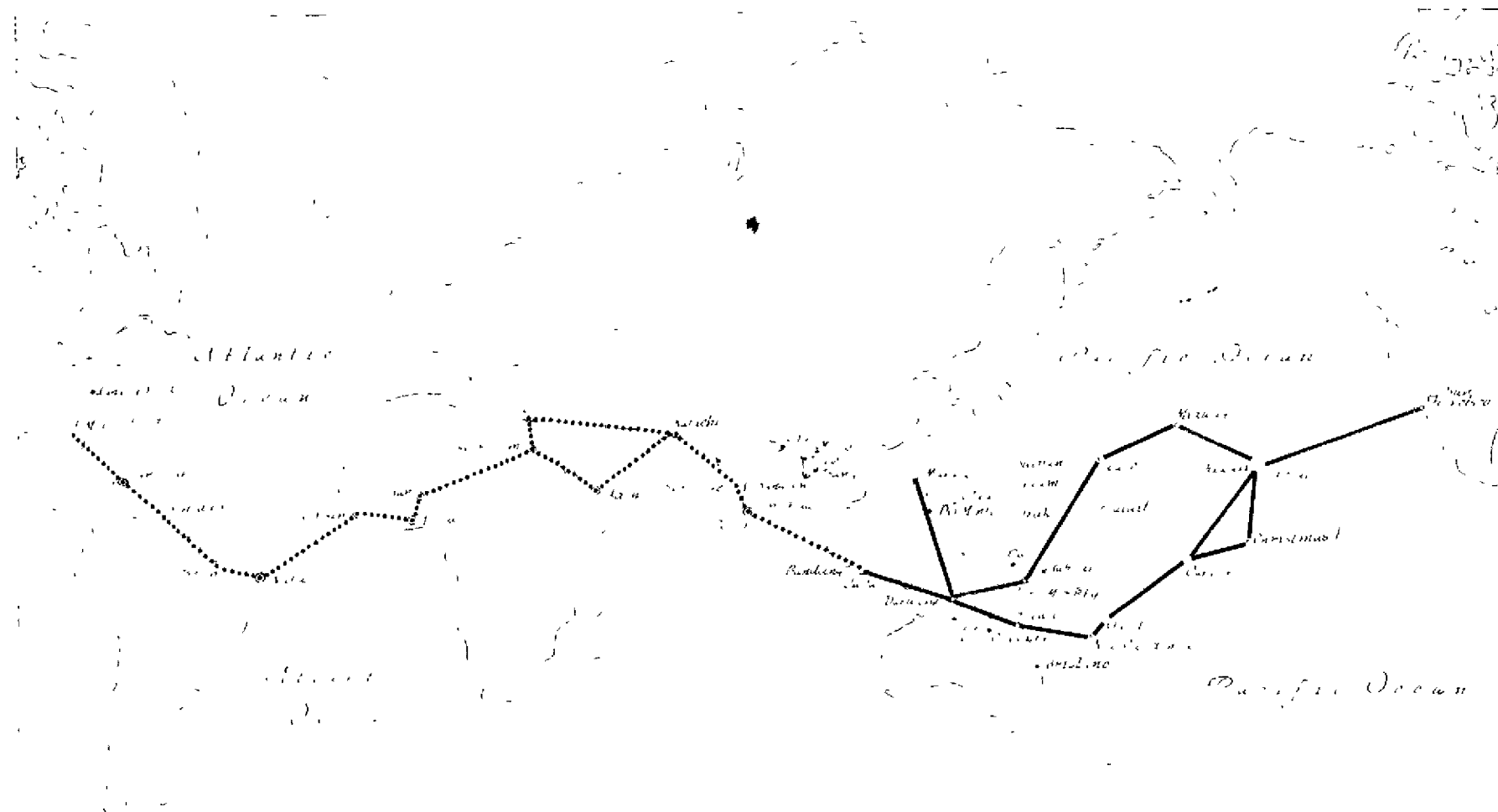
At 0600, 5 September, the flight consisting of 9 B-17's, 26 officers, 3 aviation cadets, and 46 enlisted men took off from Hickam Field. Three of the officers, a weather officer, a communications officer, and a flight surgeon, were to return to Hawaii upon

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16

completion of the trip.³⁷ The planes flew the first leg of the journey to Midway--1,132 nautical miles--without incident except for two hours instrument flying through rain and heavy clouds. Weather conditions, however, were never serious enough to cause much variation from a predetermined altitude of 8,000 feet. As the 3-17's approached Midway, they received satisfactory radio bearings from Pan American facilities there and contacted the control tower by voice for landing instructions. After 7 hours and 10 minutes in the air, the flight landed on the 4,500-foot runway. The gasoline facilities consisted of two pits and drums. O'Donnell decided to refuel only from drums since the men would need this experience at Wake where it was known that only drums were available. Fortunately they had brought along engine-driven gas pumps "which proved to be lifesavers," particularly as the local marine service detachment was off on maneuvers. In less than four hours after landing, the crews had completely serviced and staked down the planes for the night. The officers found the housing and mess facilities excellent, although located on another island. The enlisted men, on the other hand, slept under the wings of their own ships, ate at an unappetizing mess, and furnished five men each meal for kitchen police.

On the following day, the nine planes took off at 0445 (Wake Time) without mishap except for hitting a number of large birds. They cruised at 8,000 feet through excellent weather, crossed the international date line at 0745, and "in one second it became Sunday September 7." They received fairly accurate radio bearings from

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17

Wake, and rolled onto the landing field at 1120, having flown 1,035 miles. A construction company building installations at Wake had made careful preparations for their reception. Gasoline drums had been placed in the parking area so that each ship could taxi up to its own supply. The meals were excellent; some of the crews were even entertained at a barbeque steak dinner. The beds were also most satisfactory, but the crews could not enjoy them for long as the take-off had been scheduled for midnight.

Since the 2,176 miles from Wake to Port Moresby involved crossing some of the Japanese mandated islands, it was considered wise to avoid a possible international incident by flying over this area at night. The take-off occurred successfully from a runway lined with gasoline flares, but shortly thereafter one B-17 piloted by Capt. W. P. Fisher had to return for repairs. In $1\frac{1}{2}$ hours, however, he was able to resume his flight. For the first 2 hours, the flight kept at the customary 8,000 feet, but as it approached the Mandates, it climbed to 20,000 feet and turned out all lights. To this time, the weather had been perfect. Now, however, heavy clouds hid the bright moonlight, and the planes climbed to 26,000 feet without topping them. Fortunately there was little turbulence although rain fell heavily around the ships. Complete radio silence was preserved during this phase of the flight. Consequently the planes lost track of one another, but when they resumed radio communications, O'Donnell found all ships in their assigned positions. At this point, the B-17 piloted by Lt. Edward G. Teats developed engine trouble. Teats

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18

also discovered that in some way he had lost 175 gallons of gasoline. He considered this serious enough to warrant an emergency landing at Rabaul but was warned of soft fields there, and so continued with the flight. At 1255, Monday, 8 September, he successfully landed at Port Moresby with the rest of the squadron.

The crews found the Australians genial and hospitable. In his welcome, the territorial administrator pointed out the historical significance of the occasion since, according to him, theirs was the first U. S. Army unit ever to set foot on Australian soil. The Air Corps officer who had served as an advance agent for the 14th Squadron had procured Australian enlisted men and Papuan natives to service the ships, but for the first time sufficient 100-octane gasoline was not available, and a blend of 100 and 90-octane had to be used. Leaving members of a Papuan infantry battalion guarding the planes, the crews paid a visit to the town finding rather primitive facilities, little in the way of sanitation or running water, and, with the exception of some native fruit, only canned food to eat. After a day's rest at Port Moresby, the B-17's resumed their flight at 0845, Wednesday, 10 September. They covered the 934 miles to Darwin in 6 $\frac{1}{2}$ hours. Here they found an excellent airfield with huge runways running in "all directions." The crews were greeted officially by the Administrator of the Northern Territory and not so officially by friendly members of the RAAF, who gave them a gala party and obtained souvenirs by stripping the officers of all their insignia.

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The squadron took off for Manila at 0435 on 12 September. The planes at first cruised at 9,000 feet through excellent weather, but as they approached their destination the skies became overcast. They had received several favorable weather reports from Clark Field, but when they reached the southern tip of Panay, they were advised to land at Del Monte. This message confused O'Donnell. He knew nothing of Del Monte and had been told by radio before leaving Hawaii that Clark was the only field suitable for landing B-17's in the Philippines; so he continued on his predetermined course. The weather grew steadily worse, and the B-17's were maneuvered into storm echelon, keeping over water to avoid mountains, and flying at an altitude of from 100 to 400 feet. Hourly position reports kept the planes in their assigned formation. Fortunately when they reached Manila Bay, they found "a dome of good visibility" near Corregidor. They circled over that area while O'Donnell dispatched one plane every 3 minutes toward Clark Field 60 miles to the North. As each pilot let his plane down over the unfamiliar runway, he was completely blinded by rain driving on the windshield and had to rely on the engineer looking out the dome behind him for directions. In spite of the hazards, all planes landed safely with only one slight mishap when a B-17 grazed a B-18 parked near the runway.

By 1600 on 12 September, the historic flight had been completed. O'Donnell in summarizing his experiences pointed out that the secrecy which surrounded the movement had prevented the personnel at the airfields along the route from knowing when to expect his arrival.

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20

that weather reports had been insufficient, and that the crews had had inadequate knowledge of the Philippine Islands. This last was particularly unfortunate in view of the stormy weather which confronted them as they neared Clark Field. They had learned upon their arrival that a study of the islands had been prepared weeks before and had been sent to Hawaii by clipper in sufficient time to reach them for their take-off. The clipper, however, had cracked up at Guam, and thus this important information had never arrived.²⁸

In spite of these minor difficulties, however, the 14th Squadron had succeeded in its flight and thus had moved the Far East closer to the United States. Those who envisaged a successful defense of the Philippines against enemy attack now had irrefutable proof that air reinforcement was feasible. This fact undoubtedly helped to shape American policy in the fall of 1941, even though it was recognized that air and ground forces could not be prepared for "ultimate decisive modern combat" before 1 July 1943.²⁹

On 11 September 1941, a Joint Army and Navy Board approved a document which listed the assumptions upon which future plans were based. According to this study, American national policy included the accepted principles of the Monroe Doctrine, freedom of the seas, aid to Britain, and to other anti-Axis nations, and strong disapproval of Japanese aggression in the Far East. It assumed, furthermore, "that eventually the U. S. will employ all armed forces necessary to accomplish national objectives," and that "the principal theater

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21

of operations is Europe, but other possible theaters may later appear desirable."³⁰ Although this plan asserted that the ultimate objective of the final phase of proposed operations was "the total defeat of Germany," the text of the plan included a strong statement concerning the importance of the Philippines. The general scheme of operations still required only "a strategic defensive in the Far East." But this strategic defensive included the maintenance of the integrity of the Philippine Islands which were now considered "too important to our position in the Far East and our prestige in the world" to be permitted to pass under Japanese control. With the increase of American diplomatic pressure on Japan, therefore, the Joint Board considered vital "a substantial increase of our forces in the Far East," and gave primary consideration to the creation of "a moderately strong air force" in that theater. This was to include the strengthening of the Philippine garrison to protect present and future air bases, the disposition of two pursuit groups to provide protection for the Manila area and for bombardment bases in northern Luzon, and the movement of four heavy bombardment groups to the Philippines as soon as possible.³¹

Even as the plan was being put in its final form, specific steps were being taken to implement it. On 7 September, General MacArthur had stated that the one American division already in his command, supplemented by units of the Philippine army, provided an adequate infantry garrison. He felt at this time that his greatest needs were supplies and equipment with particular emphasis on aircraft

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22

warning facilities together with aircraft and necessary equipment. Marshall concurred in these suggestions and promised more air reinforcement as soon as Philippine airfields could accommodate additional planes, adding that the USAFFE was being placed "in highest priority" for equipment including authorized defense reserves for 50,000 men.³²

MacArthur had already received funds earmarked for the construction of adequate airfields, and a substantial program was under way. In August, an AG letter had authorized the expenditure of \$2,373,000 for specific airfield projects.³³ This amount had proved inadequate, and on 1 October negotiations were completed for the transfer of an additional \$2,200,000 from "Public 29 Airplane Deferred Storage Program" to the Philippine Department for Air Corps projects only, and before the end of the month \$5,000,000 more were allocated for similar purposes.³⁴

Although some progress was thus being made in airfield construction during the fall, aircraft warning facilities, also recognized as of primary importance, remained almost non-existent. Early in September, a project designed to give thorough aircraft warning coverage of the Philippine Archipelago was submitted to the War Department from Headquarters, USAFFE. This project called for at least 10 long-range detectors and 16 tracking stations. To fill these needs, 1 SCR 272 and 2 SCR 271's were en route by the middle of September, and 3 SCR 270's were scheduled to be shipped by 1 October. In addition, General Marshall stated that \$190,000 could

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23

be released for aircraft warning construction, and that an additional \$200,000 would be included in the supplemental estimate for the fiscal year 1942 in order that 3 detector stations and 1 information center might be completed.³⁵

Meanwhile plans were maturing for the transfer of additional aircraft to General Glagett's air force. The Army-Navy Joint Board had recommended 4 heavy bombardment groups and 2 pursuit groups. But by 1 October only a beginning had been made on that program. The USAFFE had one pursuit group consisting of the 31 P-40's and the obsolescent P-35's, the 9 B-17's of the 14th Squadron, and a few J-18's. The schedule to augment the number of pursuits to two-group strength was somewhat vague. General Marshall, on 9 September, had informed MacArthur of a proposal to increase the number of his pursuit squadrons from three to five. Two weeks later a plan was being considered to transfer two pursuit squadrons from Hawaii by 1 January 1942.³⁶ On 2 October the Secretary of War was informed that 50 pursuits had reached Manila on the President Pierce, the President Coolidge, and the American Press, all of which had arrived before 30 September. Yet a radio message from Manila showed only a total of 23 P-40B's on hand as of that date, and these had been in the Philippines since May. By the end of September, 25 P-40B's appeared for the first time in a status report, but this still left 25 pursuits unaccounted for.³⁷

More definite information exists regarding the transfer of bombardment aircraft to USAFFE. Early in September, MacArthur informed

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24

Glaxett that he was to receive a light bombardment group of three combat squadrons. Within a month, preparations were under way for the transfer of the 27th Bombardment Group (L) to the Philippines, on or about 1 November 1941. At the same time, every available effort was being made to collect 52 A-24 aircraft to equip this group.³⁸ MacArthur could also count on a reasonably specific schedule for the arrival of heavy bombers. General Marshall on 9 September had asserted that two squadrons could be dispatched during October, and before the end of the month arrangements had been made for the transfer by 1 October of a headquarters and headquarters squadron together with the 30th and 93d Bombardment Squadrons, all of the 19th Group. During that period also the air echelon of these units was to fly 26 B-17's to the same destination. This movement, it was hoped, would be only one in a series of flights which would include 33 heavy bombers in December, 51 in January, and 46 in February.³⁹ Thus, the War Department had allocated 165 heavy bombers to the Philippines to be delivered before 1 March 1942. In view of the fact that the estimated production of both B-17's and B-24's for that period was approximately 220 aircraft, this program demonstrated the growing importance of the Far East in American strategy.⁴⁰

Obviously the highest priority in the entire program was being given to heavy bombers. It was obvious also that these aircraft would have to be ferried to their destination. The 14th Squadron had tested the route via Hawaii, Midway, Wake, Port Moresby, and Darwin. But, as has been pointed out, that route necessitated flying over a number of the Japanese mandated islands, in which area

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35

the Japanese were notoriously inhospitable to visitors. It was desirable, therefore, to find another route, one which would be safer than that followed by O'Donnell's nine B-17's but if possible just as expeditious. The Navy had already foreseen the desirability of staging long-range aircraft across the Pacific and had considered the possibility of basing land planes at a number of naval air stations in the South Pacific. Thus in reply to a request for information by the Chief of Staff, Admiral Stark could reply on 10 October 1941 that one runway at Palmyra would be usable by 1 January 1942 and completed by 1 March, that two runways at Samoa would probably be usable by 1 July 1942 and completed by 1 December, and that the Navy Department was prepared to undertake the construction of an airport on Canton Island.⁴¹

By the end of October, the Army had taken steps to further the project. General MacArthur, responsible for the portion of the route west of New Caledonia, had already negotiated with officials in Australia and the Netherlands East Indies. The Commanding General of the Hawaiian Department, Lt. Gen. Walter C. Short, who was charged with the development of the route "east of, but including, the Solomon Islands and New Caledonia," was gathering ships to transport construction personnel and equipment to Canton and Christmas islands.⁴² Yet the continuation of the route toward Australia required attention to diplomatic details as well as to tremendous problems of supply and construction. Clearly the job had just begun.

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26

Since heavy bombers would not be able to use the southern route for several months, the B-17's of the 19th Group were to follow the course pioneered by the 14th Squadron. The date of departure of the next flight was contingent upon the availability of gasoline and oil at refueling points along the route. Even before the 14th Squadron had left Hawaii, the Air Staff had concluded that in order to carry out routine flights to the Philippines, 40,000 gallons of 100-octane gasoline should be maintained at both Wake and Midway, 60,000 gallons at both Port Moresby and Darwin, and a reserve supply of 10,000 gallons at Rabaul. After the 14th Squadron had completed its movement, Midway and Wake still had adequate fuel reserves, but those at Port Moresby and Darwin had to be replenished. In order to accomplish this most efficiently, General MacArthur was requested on 11 September to supply those two points and Rabaul from his own gasoline reserves. At the same time, he was assured that the War Department was planning to send more 100-octane to the Philippines as soon as shipping was available.⁴³

The shortage of tankers and lack of coordination delayed the accomplishment of this plan. General MacArthur, for example, did not acknowledge the first message from the War Department requesting a shipment of fuel to Darwin and Port Moresby. This required a follow-up message. Later the Australian authorities, who were disturbed about the shortage of 100-octane, were kept in the dark as to when they might expect to receive an additional supply. By the middle of October, however, some of the difficulties had been ironed

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27

out. MacArthur had chartered two ships, the American Press and the Vincent, to transport 10,000 gallons of gasoline to Rabaul, 140,000 gallons to Port Moresby, and 85,000 to Darwin. Moreover, arrangements had been made to maintain an adequate amount at these points by shipment from the United States.⁴⁴

The movement of the gasoline to Port Moresby, according to MacArthur, was to be completed by 19 October. The final arrangements for the flight of the 19th Group could, therefore, be made. Although the War Department had been planning this movement for several months, the final alert came unexpectedly by a telephone message on 16 October. The planes had been undergoing extensive depot overhaul, and several technical difficulties were discovered at the last moment. It was found, for example, that the bulkheads and internal bracings of the fuselage within the radio operator's compartment were not strong enough to withstand the recoil shock of dual .50-caliber guns, which necessitated last-minute strengthening of sections of that part of the plane. In spite of these and other delays, however, 26 B-17's had arrived at Hickam Field by the morning of 22 October.⁴⁵

Meanwhile precautions were being taken to prevent possible Japanese interference with the flight to the Philippines. The airfields at Midway and Wake were in a particularly exposed position to naval or air attack, and Army authorities wished to be reassured of the condition of the island defenses. This fell under the jurisdiction of the Navy, and on 17 October General Marshall addressed a

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28

detailed memorandum to the Chief of Naval Operations informing him of the plans to reinforce the Philippines. It also emphasized the need for unusual precautions at Midway and Wake and stated that if the Navy Department were "in a position to render assistance in this matter," detailed arrangements to insure the safety of the B-17's while on the ground should be made between the Commanding General, Hawaiian Department, and the commander of the participating naval components. Admiral Stark immediately directed the Commander in Chief of the U. S. Pacific Fleet to take special precautions at Wake and Midway. At the same time, he informed Marshall of the land defenses on those islands. According to his statement both had a Marine garrison, but the defenses at Wake were incomplete and only partially manned. Midway, on the other hand, was equipped with 5-inch naval guns emplaced for low-angle fire together with 3-inch antiaircraft and .50- and .30-caliber machine guns.⁴⁶

With this information from the Navy, the War Department directed the 19th Group to prepare for departure from Hawaii on 22 October. The experience of the 14th Squadron had shown that Darwin and Midway could have handled all 26 planes at the same time. The facilities at Port Moresby and at Wake, however, were limited to not more than nine planes. Thus the group was divided into a number of flights, the first of which took off from Hickam Field on 22 October. Their instructions were to avoid as far as possible the Japanese Mandates, and to maintain in this area a high altitude and complete radio silence except for distress signals. Bad weather delayed the planes

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~~RESTRICTED~~

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29

from the start, several flights being temporarily grounded at Midway and Wake. Engine trouble also was more frequent than had been the case in the movement of the 14th Squadron. Nevertheless the first eight B-17's arrived at Clark Field on 29 October, one week after leaving Hawaii, and all but two had arrived by 4 November. These two were delayed at Darwin by engine trouble but later arrived safely.⁴⁷

The arrival of the 26 B-17's in the Philippines was a landmark. It meant more than the simple fact that the Air Force, USAFFE, now possessed 35 modern heavy bombers. It symbolized a new and stronger American policy toward the Far East. In 1939 only a token force, both air and ground, had existed in the Philippine Department. Responsible officers of the Air Corps, notably General Arnold and General Spantz, were fully aware of the inability of that force to withstand any full scale attack; yet at that time they had neither the men nor the materiel to establish an effective garrison there. Furthermore, attention was focussed principally on Europe rather than the Pacific. By the fall of 1941 ambitious programs for expansion of the Air Corps had been launched, and the Philippine Islands had been recognized as one of the most important outposts for defense of the Western Hemisphere. The 26 B-17's accordingly symbolized the dawning hope that, if the new program of reinforcement could be completed before a Japanese attack, the Philippines could then be held.

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Chapter II

THE PERIOD OF ALERT, NOVEMBER TO 7 DECEMBER 1941

Diplomatic events in the fall of 1941 were pointing more and more clearly to a crisis in the Far East. In July, negotiations between the United States and Japan had broken down following a series of economic squeezes to which both England and the United States had subjected Japan. In August a personal letter to President Roosevelt from Prince Konoye, the Japanese Premier, had urged a resumption of negotiations, but in late September a Japanese note indicated little chance for compromise. Particularly disturbing was the replacement on 17 October of Prince Konoye by General Tojo, an avowed militarist, known to have extreme views as to Japan's role in Asia. Both the War Department and the USAFFE command, aware of the crisis, were rushing the completion of necessary defenses and reinforcements.

Developments prior to November, such as the creation of USAFFE under MacArthur, the reorganization of air units under Olagett, the appropriations for airfield facilities, and the plans for reinforcement of pursuit and bombardment units, had laid a foundation for further expansion of both ground and air forces. General MacArthur believed, however, that a new organization was necessary for a more effective employment of his air units, and early in the fall had requested that Maj. Gen. Lewis H. Brereton be sent to the Philippines

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31

to effect this change. Brereton, with a long and varied career in the Air Corps which included the command of the 17th Bombardment Wing, GHQ Air Force and the command of the Third Air Force, had just completed a series of experiments testing the employment of air units in cooperation with ground troops. During the first week in October, he was relieved from command of the Third Air Force and sent to Washington for a brief period of orientation before reporting for duty in Manila.¹

During the ensuing conferences at Washington, the form of a new air organization for the Philippines was determined. It was decided that Brereton's command would be known as the Far East Air Force. At the same time, during a meeting of 16 October, General Arnold in consultation with Brereton decided upon the activation in the Philippines of the V Bomber Command and the Far East Air Service Command. This was in accord with a general plan to inactivate Air Corps wings and substitute functional commands. Arnold further suggested the inactivation of the 4th Composite Group and the employment of the headquarters personnel thus released in the new commands.²

Following Brereton's arrival in the Philippines, therefore, the air force was completely reorganized. The changes determined upon in the Washington conferences became effective on 16 November 1941. The newly-activated Far East Air Force included the V Bomber Command under Lt. Col. Eugene L. Eubank, who also remained the commanding officer of the 19th Group; the Far East Air Service Command under

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32

Col. L. S. Churchill, former commander of the 4th Composite Group; and the V Interceptor Command under General Clagett.³ MacArthur did not believe that he had the personnel required by the new organizations and radioed an urgent appeal for more. The War Department replied that additional officer and enlisted personnel would be sent by the first available transport, and that 1,978 enlisted men would be ready for shipment on or about 1 December 1941. In general, however, it was felt that the Far East Air Force had "present for duty more than the percentage of experienced personnel in other combat units in the Army Air Forces," and that particularly for staff work, MacArthur could choose from a large number of regular Army officers already in his theater.⁴

General Clagett's position by this reorganization had become personally embarrassing. In August he had been assured that General Arnold favored his promotion and would push it through if approved by either General Grunert or General MacArthur. MacArthur had stated later that Clagett's duties had been performed to his entire satisfaction. Nevertheless Brereton had received the command of the air force while Clagett had been relegated to a subordinate position as commanding officer of the V Interceptor Command. The latter believed that this loss of position inevitably produced a situation "inimical to the utmost defense effort," and though he had shared responsibility with Brereton and MacArthur in effecting the reorganization, he felt that his presence might restrict their

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33

freedom of decision and action. Accordingly on 12 November he requested a return to the United States. Brereton approved the request for transfer principally on the grounds of Olagett's poor health and at the same time praised his efficiency and ability. The final decision, however, was not made until 13 December when it was decided that the change was not practicable "in view of the Pacific situation."⁵

Olagett's V Interceptor Command consisted of the 24th Pursuit Group, composed of the 3d, 17th, and 20th Squadrons. The pilots of these units had received considerable training in pursuit tactics in a special training unit at Clark Field and in gunnery at Iba Field, 75 miles northwest of Manila. During November, the 21st and 34th Squadrons of the 35th Pursuit Group arrived from the United States and were attached to the 24th Group pending the arrival of their own organizations.⁶ These squadrons divided up the available P-40's, and supplemented the comparatively few modern planes with obsolete P-35's. Shortly after Brereton arrived, he reported that the three pursuit groups were equipped with 53 P-35's, 28 P-40B's, and 25 P-40E's. This did not take into account almost 100 additional P-40E's, which were to arrive before the end of the month.⁷

Within the Bomber Command the 19th Group remained the principal unit, and its 26 planes arriving in November the last bomber reinforcement of the Philippines. Of the original group only the 30th and 93d Squadrons had as yet been transferred from the United States. On 16 November, however, the 28th Squadron, a medium unit which had

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34

been in the Philippines for some 15 years, was assigned to the 19th Group and equipped with B-17's. Meanwhile the veteran 14th Squadron maintained a separate existence until 2 December when it too joined the same group. If the program of reinforcement had gone according to plan, additional heavy units would have been added. Before 1 November, the Adjutant General had authorized the movement of the ground echelon of the 7th Bombardment Group to the San Francisco Port of Embarkation. It sailed on 21 November. The air echelon was to proceed by flights of nine aircraft each in late November or early December as soon as run-in tests had been completed. Arrangements were also being made for the transfer of the 32d Bombardment and the 33th Reconnaissance Squadrons (H). In addition to heavy units, a light bombardment group was allocated to the Philippines, and on 1 November the 37th Bombardment Group (L) sailed from San Francisco on the transport President Coolidge. Ten days later their aircraft, 52 Douglas A-24's, reached Hawaii on the transport Heigs but were delayed there until the 24th for a naval escort. The A-24's never did reach the Philippines, but both the air and ground echelon arrived on 20 November.⁸

Although it was expected that flights of heavy bombers would continue to use the northern route (Midway, Wake, Port Moresby, and Darwin), negotiations were continuing for an alternate route further south.⁹ Actual construction could not commence on certain strategic islands, such as Christmas and the Fijis, until permission was received from the British and the New Zealand governments. Not until

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35

the first week in November, however, was a clear go-ahead signal received from England. At that time Anthony Eden assured the United States that the government of the United Kingdom joined those of Australia and New Zealand in offering complete cooperation, that they would undertake all construction within their power, but that they would welcome any technical and financial assistance which the United States might offer.¹⁰

By this time, the Hawaiian Department had almost completed preparations for moving construction material to prospective bases at Christmas, Canton, New Caledonia, and the Fijis. General Short planned to by-pass Palmyra and Samoa, where runways were being constructed by the Navy. He believed that "obstructed approaches" would render the Samoan field extremely dangerous for heavy bombers, and that the heavy rains on Palmyra would prevent continuous operations from that point. Furthermore it was considered doubtful whether the Navy would be able to finish their construction projects in time for the projected flights. By the end of November, a small fleet of supply ships and barges were carrying construction materials from the west coast and Hawaii to Canton, Christmas, and even farther west to New Caledonia and the Fijis. Energetic engineers were laying down runways with such speed that Maj. Gen. F. L. Martin, Commanding General of the Hawaiian Air Force, expected that all landing fields necessary for operations over the southern route would be available by 15 January 1942.¹¹

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RESTRICTED~~SECRET~~~~CONFIDENTIAL~~

36

Arrangements for improvement of the western portion of the route had made even greater headway. The Australians had offered splendid cooperation since American bombers had first begun to fly the Pacific. By November the Commonwealth government had granted permission for the establishment not only of air ferrying routes, but also of training bases, maintenance facilities, munitions storage, and communications. On 16 November General Brereton left Manila to survey the facilities already available. Following an inspection tour which included Darwin, Port Moresby, Rabaul, Lae, and Townsville, he conferred from 21-23 November with the Chief of the Australian Air Staff, Sir Charles Burnett, at Melbourne. In these conferences, negotiations were begun not only for improving airfields so that they would be usable during the rainy seasons, but for developing Australian maintenance facilities to service American planes.¹²

General Brereton's conferences with Australian military and political leaders were only one indication of a growing cooperation between the "associated powers." Air Chief Marshal Sir Robert Brook-Popham had gone to Manila from Singapore at least twice to confer with General MacArthur. Frequent conversations had occurred between Admiral Hart, Commander in Chief of the Asiatic Fleet, and British and Dutch naval officers. At the same time, some coordination was achieved between the activities of naval aircraft, the 30 PBY's of Patrol Wing Ten based in the Philippines, and those of the Far East Air Force. Hart claimed, however, that his attempts to promote further coordination met a "decided rebuff" from Army

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37

authorities. Nevertheless, by the end of October the PEY's were maintaining offshore patrols with particular attention to the area off the western Luzon coast.¹³

Growing cooperation produced by the increased tension in the Far East coincided with a change in the Joint-Army-Navy War Plan, a change which was a re-affirmation of the importance of the Philippines in American strategy. The basic war plan, RAINBOW NO. 5, had at first envisaged only defensive operations carried out by Army ground forces and the Asiatic Fleet working in close cooperation. In November, the growing strength of the Far East Air Force encouraged a modification of this plan to include offensive action. It specifically called for "air raids against Japanese forces and installations within tactical operating radius of available bases." MacArthur was given broad powers to develop the modified plan in conjunction with British authorities in the Far East. At the same time, he learned from Marshall that earlier agreements which had called for "British strategic direction" in the Far East had given way to one which recommended "mutual cooperation."¹⁴

This modification of the basic war plan was immediately supplemented by a decision on the part of the Air Staff to accelerate the dispatch of heavy bombers to Brereton's command. In fact, by the second week in November, the Far Eastern situation was considered so tense that it was planned to transfer "all modernized B-17 type aircraft from the United States" to the Philippines, and within a few days this project was broadened to include all B-24's as well. The

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38

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proposed transfer would have left 17 B-17's within the continental limits of the United States. Eleven of these were obsolete (B-17A and B types), another (a B-17C) was in a repair depot on 23 November, and 5 B-17E's were being used for test flights. Twelve B-17D's, assigned to the Hawaiian Department, were also being prepared for the Philippine flight, but General Spaatz believed that a release of these planes from Hawaii was not advisable at that time. The Far East Air Force, however, was definitely considered to have highest priority in allocation of heavy bombers, and General Arnold felt that the necessity of reinforcing the Philippines made the curtailment of training activities in Hawaii unavoidable. In a letter of 1 December to General Martin, the Chief of the AAF said, "We must get every B-17 available to the Philippines as soon as possible."¹⁵

Since the southern route was not yet complete, the flights of heavy bombers were to be dispatched via the old route. With the growing concern over Japanese intentions, however, the safety of aircraft in transit was more and more open to question. It was also realized that a Japanese seizure of either Wake or Midway would prevent any deliveries over that route. General Spaatz, therefore, urged that all available heavy bombers, as well as pursuits, destined for the Philippines should be en route not later than 6 December, and expressed the hope that 48 B-17's and B-24's could be dispatched from the United States by that time.¹⁶

In the meantime, the Air Staff considered measures to insure the safety of the Midway and Wake bases. The principal threat came from

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Japanese forces in the Marshall and Caroline islands. Late in October, the British had warned the United States that two aircraft carriers were operating within the Mandates. Thus was presented the problem of determining the course of action to follow in dealing with a potentially hostile force. The most effective course might have been for the United States Navy to remove the threat by taking offensive action. It was believed, however, that such an act of war should be avoided "at least until our forces in the Philippines had been reinforced to their contemplated strength." The recommended action was primarily defensive and in keeping with a national policy not to commit the "first overt act." The commanders of the heavy bomber flights were to be instructed to use "evasive action" and to avoid any contact with Japanese units. In addition it was suggested that the Navy provide light surface craft and patrol planes for the protection of Midway and Wake. By 20 November, plans had been completed to send 13 Marine planes to Midway and 12 to Wake. Furthermore the Army was testing the feasibility of flying pursuits off an aircraft carrier with the intention of sending 25 P-40's by that means to the same Pacific bases.¹⁷

Japanese activity in the western Pacific continued to increase. The British warning of the presence of two Japanese aircraft carriers in the Mandates had occurred late in October. In less than a month, a further warning stated that Japanese planes had been detected flying over British territory, apparently photographing some of the islands in the Gilbert group. These suspicious activities brought

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40

a suggestion from Singapore that the "associated powers" carry out reconnaissance missions of their own and photograph all the Japanese Mandates, the coast line of French Indo-China, and other areas occupied by Japan.¹⁸

This proposal received almost immediate approval from the War Department. On 26 November, MacArthur was informed that two B-24's equipped for high-altitude photography were to depart for the Philippines within 48 hours. On the same day, General Short was specifically informed of the mission of these planes. They were to photograph Jaluit in the Marshalls and Truk in the Carolines. In addition they were to obtain as much information as possible on the number and location of guns, airfields, barracks, and naval vessels including submarines. The B-24's were to fly at high altitude and were to avoid Japanese aircraft, but they were instructed to "use every possible means of self-preservation if attacked by planes."¹⁹

The accomplishment of the mission was held up by a series of delays. Brereton notified the RAAF authorities at Port Moresby on 29 November that two B-24's would probably arrive within 48 hours. On the same day, a message was dispatched to MacArthur stating that the crews had been "instructed." But three days later the War Department informed him that the mission was believed impracticable because of the distance to be flown. Nevertheless, on 5 December, one of the B-24's landed in Hawaii. The plane lacked among other things a ".50-cal. tunnel machine gun, adapter and accessories; .50-cal. guns, mounts, adapters and accessories for port and starboard sides; .50-cal. guns, mounts, adapters and accessories for upper hemi-sphere."

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41

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Moreover it had no armor plate installation. General Short, therefore, decided to hold the plane in Hawaii until it was "satisfactorily armed," and by 6 December MacArthur had given up hope, temporarily at least, that the photographic mission could be undertaken.³⁰

Aerial photographs taken of the Mandates might have provided useful information of Japanese military movements, but such intelligence was not necessary to warn the Far East air commanders of the danger of attack. Aggressive Japanese moves along the Chinese coast, together with the public pronouncements of leading Japanese officials, provided sufficient evidence to warrant every possible precaution. As early as 10 November, General Brereton had enumerated emergency duties for all post, group, and separate squadron commanders. All elements of the Far East Air Force were to be prepared for emergency operations "at any hour of day or night." Effective on 10 November, each headquarters "down to include each base and occupied airrome and each group and separate squadron" was to maintain a 24-hour message center and was to designate an "alert officer" in addition to the officer of the day. Base commanders were to keep sufficient personnel available at all times for necessary guard duties and for operation of any facilities required in an emergency. In addition, Brereton gave special instructions to pursuit and group commanders. The pursuit group commander, Maj. O. L. Grover, was to keep a three-plane flight from each pursuit squadron on the alert from daybreak until dark, to have crews for all flyable aircraft on "two-hour readiness" call day and night, and to provide such

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42

dispersal of aircraft as would minimize the effects of an aerial attack. The bombardment group commander, Lt. Col. Eugene Eubank, received similar instructions: to maintain one squadron at all times and a flight crew for all aircraft in commission on "two-hour readiness" call for reconnaissance and bombing missions, and to arrange for the most effective dispersal possible of bombers on the ground.²¹

By the end of the month, last hopes of peace were fading. On 26 November Admiral Hart received a Navy Department dispatch indicating serious developments in Japanese-American relations. On the following day, General Marshall informed MacArthur by radio message that negotiations with Japan had "to all practical purposes" broken down, that future developments were unpredictable, and that "hostile action" was possible "at any moment." MacArthur was further advised that in the event of hostilities "the United States desires that Japan commit the first overt act," but that this policy should not be interpreted as a restriction "to a course of action that might jeopardize the successful defense of the Philippines."²²

Emergency precautions were immediately taken. U. S. High Commissioner Francis B. Sayre called Hart and MacArthur into conference. MacArthur at once took measures to extend and intensify his reconnaissance patrols and reported on 28 November that everything was being put in readiness for a successful defense.²³ On the following day, all leaves were canceled, the entire Army in the Philippines was placed upon war alert, and two infantry divisions

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43

were dispatched to beach positions around Lingayen Gulf and two more to positions along the Batangas coast.³⁴

By 1 December Hart and MacArthur, after preliminary consultation among air commanders, had come to an agreement providing for cooperative air patrols. This agreement provided that Army heavy bombers would patrol the northern area including Formosa. It was believed that the B-17's greater speed and higher ceiling than the PB1 would give a better chance of coping with Japanese fighters from Formosa, although the possibility of combat was lessened when General MacArthur decided that the bombers would keep a legal distance from the island. Navy planes were to patrol the southern waters. Their operations included a number of long-range missions as far as the Indo-China coast. On these prewar patrols no American planes were attacked, but both Army and Navy reconnaissance spotted Japanese planes. Navy planes also reported large numbers of transport and cargo ships both at sea and in harbors. On the other hand, Army planes, according to Hart, were able to give him no enemy information.³⁵

The bases of these reconnaissance aircraft, as well as other military and civil installations, were dependent for defense against air attack upon the interceptor command, the antiaircraft defenses, and the aircraft warning service. The interceptor command had been considerably modernized during the fall of 1941, and by the end of November, all pursuit squadrons, except the 21st commanded by Lt. Sam Marrett at Del Carmen Field, were completely equipped with P-40's. The 20th at Clark Field, commanded by Lt. J. H. Moore, still had the old P-40B's; but the 3d at Iba under Lt. H. G. Thorne,

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44

the 17th under Lt. Boyd D. Wagner, and the 34th commanded by Lt. W. E. Dyess, the latter two at Nichols Field, were equipped with P-40E's. The 34th Squadron, however, had not had an opportunity to test all its aircraft, for the last P-40 was not received from the depot until the evening of 7 December. These American squadrons were supplemented by the 6th of the Philippine Army, commanded by Capt. Jesus Villamor, which was equipped with the old P-26's and was based at Batangas. In addition to the bases normally used, Nielson and Rosales fields were available for pursuits while O'Donnell, San Fernando, and Ternate were under construction. Since 15 November all pursuit aircraft had been kept on constant alert, fully loaded, armed, and with pilots on 30-minute call. During the first week in December, all pursuit pilots were undergoing intensive training in interception and gunnery, while squadron commanders were leading their units in day and night interception drills coordinated with bombers and anti-aircraft batteries.³⁶

The interceptor command was far better prepared for an early attack than were the antiaircraft defenses of vital installations in the Philippines. Before leaving Washington, General Brereton is said to have asserted that putting heavy bombers into the Philippine Islands without providing adequate antiaircraft defenses would almost certainly mean their destruction. Harbor defense batteries were equipped with a considerable number of 3-inch antiaircraft guns manned by the 60th CA, and there were some 5-inch and 37-mm. guns in

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45

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the Philippine Ordnance Depot. On 7 November, Maj. Gen. J. A. Green, the Chief of Coast Artillery, in a memorandum to General Marshall, warned of the certainty of hostile air attack against Philippine air bases in the event of war, and suggested that at least a part of harbor defense regiment be reassigned to the antiaircraft defense of airdromes or other critical areas. Until 8 December, however, only "24 AA machine guns" guarded the Manila area and its principal air base at Clark Field, and only low-altitude powder-train fuzes were available for 3-inch shells.²⁷

Without adequate antiaircraft protection, the Manila area could be defended only if pursuit aircraft could get off the ground in time to intercept hostile attack, but only the groundwork had been laid for an aircraft warning system that would make this possible. General Spaatz early in November had suggested an adjustment of the existing table of basic allowances to provide an aircraft warning battalion which would be suitable for the Philippines. Perhaps of most concern, according to Spaatz, was the lack of authorization for the SCR-268, a radar set which could be used for tracking and determining the altitude of approaching aircraft. The urgency of the situation resulted in the organization of an aircraft warning battalion, the 557th, for transfer to the Philippines. It arrived at the San Francisco Port of Embarkation on 6 December 1941. In the meantime, MacArthur had made some progress in setting up his own system. Native air watchers posted at strategic points were to transmit their information by telephone to the V Interceptor Command

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46

headquarters at Nielson Field, which in turn would relay the message by teletype to a plotting board at Clark Field. Three radar sets were available by 1 December, but of these only one, at Iba, was completely installed, another was in the process of being set up approximately 60 miles west of Aparri, while the third was in transit to Legaspi.²⁸

The lack of sufficient antiaircraft defense and aircraft warning service made even greater the need of fields suitable for the dispersal of heavy bombers. A sufficient number of such bases did not exist. At this time, of major air installations projected, only Clark Field with two large hangars, a rather limited dispersal area, blast pens, and barracks stood in a reasonable degree of completeness. The subject of further construction of airfields had been under study for some time. General Clagett had made a survey of possible bases throughout the Philippine archipelago during the summer of 1941, and the allocation of additional funds for that purpose during the fall had given promise of a considerable program of construction. Some work was initiated both on new fields and in extending old, but little progress had been made. Disturbed by the vulnerability of Clark Field, General Brereton and his chief of staff, Col. Francis H. Brady, made several attempts to provide additional dispersal facilities. In mid-November, Brady made arrangements to acquire construction equipment and was prepared to supervise construction of dispersal pens, but he was told by General MacArthur that air force responsibilities extended only to the digging of slit trenches.

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47

According to Brady, MacArthur then believed that the Japanese would not strike until early April, and that sufficient fields would be ready by that time.²⁹

A decision had been made, however, to establish a heavy-bomber base in Mindanao. This represented a change of policy since General MacArthur, according to Colonel Brady, had not planned to build air-dromes south of Cebu. Since September, at least, it had been possible to land a B-17 on a runway at Del Monte in Mindanao; by the end of November improvements had been made but work was only beginning on maintenance facilities and living quarters. At that time, it was decided that the 5th Air Base Group, commanded by Maj. Ray T. Elsmore, should develop the new base. This was considered an urgent job, and particularly difficult for a group which had been in the Philippines only since 20 November. But boats were obtained, equipment loaded, and the voyage from Manila of over 500 miles was accomplished within a week. With the cooperation of local commercial companies and native labor, Elsmore rushed the construction work, and on 5 December 12 B-17's of the 93d and 14th Squadrons arrived at Del Monte. The planes, still shining aluminum in color, had to be dispersed and camouflaged, a difficult task since there was no natural cover near the field. Only one spray gun was available, "and this was put to work both night and day spraying the airplanes with GI paint." Trucks were requisitioned from a Del Monte plantation to haul large coconut leaves to the field. While the B-17's were on the ground, they were kept dispersed and covered by the leaves. On 7 December, Elsmore and

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48

other officers flying a B-18 reconnoitered the island of Mindanao, carefully studied the Davao area with its Japanese population of 30,000, and reported that "all seemed peaceable on the entire island."³⁰

It was clear to the USAFFE command, however, that some sort of crisis was approaching. A "hostile" aircraft had been sighted over Clark Field at approximately 5:30 a.m. on 2 December. Instructions were issued to intercept the plane if the incursion was repeated. For three more nights the aircraft appeared, but American pursuit planes failed to make the interception owing to darkness and the inability of searchlights to illuminate the persistent visitor. On the fifth morning, pursuits were kept on the ground while anti-aircraft batteries remained on the alert. This time no aircraft appeared, although the radar set tracked several over the installations at Iba.³¹ Japanese shipping was also engaged in mysterious movements. On 5 December, the War Department learned from Singapore that a battleship, 5 cruisers, 7 destroyers, and 25 merchant ships had been seen on a due west course off the southeast coast of Thailand.³² By 6 December, MacArthur had established a final alert. Airplanes were dispersed, each under guard, all defense stations were manned, and the normal guards increased, while "counter subversive activities" were started "in a limited manner."³³ That day MacArthur wrote to one of his subordinates: "The negotiations between the United States and Japanese Governments that have been in progress in Washington, D. C., have not yet provided a basis for

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49

mutual understanding. Under existing circumstances it is not possible to predict the future actions of the Japanese."³⁴ General Marshall dispatched at 1205, 7 December, a final warning message of the approaching crisis. It reported that the Japanese emissaries were presenting at 1300 (0200, 8 December, Philippine time) what amounted to an ultimatum, and that they were under orders to destroy their code machines immediately. "Just what significance the hour set may have we do not know," warned Marshall, "but be on alert accordingly."³⁵

The month of November 1941 had been a month of mounting tension and hurried preparations for an American defense of the Philippines. Basic war plans had been revised to authorize certain offensive measures in the Far East in the event of war with Japan. The program for the reinforcement of the Philippines had rested on an assumption that hostilities could probably be postponed until March or April 1942. But with the mounting evidence of Japan's determination to expand throughout the Far East, it became increasingly evident that March or April might well be too late. It was the realization of this that prompted every effort to speed the program of reinforcement with the hope that all available heavy bombers would be on the way by 6 December, a program that was to be carried out even at the cost of stripping the continental United States and Hawaii of that type of aircraft.

The situation in the Philippines reflected the unreadiness of the United States for war only slow progress was being made in the

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50

construction of airfields, and resources and equipment were sadly lacking. Instead of 36 radar sets, there were three, of which only one was set up; instead of all-round anti-aircraft defense for all military and civil installations, only the harbor defenses seemed to be adequately protected; instead of the proposed 340 modern pursuit aircraft, the Far East Air Force had 107 P-40's and instead of a projected total of 165 modern heavy bombers, it had 35 B-17's and D's. The experience of the 27th Group was not typical, but it provides perhaps the most flagrant example. The members of the group arrived in Manila on 20 November. They passed the ensuing weeks in infantry drill, flying decrepit E-18's, filling sandbags, and wondering when the A-24's left in Hawaii would arrive. And as a result of their failure to arrive, the trained crews of the 27th Group were never able to test the effect of dive bombing on the transports and landing barges which cut the Japanese ashore in the Philippines.

The Japanese were fully aware of this weakness of the Philippine defenses against air attack. Their intelligence summaries of November and December gave a fairly accurate picture of the number, type, and location of American aircraft. During the first week of December they credited the Far East Air Force with 130 fighters, 30 bombers, and 20 patrol bombers. Actually there were in commission 90 P-40's and P-35's, and 33 B-17's, in addition to the Navy's approximately 30 PB's. By contrast with this meager aerial strength the Japanese had an overwhelming superiority in aircraft based at points near enough to provide support for an assault on the

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51

Philippines. The best available American and RAAF intelligence estimates gave the following figures for the total Japanese air strength as of 8 December 1941:³⁶

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| Fleet Air Arm | 612 |
| Manchuria | 800 |
| Japan | 600 |
| North and Central China | 198 |
| Mandated Islands | 100 |
| Malaya | 300 |
| Area including Canton, Hainan, Formosa | <u>250</u> |

Total First Line Strength 2360

The warning messages sent by the War Department during November and December had brought the Army's air arm in the Philippines to a state of readiness, but there is a great difference between readiness and preparedness.

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Chapter III

OPERATIONS IN THE PHILIPPINES, 8 TO 19 DECEMBER

On 7 December (Philippine time), the 27th Group gave a party at the Manila Hotel in honor of General Brereton. A gala affair, generally considered "the best entertainment this side of 'Minsky's,'" it began to break up at 0200, 8 December. Shortly thereafter, according to the 27th Group's account, "the dawn broke, War broke, we lived from today on, tormented with the old, worn-out phrase-- "where in hell are our airplanes?""¹

The first news of the opening of hostilities came from a commercial radio station which had intercepted a message from Pearl Harbor shortly after 0300. Although no official confirmation was received at the time, base commanders were notified, and all units were ordered to "constant stations." Within 50 minutes of this first warning, the lone radar set installed at Iba picked up a formation of aircraft about 75 miles offshore heading for Corregidor. The interceptor command immediately dispatched the P-40E's of Lt. H. G. Thorne's 3d Pursuit Squadron to intercept the unidentified formation. The radar set plotted the outgoing P-40's and showed them making contact with the approaching raiders, but the latter then swung off to the west, and their plots disappeared. When the 3d Squadron returned to Iba, it was learned that it had not made

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SECURITY INFORMATION

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53

contact with the enemy. The radar set was unable to provide accurate altitude data, and darkness had prevented the American pilots themselves from spotting the planes. The radar plots showed that the interceptors had estimated the direction correctly, but they had apparently followed a course which took them underneath the incoming flight.²

Official confirmation had been received of the outbreak of hostilities with Japan by 0600.³ The plan of action which had been specifically considered for this eventuality by the Far East Air Force was an American air attack upon installations in Formosa. Immediately upon hearing of the Pearl Harbor attack, Brereton rushed to MacArthur's headquarters to obtain permission for the Formosa attack, and Brady ordered Eubank to have the bombers at Clark Field prepared for the mission. Before preparations could be completed, however, Brereton returned and announced at a meeting of his staff that MacArthur would not authorize the raid. During the next few hours, Brady made a series of telephone calls to MacArthur's headquarters to ask if there had been any change in the decision. About 0930, MacArthur's Chief of Staff, Maj. Gen. Richard K. Sutherland, told Brady that he would be informed of any new decision, and that he was not to call again.⁴

Meanwhile at approximately the same time, the aircraft warning service reported a large formation of bombers over Lingayan Gulf proceeding south towards Manila. The B-17's at Clark Field were at once ordered into the air to avoid being caught on the ground. The

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54

30th Pursuit Squadron also at Clark was dispatched to intercept the approaching enemy formation, while at Nichols Field the 17th under Lt. Boyd Wagner was ordered to cover Clark Field. The pursuits of the 30th Squadron had planned to make contact with the enemy at Rosales, north of Manila, but the approaching bombers avoided the American planes by swinging to the northeast and bombing Baguio, the summer Philippine capital, and Tagayaran. Shortly before 1100 General Sutherland called FEAF headquarters to authorize a Formosa attack, saying that their hands were no longer tied since the Japanese had dropped bombs on Philippine soil. He accordingly authorized Brady to send out three B-17's on a reconnaissance bombing mission and to prepare the remainder for an attack on Formosa. The American bombers were called back to Clark Field, and the 20th Squadron, which had spent the past 2 hours in fruitless patrolling, was also ordered to return but first to cover the landing of the bombers on the way in.⁵

Shortly after 1130, therefore, all American aircraft in the Philippines, with the exception of one or two planes, were on the ground. The B-17's were being prepared for the Formosa attack which had been ordered for that evening. The 20th Pursuit Squadron at Clark and the 17th at Nichols were being refueled; while the 3d at Iba, the 34th at Nichols, and the 21st at Del Carmen were standing by to take off as soon as orders were received.⁶

At this point either unusually effective Japanese planning or a series of coincidences upset MacArthur's air warning system. Communications almost completely broke down, apparently the work

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of fifth-column saboteurs. Radio reception was drowned by static which the Japanese probably caused by a systematic jamming of the frequencies. In the resulting confusion, the 3d Squadron was dispatched on what proved to be a wild goose chase over the China Sea, where an enemy formation had been reported. At the same time, the interceptor command took steps to protect the approaches to Manila. The 17th Squadron was ordered to cover the Bataan peninsula, the 34th to patrol the Manila area itself, and the 21st to cover Clark Field. At 1145 the radar set at Iba picked up another enemy formation and plotted it as it proceeded directly south over Lingayen Gulf. But Jap saboteurs had done their work. No message got through to Clark Field.⁷

Japanese good fortune continued. A thick haze of dust over Del Carmen Field had delayed the take-off of the 21st Squadron, and at noon Clark Field had no pursuit cover. At 1215, accordingly, the 20th, whose planes had not yet completed refueling, was hastily ordered to cover its own base. Five minutes later four planes cleared the ground. At that moment, a V-shaped formation of 27 Japanese bombers appeared and began dropping bombs varying in size from small fragmentaries to 100-pounders. This formation was followed by another equal in number which continued the attack for 15 minutes. Almost before the last bomb had been dropped, Japanese pursuits began swarming over the field. Carefully picking out each grounded American plane,^{they} swept in for over an hour carrying out low-altitude strafing attacks.⁸

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56

The Japanese assaults were not entirely unopposed. Four P-40's of the 20th Squadron had got off the ground. Five more were smashed by bombs while taking off, and another five were destroyed in strafing attacks. Lt. Joseph H. Moore, squadron commander, led his four planes against the numerically superior Japanese pursuits. Lt. Randall B. Keator attacked a flight of three enemy pursuits and acquired the distinction of shooting down the first Japanese aircraft over the Philippines. Moore, himself, in a series of dogfights destroyed two others.⁹

Meanwhile, 30 miles northwest of Clark Field, the 3d Squadron was having particularly bad luck. Not finding an enemy formation over the China Sea, and with the P-40's low on gasoline, it was forced to turn back toward its base at Iba. At about this time the radar set recorded the approach of a new enemy formation. A warning was flashed to a central control point at Nielson Field, Manila, but communications again failed. The message never arrived. The radar continued to track the oncoming Japs, this time heading toward Iba. The 3d Squadron, now dangerously low on fuel, arrived there first. It was slowly circling the field when 54 Japanese bombers escorted by numerous fighters appeared, apparently the formation which had not been found over the China Sea. The 3d Squadron, consisting of approximately a dozen P-40's tried to break up the Japanese formations. Its attack prevented the low-level strafing which was so destructive at Clark Field, and Lt. Jack Donelson probably shot down two enemy planes. But five P-40's were shot down, and three others crash-landed on near-by beaches with their gasoline supply exhausted.¹⁰

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57

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Two B-17's were off the ground during these attacks. One, piloted by Lt. John Carpenter, was on reconnaissance and landed after the raiders had disappeared. Another, piloted by Lt. Earl Tash, had arrived over Clark Field from Del Monte during the height of the low-level strafing and was immediately pounced upon by three enemy pursuits. Tash managed to pilot the B-17 back to Del Monte in spite of the loss of aileron cables, damage to superchargers, and bullet holes in the propellers. Just before landing, he radioed his base: "Have been exposed to enemy, have ambulance ready."¹¹

The period of attack, lasting for almost 2 hours, gave those on the ground as well as those in the air a true baptism of fire. Most of the personnel on the ground had sufficient warning to throw themselves in zigzag trenches dug in the hangar and working areas. But the antiaircraft gunners, with few exceptions, stood by their guns, .50- and .30-caliber machine guns for the most part and a few 37-mm. guns. Ground crews and combat crews on the field performed many individual acts of heroism. Colonel Eubank and Maj. David R. Gibbs did not take cover but continued to direct the efforts of their men in defending installations and planes on the field. Lt. Fred Grimmins was severely wounded while rushing through a hail of machine-gun bullets into a burning hangar in a vain attempt to rescue a B-17. Chacelain Joseph E. La Fleur, ignoring the low-flying strafers, ministered to the wounded and dying. Pvt. Robert Endres "at his own initiative" appropriated an abandoned truck and in the thick of the attack made seven trips to the station hospital.

~~RESTRICTED~~
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58

Pfc Greeley B. Williams refused to desert a gunner's post in a B-17 and maintained constant fire on Japanese planes until he was killed.¹²

By the time the last enemy plane had returned to its base, it was clear that the Japanese had won a tremendous victory. Clark Field had probably suffered most heavily. High-level bombing had destroyed hangars, shops, and supply buildings. A bomb which scored a direct hit on the communications center cut off Clark Field from other points and prevented any attempt to direct the pursuits from the ground. Bombs had not been particularly effective against the dispersed B-17's, but each enemy pursuit pilot had systematically chosen a target and concentrated machine gunfire on it. In this way, 17 or 18 B-17's were destroyed. At Iba, eight aircraft on the ground were smashed, and, even more important, the radar installations were at least temporarily put out of commission. A bombing attack on Nichols Field at 0315 on 9 December destroyed a hangar and damaged several planes. Thus in less than one day of hostilities the offensive and defensive power of the air force had been cut in half. The destruction of B-17's on the ground left not more than 17 in commission. Approximately 55 of the 105 P-40's had been lost either in combat or on the ground, and of the remaining P-35's probably no more than 15 were operational. Casualties were heavy. At Clark Field alone, 55 officers and men were killed and over 100 wounded, while at other points approximately 25 were killed and 50 wounded.¹³

The Japanese victory forced the Far East Air Force to change its plans and to some extent its organization. The bomber losses

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59

destroyed any hopes for an effective air offensive, although there was some talk of a suicidal daylight mission to Formosa by B-13's. The heavy pursuit losses, furthermore, required a reallocation of the remaining aircraft and pilots. The 3d Squadron at Iba had suffered most heavily; consequently its air echelon and remaining aircraft were absorbed into Lieutenant Wagner's 17th Squadron now located at Clark Field. The ground echelon of the 3d was sent to Nichols Field to bring the 54th Squadron up to strength. The 27th Group, which had now practically given up hope of ever receiving its A-24's, received a miscellaneous assortment of duties. Many of the officers received a platoon of men to train in the use of firearms. Others were dispatched to various points in the Philippines for a variety of tasks. Lt. James B. McAfee, for example, was assigned to General Brereton's headquarters to keep up the situation map, and Lt. Pete Zender flew a B-18 on courier missions throughout the islands. Some efforts were made to curb fifth-column activities. MacArthur had reported after the attacks of 8 December that 40 per cent of the enemy aliens in Manila had been rounded up that day together with 10 per cent in the provinces. But, according to one report, that night "when the Japs bombed, there must have been 10,000 flares shot up by 5th Columnists."¹⁴

Other efforts were made to strengthen the antiaircraft defenses, which had proved so ineffective against both high-level bombing and low-altitude attack. The Coast Artillery command determined to increase the protection of the Manila area. Early in the evening of 8 December, a machine-gun battery of the 60th CA moved to Nichols

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80

Field and the port area of Manila. Additional equipment was scanty, but some was available in the Philippine Ordnance Depot, and 500 officers and men were transferred from the 200th CA to man it. Working almost continuously for 36 hours, these men, now organized into the Provisional 200th CA (AA), put together and installed twelve 3-inch guns, "3 directors and heightfinders, 5 AA searchlight units," and twelve 37-mm. AA guns. By 10 December, new 3-inch batteries were located at Parangue, Paco, and east of Nielson Airport, and 37-mm. batteries had been installed at Nichols Field, Nielson Airport, and the section of Manila known as the Walled City.¹⁵

It was hoped that these moves to repair and to strengthen the facilities at hand could be completed before the next enemy attack. Until late in the evening of 9 December, the Japanese had made no attempt to land on Philippine soil. It was obvious, however, that such an attempt would soon be made, and ground crews were working frantically to ready every available aircraft for defensive operations. The principal American air missions on 9 December, carried out by both Army bombers and Navy patrol planes, were designed to locate approaching enemy convoys. At 0730, 6 B-17's, commanded by Maj. Cecil Combs and each loaded with 20 x 100-pound demolition bombs, took off from Del Monte. They reconnoitered the area in the vicinity of Caranduanes without finding any trace of enemy activity, continued to Clark Field, and landed there at 1430. But to avoid a possible ground strafing attack, they took off immediately and remained in the air until well after dark. During the afternoon

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seven additional B-17's were dispatched from Del Monte to San Marcelino, near the coast west of Clark Field, which now had a runway capable of handling heavy bombers. They saw no sign of enemy activity and flew the entire distance without mishap. As they were preparing to land just after dark, however, AA gunners, not recognizing the B-17's as friendly aircraft, opened fire. Fortunately, no damage to either planes or crews resulted. Some air patrols during these critical hours gave almost useless reports. According to Admiral Hart, "an extraordinary crop of incorrect enemy information" came over the warning net. There were numerous reports of "enemy sightings when nothing was actually sighted and when a vessel was really seen she was usually reported in one of two categories: irrespective of size, she was either a Transport or a Battleship."¹⁶

During the night of 9-10 December, however, USAFFE headquarters received confirmed reports of approaching enemy convoys.¹⁷ Of these convoys, at least two were heading for northern Luzon. To repel the landings, it was planned to coordinate attacks of the heavy bombers now at Clark Field and San Marcelino with a strong pursuit escort. Five B-17's and two pursuit Squadrons, the 17th with P-40's and the 21st with P-35's, therefore, were prepared for an early morning mission. At 0600 the B-17's led by Major Combs took off and headed for Lingayen Gulf. Before reaching the target area, they were joined by the 17th Squadron. The B-17's, each loaded with 30 x 100-pound demolition bombs, chose a number of transports already unloading troops and supplies. Two bomb runs were carried

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SECURITY INFORMATION

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62

out by four bombers, the first from 12,000 feet and the second from an altitude 500 feet higher. The fifth B-17, piloted by Lt. Elliott Vandevanter, swept in first at 10,000 and then at 7,000 feet. At the completion of the bombing mission, the antiaircraft fire was still fierce, but the P-40's dived down to an altitude low enough to strafe the ships and shore installations. Meanwhile the 21st Squadron, which had miscalculated the time required for the slow P-35's to reach the target, had arrived on the scene. The B-17's had gone, and the P-40's were completing their mission, but the P-35's, which had no armor protection or leak-proof tanks, "strafed and restrafed the invaders." As Lt. Samuel H. Harrett, squadron commander, led his flight in "one final and successful strafing dive," a transport exploded destroying Harrett's plane. Harrett was killed. Another P-35 was also lost, but the pilot was saved. The B-17's had succeeded in hitting a number of vessels, but apparently in the series of bombing and strafing attacks only one transport was sunk.¹³

This mission was only a part of the heavy-bomber operations for the day. Another mission was scheduled for Major O'Donnell's 14th Squadron. The B-17's of this unit left San Marcelino at 0600 for an initial hop to Clark Field where they were to be serviced and loaded with bombs. The plan was to some extent upset by a warning of approaching Japanese planes. By the time five of the B-17's had reached Clark, it was considered too hazardous for the other three

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to land, and they were ordered to remain in the air. By 1100, however, their fuel was almost exhausted, and they were forced to return to San Marcelino. Meanwhile the other five planes had been serviced and had taken off individually on their missions.¹⁹

Three ships, piloted by Major O'Donnell, Capt. E. L. Parsel, and Lt. G. R. Montgomery, proceeded toward Vigan, approximately 100 miles north of Lingayen Gulf where the Japanese had concentrated a number of transports protected by naval vessels. O'Donnell, first to arrive over the target area, made several runs at 25,000 feet against what appeared to be an enemy aircraft carrier. Mechanical trouble with the bomb racks as well as antiaircraft fire interfered with the bombing, and it took approximately 45 minutes to drop eight 600-pound bombs. No hits were observed. Parsel had better success. He made two bomb runs from 12,500 feet. The first with four 300-pound bombs against a cruiser was unsuccessful, but of the three bombs dropped during the second run, at least one direct hit was scored on a transport. Montgomery had time to load only one 600-pound bomb before being ordered off Clark Field. He proceeded to Vigan, however, and dropped his bomb in the water near the transports.²⁰

The two remaining B-17's took off individually from Clark Field at approximately 0850 to raid Japanese landing craft, transports, and their naval escort near Aparri off the extreme northern coast of Luzon. Lt. G. E. Schaetzel, pilot of one plane, made a run over several transports at 25,000 feet apparently scoring a hit. He

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64

turned to bomb a cruiser, but by this time antiaircraft fire was heavy and enemy pursuits had gained sufficient altitude to attack. Although the B-17 was severely damaged, no personnel were injured, and Schaetzel succeeded in reaching San Marcelino.

Capt. Colin Kelly in the other heavy bomber meanwhile was dispatched to locate and if possible sink the aircraft carrier previously reported along the northern Luzon coast. Kelly's navigator, Lt. Joe M. Bean, spotted a large Japanese warship near Aparri, probably a battleship of the Yamashiro or Haruna class, among a large concentration of vessels including 6 cruisers, 10 destroyers, and at least 15 transports. After a fruitless search for the aircraft carrier, Kelly determined to attack the battleship which made a good target since it was moving slowly and not maneuvering. The bombardier, Sgt. Meyer S. Levin, dropped the entire bomb load, 3 x 600-pound bombs, from 32,000 feet. The first two scored near misses; the third struck squarely amidships, and when the B-17 turned back toward its base, the warship appeared to have stopped with black smoke pouring from it.

During the return flight, all gunners were kept at their stations except the radio operator (lower-turret gunner), who was receiving landing instructions from Clark Field. At first, the control tower warned Kelly not to come in for a landing, but almost immediately after this warning informed him that the "all clear" had been sounded. This welcome message had no more than been received when, without prior warning, "the commander's dome flew off,"

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65

the instrument panel seemed to disintegrate, a machine-gun burst penetrated the left rear-gunner's post killing T/Sgt. William J. Delehanty, the low-pressure oxygen tanks in the radio compartment exploded, and "the empty bomb bay" burst into flames. An unexpected attack had come from two enemy pursuits which had zoomed out of the clouds from the rear of and below the plane, an approach which probably would have been observed had the lower turret been manned. The pursuits continued to fire, while flames from the bomb bay were growing in intensity and becoming almost unbearable. Kelly ordered the crew to bail out. S/Sgt. James E. Holkyard, Pfc Robert A. Altman, and Pfc Williard L. Money dropped out of the rear compartment; Bean and Levin tumbled out of their escape hatch; and Kelly and the co-pilot, Lt. Donald D. Robins, were preparing to leave the plane. Suddenly there was a tremendous explosion. Robins, thrown clear of the wreckage, succeeded in pulling the rip cord of his parachute. In spite of the fact that one of the enemy pursuits vainly attempted to machine-gun the Americans who had bailed out of the plane, the whole crew reached the ground safely, with the exception of Delehanty and Kelly whose badly mangled bodies were later found near the wreckage of their ship.²¹

The pursuits which had shot down Kelly's B-17 may have been from Japanese formations heading for the Manila area. American pursuit squadrons had been kept on the alert throughout the morning to meet such a threat. The 17th Squadron, after its earlier escort mission to Lingayen Gulf, had covered the B-17's as they returned to Clark

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Field. At 1115 interceptor headquarters received specific warnings of enemy aircraft approaching from the north, and three squadrons were dispatched to intercept them, the 17th to Manila Bay, the 21st to the port area of the city, and the 34th to Bataan. Shortly after noon the Japs arrived. A large number of bombers, escorted by approximately 100 enemy pursuits, roared over Nichols Field and Cavite, the naval base, systematically bombing and strafing air installations, docks, and supply points. The three American squadrons attempted to break up the bomber formations, but the escorting Japanese pursuits thwarted these attempts in almost every instance.²²

The experience of the 17th Squadron illustrated the apparent futility of these interceptions. Ten P-40's of this unit found themselves confronted with some 50 bombers and 40 Zero pursuits. The Americans tried to engage the bombers, but Zeros outmaneuvered them at every turn. After some minutes, the P-40's found themselves low on fuel and had to break away. One pilot, Lt. William M. Rowe, shook off the Zeros by taking "a long dive at the ground." He made for Del Carmen Field, north of Manila, but the field was being strafed. He turned back toward Clark Field, and after dodging machine-gun bullets, landed safely with no more than two gallons of fuel left.²³

Not until the enemy planes began to withdraw did American flyers achieve any real success. Two flights led by Lt. W. A. Shepherd and Lt. Joseph H. Moore pursued some of the enemy bombers returning to their base. Shepherd's P-40 was so badly damaged that he was

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37

forced to parachute to safety, but two enemy bombers were probably shot down. These may have been the only Japanese aircraft destroyed during the engagement, but four Filipino pilots won at least a moral victory in taking off in obsolete P-26's, a type of plane equipped with probably no more than one .50- and one .30-caliber machine gun. Led by their ace, Capt. Jesus Villamor, they attacked an enemy formation. Third Lt. Jose P. Goner, when his guns jammed, even attempted to ram his Japanese adversary.²⁴

By the evening of 10 December it was again clear that further changes were necessary in American organization and plans. The Japanese attack upon Cavite had been savage and successful. The power plant, industrial facilities, and supply depots "were completely ruined." A submarine, the Sec. Lion, was sunk, and other naval craft damaged. Little American opposition was offered. Enemy planes had flown out of reach of the naval base's nine 3-inch antiaircraft guns, and Admiral Hart believed that it was dangerous to continue to base his vessels in the Manila area. The Interceptor Command could no longer promise pursuit protection. Exclusive of the 1 or 2 P-26's, only 30 pursuit aircraft remained, and 8 of these were P-35's. Thus to conserve these few, General Brereton instructed the 24th Group not to employ its aircraft except on specific orders, his intention being to use pursuit planes largely on reconnaissance missions in place of the 2d Observation Squadron which had been wiped out during the first 2 days of the war. After 10 December, therefore, instead of carrying out actual combat missions, American pursuit aircraft in

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the Philippines were assigned areas for reconnaissance patrols; the 21st and 34th Squadrons combined to cover southern Luzon, while the 17th and 20th were assigned the northern part of the island.²⁵

The decision to reserve pursuit aircraft for reconnaissance missions meant that American bases on Luzon would be even more vulnerable to enemy air attack. This would be particularly true by the time the Japanese had established air bases on Philippine soil, and by 10 December they were well on the way toward accomplishing this. Already ground and service units had landed at Aparri and had begun the task of enlarging the airfield previously located there. These units included not only airdrome battalions, but a part of an antiaircraft regiment together with construction, air warning, meteorological, and signal units. The prospect of land-based planes within 250 miles of Manila made it necessary for American heavy bombers to abandon Luzon bases. Consequently before the completion of the missions of 10 December, it had been decided to dispatch the remaining B-17's to Del Monte. Accidents and unfavorable weather delayed the transfer of a few of the planes. Combs and Ford en route to Del Monte on the 10th, for example, landed for fuel at San Jose, Mindoro; and, on the same day, Vandevanter landed at Tacloban, Leyte. By 11 December, however, all B-17's, except one piloted by Lieutenant Schaetzle which came in on the 13th from Cebu, had arrived at the Mindanao base.²⁶

The distance of Del Monte from the principal enemy forces now on Luzon decreased the striking potential of the Far East Air Force,

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69

and landings were continuing almost unopposed. The air force could not offer a continuous threat to the enemy advance and the ground forces did not seriously oppose the landing because of MacArthur's diagnosis of enemy strategy. He believed that the enemy hoped to confuse him and cause him to commit his forces prematurely. Certainly the Japanese had put forces ashore at a number of points. They were reinforcing their already substantial landing parties at Aparri and Vigan and had begun operations off the coast of southern Luzon near Legaspi and Zambales. Moreover to create further confusion, they were increasing the tempo of the air offensive. On 12 December, for example, more than 100 enemy aircraft were over southern Luzon, hitting Clark Field, Batangas, and Olongapo. On the following day, heavy attacks hit the same points as well as Nielson Airport and Nichols Field. Again the attacks were destructive, resulting in the burning of fuel and other supplies and the loss of 7 PSY's at Olongapo, the base of Navy Petrol King 10. In spite of orders to avoid battle, American and Filipino flyers apparently were irresistibly drawn to making some attempt at interception. The Filipino flyers particularly distinguished themselves. Six of their airmen, led by Captain Villanor, took off in P-36's from Batangas to harass some 54 bombers which were heading toward that field. In this apparently suicidal mission, 1st Lt. Cesar N. Bosa was killed, but Villanor succeeded in destroying one enemy aircraft and together with his colleagues prevented serious damage to the airfield.²⁷

Planned combat missions during the period from 10 to 18 December, however, were few. The 19th Group attempted only two of

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70

importance. The first occurred on the 13th when Major Combs carried out a mission against enemy transports at Vigan. No hits were scored. On 14 December, six B-17's were scheduled for a bombing attack on Japanese concentrations near Legaspi, but only three piloted by Lieutenants Wheeler, Adams, and Vandevanter reached the target. Of these, Wheeler's plane became separated from the others in low-hanging clouds over Mindanao and made the attack alone from 9,500 feet. Before the results of the bombing could be observed, 18 enemy pursuits swarmed around the plane. All four gunners were wounded, Pfc Killin fatally, but four enemy planes were apparently destroyed. Wheeler nursed his riddled bomber back to Mindanao, but a drizzling rain shut out Del Monte, and he was forced to crash-land on a small barricaded field at Cagayan. The other two planes to reach the target made their attacks from 21,000 feet. Vandevanter escaped without being approached by pursuits but Adams' B-17 was continuously attacked from the time it reached the target area. Machine-gun bullets cut through the plane wounding several of the personnel and knocking out two engines. Adams started back to base but, realizing that he could not reach it successfully, headed for the island of Masbate just across the strait from Legaspi. He brought his plane down, and the crew ran for cover, while persistent enemy pursuits flew over the crippled plane and completely destroyed it in a strafing run. It took three weeks for the crew to work their way back to Del Monte.²⁰

Pursuit aircraft during the same period were in the air more frequently than the bombers but, with two exceptions, carried out

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only noncombat missions. Indeed, these two exceptions were labeled as reconnaissance missions, although in both cases they resulted in clear-cut victories for American fliers. On 13 December Lt. Boyd Wagner flew one of the remaining P-40's on a reconnaissance flight over northern Luzon. As he approached Aparri, he shot down four enemy fighters, which had taken off from the field at his approach, and then destroyed several more on the field. Three days later, Lieutenants Wagner, Church, and Strauss were assigned the hazardous mission of dive bombing the airfield at Vigan. When they had reached the target area, Wagner signaled Strauss to remain on patrol, while he and Church proceeded to bomb the airfield. As they went into a dive Church's plane received a direct hit from AA, setting it afire, but he continued the attack, released his bombs, and crashed with his plane "because there was not sufficient time to jump for safety" after accomplishing his mission." Wagner meanwhile had dropped six fragmentation bombs and thoroughly strafed a fuel dump and approximately 20 planes parked in the runway.³⁹

Such victories stimulated American morale but could not conceal the fact that the Japanese held unchallengeable control of the air over the Philippines. Heavy bombers had already been forced to move their base of operations back almost 600 miles from Clark Field to Del Monte. It was now planned to withdraw even further, this time with a jump of some 1,000 miles to Darwin, Australia. This new move was made necessary by two conditions: the lack of adequate maintenance facilities at Del Monte, and the growing danger that that

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base too would soon be subject to constant air attack. The 5th Air Base Group under Major Elsmore had been working day and night to complete Del Monte as a base. After the outbreak of war, he had taken the responsibility of constructing underground shelters instead of barracks above ground and had selected four additional fields for dispersal within a 15-mile radius of the main runway. In spite of Elsmore's efforts, however, Del Monte did not have extensive maintenance facilities, and the B-17's, after the rough treatment received during the first week of war, were in need of thorough depot overhaul. Moreover, the growing strength of the Japanese forces on land together with the speed with which they were constructing air strips meant that land-based enemy planes would soon be able to range over the entire archipelago. Elsmore's forces could make only a token defense against enemy raids. No radar set existed on Mindanao. No pursuit aircraft were available, nor were there any large caliber antiaircraft guns. The only antiaircraft defenses were water-cooled .50-caliber machine guns and a few additional air-cooled .50's removed from B-17's. These were set up around the main field in 17 emplacements. The air warning system consisted of look-outs posted on hills north and south of the field and connected by telephone with operations headquarters. With only these inadequate defenses, it was clear that the principal hope for the safety of grounded aircraft in the event of an air raid would be camouflage and dispersal.⁵⁰

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75

The decision was made, therefore, to move the B-17's at least temporarily to Australia. On 15 and 16 December final preparations were being made for the long flight. During the next two days, 10 of the heavy bombers reached Darwin without mishap. The last four, to leave shortly thereafter, narrowly escaped destruction on 19 December in Del Monte's first serious air raid. At dusk on that day, three B-17's were ready to take off for Australia but were still dispersed and covered with coconut leaves. Three B-18's had just landed, one having brought General Clegg from Manila. Before they could be dispersed and camouflaged, however, 12 Zeros came over the airfield skimming the tops of the pineapple plants. The camouflaged B-17's escaped, but the B-18's were strafed and burned. If any doubts regarding the wisdom of transferring the base of operations to Australia remained, this removed them. Within two days the last four heavy bombers had arrived at Batchelor Field near Darwin.³¹

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Chapter IV

EFFORTS TO REINFORCE THE PHILIPPINES, 20 DECEMBER 1941-3 JANUARY 1942

In spite of the decision to transfer all heavy bombers to Australia, there was no intention of permanently abandoning the defense of the Philippines, nor had the garrison on Luzon lost its will to resist. The morale of officers and men remained high, in part at least because they constantly expected the arrival of reinforcements sufficiently strong to repulse the enemy's advances. Ever since the opening of hostilities, according to one writer, the Army was traveling as much on rumors as on its stomach. One day there was news that the Navy was coming to the rescue, "sweeping everything before it." Again "someone" heard that Dewey Boulevard was lined with A-20's, ready to fly into combat. On another occasion, the 27th Group headquarters was informed by telephone that its A-24's were being unloaded at the dock. A frantic rush to the docks revealed nothing except, as the group historian wrote, "that there was probably a Fifth Columnist or two on Luzon and they had our number."¹

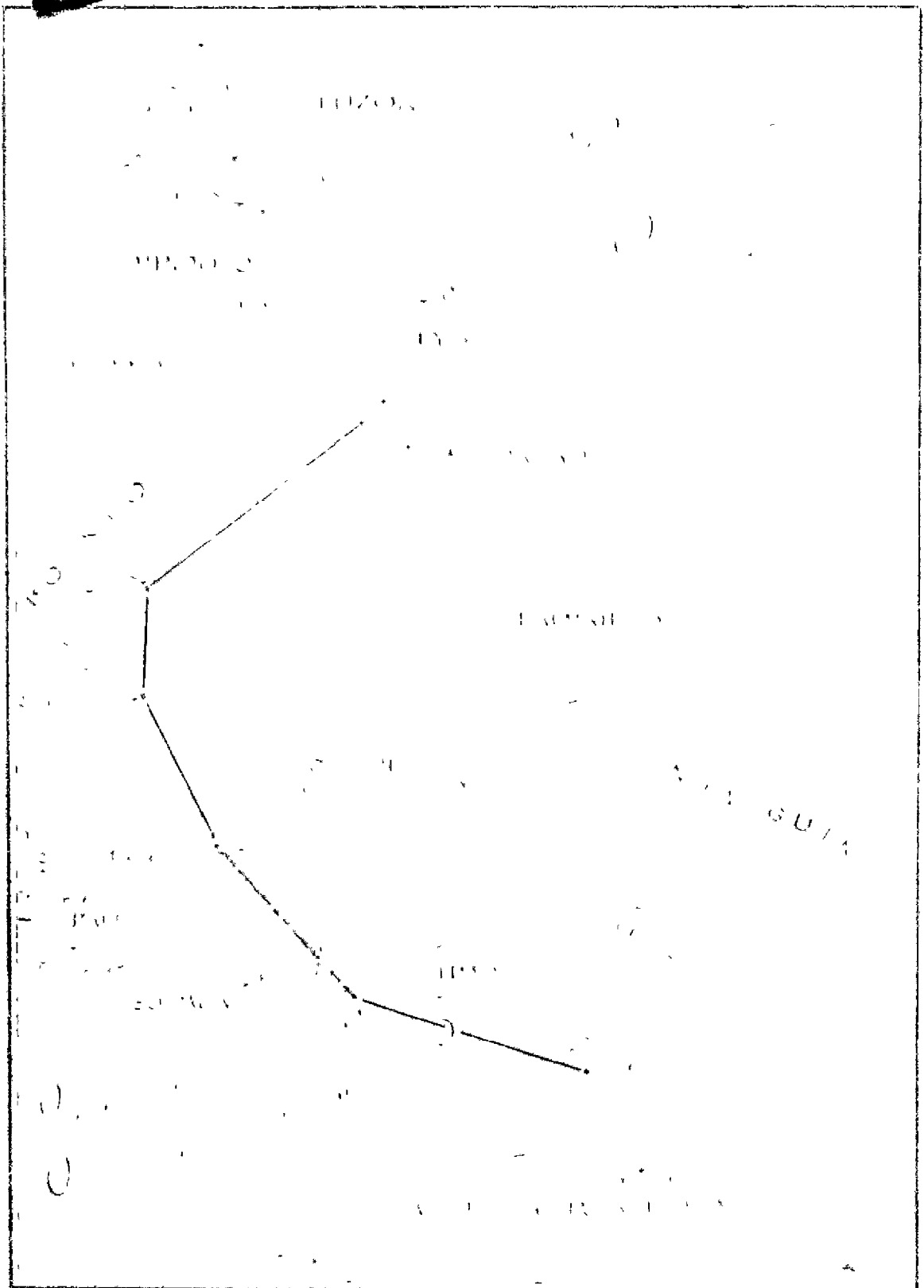
Optimistic hopes were not confined to the rank and file. General MacArthur throughout December retained a hope, if not a belief, that the Philippines could be reinforced. On 10 December, he radioed General Marshall an outline of a plan for an offensive operation.

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This entailed an immediate attack upon Japan from the north with the possible cooperation of Russia. According to MacArthur, while the enemy was engaged in an "overextended initial effort," a golden opportunity existed for a master stroke. Three days later he suggested that the only method for immediate relief was early air counterattacks against Japanese airfields in Formosa. At the same time, he added that first priority allocations to his theater should consist of pursuit planes and bombs to be brought in by aircraft carrier. "High-flying bombardment aircraft" and troops he considered to be of secondary importance.²

General Brereton, also, believed that hope for a successful defense of the Philippines did not need to be abandoned. He emphasized, however, that in considering the possibility of reinforcements, time was the primary factor. On 14 December he stated that 10 squadrons of pursuit aircraft were an immediate requirement. This meant, according to Brereton, that in addition to the 52 A-34's and 18 pursuit planes which were expected in Australia before the end of the month, it would be "advantageous" to have 300 pursuit and 50 dive bombers delivered by aircraft carrier. He believed that fields for these planes could be maintained satisfactorily and pointed out that airbase construction following the outbreak of war had been accelerated. In this respect, his engineers reported that Clark, Nichols, San Marcelino, and Del Carmen fields could be maintained in operating condition, and that some 8 or 10 additional strips would be ready by the last of December.³

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76

Nor had Washington abandoned plans for support of the Philippines. President Roosevelt specifically directed that reinforcements should be sent to that beleaguered outpost at the earliest possible date, and MacArthur was informed on 15 December not only that the strategic importance of the Philippines was fully recognized but that there would be no wavering in the determination to provide support. To implement this promise, an AG letter authorized the dispatch of 65 new heavy bombers to the Philippines, a transfer to be completed by 31 February 1942, and MacArthur was informed on 26 December that these planes, to be ferried via the South Atlantic and India, would come under his control at Bangalore.⁴

General Brereton had stated that if these attempts at reinforcement were to be effective, they should be accomplished soon. As the days went by, it became increasingly evident that all routes into the Philippines would be barred within a very short time. The Japanese were pressing down from their northern landings, while in the south, enemy transports appeared in Davao Gulf on 20 December and moved toward that city, which, with its potential fifth column of 30,000 Japanese, was easily overrun. It soon became evident, moreover, that a main effort was to be made in Lingayen Gulf, for on 20-31 December from 70 to 80 transports were sighted offshore. MacArthur's strategy against this new assault, obviously aimed at Manila, consisted of carefully planned delaying actions carried out in central Luzon. He did not intend to establish a fixed line of defense there, for he had only some 40,000 troops, and the Japanese

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had landed between 60,000 and 100,000. With patrols and a strong rear guard delaying the enemy advance, the principal American forces were to retire to Bataan peninsula, where they could serve as a buffer for a last stand on Corregidor. At the same time, MacArthur announced that he intended to declare Manila an open city in order to save the civilian population.⁵

With the exception of reconnaissance missions performed by pursuit planes, the air force could render little aid in the withdrawal to Bataan. It was decided, however, to test the effectiveness of bombardment missions carried out from Australian bases almost 2,000 miles away by using Del Monte airfield, although now bombed regularly, as an advance base for refueling. The first of these missions began at Batchelor Field (near Darwin) on 23 December when 9 of the 14 B-17's in Australia took off at 1043 for Mindanao. Their orders were to bomb docks and enemy shipping in the Davao area, and then to proceed to Del Monte for refueling. They swept over Davao Gulf at sunset through a light overcast and dropped 3 x 500-pound bombs upon a cluster of seven ships. The enemy was taken by surprise, and no antiaircraft or pursuit interfered with the attack. Poor visibility, however, spoiled the bombardier's aim, and negligible results were achieved. The nine planes continued to Del Monte and landed after dark on an airfield pockmarked by recent air raids. Shortly after midnight four of the B-17's took off again to bomb enemy concentrations in Lingayen Gulf almost 600 miles away.

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78

Again visibility was bad, and although many transports were spotted and bombed, no results were observed. The Japs sent up a barrage of antiaircraft fire which did no damage, but enemy pursuit planes were so numerous that the bombers could not land at San Marcelino as had been planned. Instead the four B-17's without landing began their 2,000-mile return flight to Australia. Three planes reached the Dutch base at Arbon before landing to refuel; another came down first at San Jose in Mindoro; and by 24 December all nine aircraft, five proceeding directly from Del Monte, had safely returned to Batchelor Field.⁶

Meanwhile another flight from Australia, this time of three heavy bombers, had arrived at Del Monte for a second mission against enemy shipping. At 0430 on 24 December, the three aircraft, each loaded with 2,100 gallons of gas and 7 x 300-pound bombs, taxied along the runway. The planes piloted by Lieutenants Mueller and Schaetzel took off and headed for Davao. The third, however, was delayed by a blowout. Ground crews under Capt. Guthbert L. Mosely began to change the tire, but were interrupted by an air raid. Mosely continued to work, however, until enemy fire actually began to kick up dust on the field. In spite of these delays, the plane piloted by Lieutenant Smith was ready to go at 1030. Meanwhile, Mueller and Schaetzel had run into trouble. After the take-off, they had climbed to 15,000 feet and bombed the Davao airport. Antiaircraft fire hit Mueller's plane, and pursuits swarmed off the

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79

field. Before the B-17's could reach 33,000 feet, they were surrounded by enemy fighters. Machine-gun bullets crashed into Schaetzol's plane, killing S/Sgt. James Cannon and knocking out one engine. Mueller elected to stay with Schaetzol's damaged ship and was soon engaged in a battle with the pursuits which continued for 20 minutes. Accurate shooting on the part of the American gunners finally discouraged the enemy, but not before both B-17's had been severely damaged and two of Mueller's crew, Col. Frank A. Harvey and Pfc Edward R. Olsen, wounded. Smith's B-17 followed the same course as the other two planes of his flight but met with no interference. He made a bombing run over a number of enemy ships in Davao harbor, possibly damaging one, and continued on the return trip to Australia arriving at Darwin that night a few hours after the other two planes.⁷

These bombardment missions had little effect upon Japanese successes. American pursuits carrying out two or three reconnaissance missions daily reported enemy advances from the north as well as new landings at other points along the Luzon coast. Against one of these occurring in San Miguel Bay on the southeast coast the pursuit command determined to throw all its remaining aircraft. Attrition had continued to cut down the 24th Group's striking power, and on 23 December only 12 P-40's and 6 P-35's were available. Furthermore, heavy casualties among trained personnel had occurred including 17 killed and 16 wounded, among the latter being "Buzz" Wagner who had been almost blinded during a recent "reconnaissance" mission.

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On 23 December, however, the 12 P-40's and 6 P-56's, loaded with fragmentation bombs, were dispatched to bomb and strafe the San Miguel landing. Apparently the low-flying pursuits created a considerable amount of confusion among enemy personnel in landing barges and around supply dumps, but the Japs succeeded in putting up such a heavy screen of antiaircraft fire that at least one P-35 was forced to crash-land before they could return to base.⁸

The pursuits had no more than returned from this mission when all air force units were instructed to evacuate currently-held Luzon bases as a part of the general withdrawal to Bataan. The evacuation began on 24 December. Pursuits were to establish themselves first on three newly constructed fields at the head of Bataan peninsula. Then if the enemy continued to close in, these bases were to be evacuated, with the pursuits falling back on three fields nearer the sea: Marivales, Cabablen, and Bataan. The planes were to be flown by pilots chosen from the 24th Group, and the remainder of the group, with the exception of sufficient enlisted men for maintenance, were to be posted as infantry reserves. On 10 January a change of branch became official when a field order redesignated the 24th Group as the 2d Infantry Regiment (Provisional) and assigned it to the 71st Division.⁹

During this period the 27th Group, located in the Manila area, also became involved in the confusion of the retreat. For several days, its squadrons had received a series of seemingly contradictory

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81

orders, and, according to Lt. James B. MacAfee, never had there been a day "more snafu" than 24 December, the day of the evacuation. Confusion resulted in part from the fact that the group commander, Maj. John Davies, together with a dozen others had flown to Australia, leaving Luzon on 18 December presumably to bring back the long-awaited A-24's. Consequently on 21 December, all squadrons had been ordered to prepare new fields at Lina, 40 miles south of Manila, and to the northwest at San Marcelino and San Fernando, before the arrival of these planes. Three days later, on 24 December, however, just after a move to these new points had been accomplished, another order directed all squadrons to evacuate their bases and to proceed to the Manila docks.¹⁰

Until that time, members of the 27th had been able to relax a little in the midst of war. They had worked frantically at digging slit trenches and preparing airfields. They had dodged bombs and manned antiaircraft guns. But they also had an occasional hour in which they could visit Manila and enjoy a dinner at the officers' club or a drink at the well-stocked bar. In the city they were confronted by anxious-faced Filipinos asking when reinforcements would arrive, or whether the present force could hold. They were challenged "every few blocks by an itchy-fingered Filipino sentry," and they tried to ignore an occasional native lying where he had been shot as a warning to others who might be tempted to light a flare when Japanese planes were passing overhead.

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As the group speeded through the city during the late afternoon and early evening of Christmas Eve, few knew where they were bound, except that they had been ordered to the docks. Some of them realized, however, that they would not see Manila again for a long time, and a few even stopped for a last drink at the bar. At the docks, the group was divided, a part piling into trucks and the remainder being ordered into boats. Both parties then headed for Bataan. Those in the boats had moments of uneasiness, as at least one craft became lost in mine fields, thus delaying the little fleet long enough to bring the men to their destination in Marivales harbor during an air raid. The withdrawal, nevertheless, succeeded, and the group was able to have a Christmas dinner of bread and hot coffee, topped off in a few cases by a nip of "grog."¹¹

MacArthur did not complete the movement to Bataan begun on 24 December until the first of the new year. His rear guard had delayed the Japanese long enough to cover the withdrawal of the principal American force as well as the evacuation of equipment and supplies. By that time the air force units located on Bataan had been reorganized. Both General Clegg and General Brereton had left the Philippines for Australia to establish a new headquarters, Clegg leaving in a B-17 on the 16th or 19th, and Brereton with members of his staff in two PBV's on the 24th. By 29 December, moreover, 650 officers and enlisted men of the 19th Group had been dispatched to Del Monte. Thus the only air force personnel remaining

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on Bataan were men of the Interceptor Command, now under the capable and energetic Col. Harold E. George, who had arrived in the Philippines with General Clagett over 6 months before. George had only a skeleton staff, which in theory was to be expanded as reinforcements began to flow in from a reservoir of personnel, supplies, and equipment to be built up in Australia. At the moment, of course, that reservoir did not exist, and it was a question whether it could be established before every channel to the tired American troops in the Philippines had been cut.¹³

The task of developing a base of operations in Australia was tremendous. Its establishment depended almost entirely upon the arrival of personnel, supplies, and equipment from the United States. Brisbane was over 7,000 statute miles from San Francisco; consequently distance itself presented a problem; moreover from the beginning of the war the tenuous routes across the Pacific had been threatened by Japanese submarine attack. Although the sea routes through the Central Pacific had been completely cut in the early days of the war, it was possible for shipping to proceed with a naval escort south of the Gilbert Islands, which had been overrun during the first week of hostilities. Troops, ammunition, spare parts, fuel, and "knocked-down" pursuit planes and medium bombers could be shipped by water. Heavy bombers, however, could hardly be transported in this way. They had to be flown, and the Japanese, by landing on Wake Island on 23 December, had cut the only air route already tested for that type of aircraft. This had held up the scheduled flight of additional

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B-17's to the Philippines, several of which were en route on 7 December. Indeed six unarmed B-17's, the vanguard of the 7th Bombardment Group's aircraft, had left the United States on 6 December and were approaching Hawaii early on the following morning. The crews expected to land at Hickam Field for gas, maintenance, and instructions before proceeding to their destination via Midway, Wake, and Port Moresby. Instead, they arrived in the midst of the attack on Pearl Harbor, and were forced to use all their skill to bring their planes to a safe landing.¹⁵

It was clear that a continuation of the flight along the old route was impossible. The Army Air Forces had long foreseen this eventuality, and repeated warnings from its officials had prompted the War Department to approve the construction of a southern route. Thus at the time of the Pearl Harbor attack, both the Army and the Navy were working feverishly to provide at least minimum facilities necessary for landing bases on Christmas, Canton, the Fijis, and New Caledonia. The "inaugural flight" over this route was not made until 6 January 1942, and the only other route possible stretched about two-thirds of the distance around the world, crossing the South Atlantic from Brazil to Africa, and thence to India and the Netherlands East Indies. Maintenance facilities over this route were much less than adequate, particularly in India, and were so poor during January that at one time, according to General Arnold, four-motor bombers were "holed up from Bangalore to Trinidad."¹⁶ In spite of these difficulties, however, all replacements for the 19th Group and the

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85

entire air echelon of the 7th Group flew to Australia by one or the other of these two routes.

Prospects for the arrival by sea of the nucleus of an American supply depot in Australia were better in the middle of December than those for the ferrying of heavy bombers over either the Pacific or the African routes. Approximately 3 weeks before the attack on Pearl Harbor, the ground echelon of the 7th Group together with a number of other service and combat units boarded the U. S. Navy transport Republic at San Francisco. On 26 November the Republic reached Honolulu, and on the following day joined a convoy made up of six other ships escorted by the U.S.S. Pensacola, an 8-inch gun cruiser.¹⁵ This convoy, destined for the Philippines, was crammed with troops and supplies which MacArthur needed. Air Force troops, numbering more than 2,500 officers and men, made up only a small part of the load. There were also some 2,000 additional troops and much heavy equipment, fuel, and supplies including 340 motor vehicles, 48 x 75-mm. guns, over 600 tons of bombs, 6,000 drums of aviation oil, and 3,000 drums of aviation gasoline. Perhaps of even more importance were 16 P-40's and the long-delayed 32 A-24's of the 27th Bombardment Group. Ships bound for the Philippines normally proceeded directly west through the mandated islands. But in this case the convoy had been directed by "higher authority" to take a southwest course. During the morning of 7 December, the commander of the Republic learned of an intercepted radio message which stated that Pearl Harbor was under attack. He first believed that this

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was no more than a chance ~~shot~~ of a message exchanged during naval maneuvers, but another message, this time from the CINC Asiatic Fleet, was shortly received reading: "Japan started hostilities--govern yourself accordingly."¹⁶

For the next 2 weeks, the convoy kept itself in readiness for any eventuality. It could do little more than be prepared to abandon ship since only two ships other than the Pensacola were capable of defense. Five ships had no armament while another had two 3-inch guns but lacked ammunition. The crew of the Republic searched its cargo for possible means of defense. Four 75-mm. guns were found but no ammunition; four .30-caliber and four .50-caliber machine guns were discovered and mounted on deck. A rifle detachment was also organized after some 500 x .30-caliber rifles were found. On 12 December the convoy was still intact (4 days earlier those on board the Republic had been interested to learn from an intercepted Japanese message that their ship had been sunk), and it was decided to organize the troops aboard into a task force under the command of the senior officer, Brig. Gen. Julian F. Barnes. The eventual destination of the convoy still remained the Philippines, but new orders were received on 13 December directing a detour to Australia and designating Barnes as commander under MacArthur of all American troops in Australia. All the aircraft, the ground crews, and much additional equipment were to be disembarked in Australia and the planes erected for immediate ferrying to the Philippines. The remainder of the convoy was to continue with the cargo by water to the Philippines.

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87

Both MacArthur and Australian naval authorities believed this reinforcement by sea practicable, although the cooperation of the U. S. Navy was needed, and at the time the willingness and the ability of the Navy to escort the convoy through to the Philippines was open to question.¹⁷

Before the convoy reached Australia, several details as to the organization of the new Australian service of supply had been settled. General Barnes announced on 19 December that his command, the nucleus of the new organization, would be known as the United States Forces in Australia, a name changed early in January to the United States Army Forces in Australia (USAFIA). Barnes had no more than made this announcement when the War Department informed him that Maj. Gen. George Brett would soon arrive to organize and command all American units in Australia. Brett, who had served in almost every administrative post in the Air Corps was at the time completing an official tour of the Middle East, India, and China. On 18 December he had been instructed to attend a conference of Chinese, British, Russian, and American representatives in Chungking apparently to reassure those interested in the Pacific war that "prompt and vigorous measures to reinforce the Philippines" were under way. Two days later it had been decided that he would take over the Australian command, but Brett himself did not receive official orders until the 22d, and did not leave Chungking for another 2 days.¹⁸

The convoy reached the Brisbane area on 22 December where Barnes together with a delegation of American and Australian officers conferred

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with General Clagett, who had been selected by General Arnold as Brett's principal assistant in Australia. Clagett temporarily assumed command on the same day and prepared to carry out General MacArthur's instructions to dispatch the convoy to Manila. Barnes had already completed arrangements for rations and quarters near Brisbane and for the assembly of aircraft at Amberley Field. The departure of the convoy, however, was dangerously delayed. The ships had not been unit-loaded, and in order to find the organizational equipment of the troops which were to remain in Australia and the parts for the aircraft which were to be assembled there, it was necessary to unload "practically the entire cargo of each ship." Even then some of the vital parts of the A-24's, such as trigger motors and solenoids for machine guns, were never found. After many hours of fruitless search, it was decided to reload the goods scheduled for water transport on the two fastest ships, the Holbrook and the Bloerfontein. In this operation, the Americans received wholehearted cooperation from Australian laborers. The stevedores worked 24 hours a day including Christmas and Boxing Day (the day after Christmas) and had completed the loading by the 28th, when the Holbrook sailed. The Bloerfontein was delayed owing to a misunderstanding with the ship's captain over his contract, but sailed on the following day when a clarification of his orders was received from the Dutch government.¹⁹

Although supplies had reached Australia, an organization had been established, and the first reinforcements had been dispatched

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39

to the Philippines, these steps were only preliminary to solving a multitude of unforeseen problems. General Marshall had suggested that Australia's cooperation should be requested and that its resources should be utilized as much as possible in order to relieve the burdens on American transport. Barnes and Claggett soon found, however, that Australian industries were already hardpressed to supply their own government's military needs. For a time, at least, little if any help could be expected. The transportation system in Australia was also unexpectedly primitive. The convoy had landed near Brisbane. Though Darwin was much nearer the battle zone, the difficulties, if not the dangers, of transporting goods from Brisbane to Darwin were almost as great as from Darwin to the Philippines. No railroad connected these two cities, which were 2,500 miles apart by the most expeditious land route. For more than a quarter of this distance, only a motor road, with no parallel railroad, cut through the central desert. The motor road came to an end within 300 miles of Darwin, where it connected with a railway capable of carrying no more than 300 tons of equipment and supplies a day. Moreover repair facilities were inadequate for the maintenance of either road or railroad, and some of the rolling stock, apparently built to transport cattle, literally buckled under heavy American equipment.²⁰

Poor transportation, complicated even more by the lack of coastwise vessels, was only one basic problem. Both an adequate labor supply and sufficient storage depots were lacking. Indeed the lack of storage facilities might have proved an insurmountable handicap

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had not several wool warehouses been made temporarily available at this time owing to the export of a considerable quantity of wool. To unload ships, to transfer supplies into warehouses, and to accomplish countless other related tasks required a readily available labor supply. This did not exist in Australia. Of a total population of only 3,000,000, approximately 350,000 able-bodied men were in the armed forces as of 1 November. Many more were engaged in industry and farming occupations indispensable to the war effort. The problem was particularly acute in the Northern Territory where only a small fraction of the total Australian population lived. Furthermore, labor unions had obtained such a position that they seemed to regulate their hours of labor without considering the exigencies of war,²¹ a situation hard-pressed Americans found difficult to understand.

These and other difficulties obviously necessitated the closest possible coordination with the Australian government. A good beginning had been made before the war, when conferences between General Brereton and Australian leaders and negotiations carried out by General MacArthur prepared the way for the use of Australian bases by American bombers. The arrival of the 14 B-17's which had flown to Darwin from Del Monte in the middle of December presented a need for further coordination. The Australians had not been informed of the plans for employment of these aircraft, nor was there any general understanding as to the future movement of American aircraft to Australia. Moreover Australia had certain flight

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91

regulations which some American pilots did not deem it necessary to respect. It was considered important, for example, that the time and destination of flights be filed with interested Australian authorities so that friendly planes would not be mistaken for those of the enemy. On one occasion, at least, the negligence of an American pilot in failing to comply with this regulation caused considerable inconvenience to the Australian aircraft warning service. Such relatively minor oversights, however, were easily forgotten. General MacArthur radioed Sir Charles Burnett, chief of the Australian Air Staff, a rather belated explanation for the presence of American B-17's in Australia, and American officers began a series of conferences to discuss basic problems of organization with Burnett and other leading Australian air officials.³³

The first of these conferences, held at Amberley Field on 26 December, not only symbolized the growing cooperation between Australians and Americans but also considered a number of practical problems vital for the reinforcement of the Philippines. Of initial importance was the establishment of aircraft erection and refueling depots. The problem was to erect knocked-down A-24's and P-40's and to dispatch them to the Philippines at the earliest possible moment. Depot facilities were available at Archerfield and Amberley near Brisbane. Personnel could be obtained from the 7th Bombardment Group, a heavy unit to be sure but wartime necessity soon converted its ground crews into experts on A-24's. American officers were given the responsibility for erection of the planes, but an

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Australian, Group Captain Ischal, was put in general charge to insure coordination of all phases of the task. Once erected, the aircraft still had to be ferried a distance of 2,000 miles before they reached a final jumping-off place at Darwin. It was decided that refueling depots would be established at Charleville, Cloncurry, Daly Waters, and Darwin. One hundred-octane gasoline from the Netherlands East Indies was available, but this fuel had such a high aromatic content that it destroyed the leadproof lining in fuel tanks. Consequently American fuel had to be imported. Some had already arrived, and the steamship Mauna Loa was on the way to Brisbane with an additional 400,000 gallons, but this was still far from the goal set before the war of 10 million gallons.³³

Another problem of importance considered by the conferences at Amberley was the training of pursuit pilots and bomber crews. The route from Brisbane to Darwin was difficult enough for inexperienced flyers, but the overwater hop from Darwin to the Philippines was beset not only with navigational difficulties but with danger of attack by Japanese aircraft. MacArthur had stated as early as 15 December that transitional training in Australia for combat pilots would be essential unless they had previously completed a training course. At the Amberley conference of 20 December, Burnett and Blagett decided that a training school was necessary, and that one for A-24 crews should be set up at Archerfield and another for P-40 pilots at Amberley. Specific plans were drawn up on the following

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95

day at a meeting of American officers with Air Commodore Bladin, who was in charge of air operations in northeastern Australia. At this time, Group Captain Lachal was assigned as a general overseer of the program, and Maj. John Davies, commander of the 27th Group, assisted by Australian Squadron Leader Legood, was made responsible for the standard of training. The course was to consist of practice in night flying, dive bombing, and aerial gunnery with special emphasis on the latter since few if any "of these USA pilots" had previously fired front guns.²⁴

By this time air force personnel had arrived from the Philippines to assist both in the erection of the planes and the training program. Members of the 27th Group, who had set out from the Philippines in a C-53 and 2 B-15's, had reached Darwin by 22 December. On Christmas Eve, a Qantas flying boat brought them--clad in Australian uniforms and dirty, hot, and disheveled--to Brisbane. At a party that night punch flowed freely and songs were sung far into the night. But on Christmas Day they were faced with the realities of their mission. They had been sent to Australia for the purpose of flying the group's 52 aircraft back to the Philippines. A preliminary investigation found ~~that~~ the A-24's still on a ship in Brisbane harbor. A more thorough inspection showed what has already been pointed out: that the aircraft had been loaded in a careless fashion. Instruments were in need of repair, tires were defective, and parts were missing. In fact, according to one account, two officers "went into a flat

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94

spin trying to locate solenoids and trigger motors, guns, and brackets." Meanwhile, several officers were delegated to act as flying and gunnery instructors for the newly organized training school. Lt. Harry Galusha gave daily lectures on low flying at Archerfield, and by 1 January 1943 official training operations had begun with Lt. Herman F. Lowery designated as acting operations officer. 36

The organization within which these activities were occurring remained a rather anomalous one. Until 29 December the only over-all American military organization in the Southwest Pacific was the United States Forces in Australia soon to be commanded by Maj. Gen. George Brett. Although not an air organization, it was envisaged as functioning primarily as an air command "with the other elements being limited to those needed for the efficient air operations in the security of bases." Pending Brett's arrival, General Clagett continued to direct its activities. But on 29 December, General Brereton arrived in Darwin after conferences with American naval and Dutch air and army officials at Soerabaja and Batavia. He came with the following instructions from General MacArthur:

You will proceed with the Far East Air Force Headquarters to the South. Your mission is that of organizing advance bases of operation from which, with the Far East Air Force, lines of communications can be protected by you, bases in Mindanao secured, and the defense of Philippines supported by the United States Air Forces in Far East. You will cooperate with the U. S. Navy, with the Naval and Air Forces of Australia and the Netherlands Indies. Liaison will be established by you with Commanding General of U. S. Forces in Australia. He is charged with organization of bases in Australia. From those bases you will direct the operation of Far East Air Force and the disposition of Air Corps troops in advance thereof in order to accomplish your assigned mission.

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Brereton outranked Clagett, and the latter did not know how Brereton's arrival would change the command setup then existing, nor did he know whether Brereton had made any plans which would alter arrangements already made in Australia. Brereton proceeded, meanwhile, according to General MacArthur's orders. He organized a temporary headquarters in Darwin and radioed the War Department requests for personnel and equipment which were needed for a newly established headquarters.³⁶

Theoretically the aim of all operations was the reinforcement and maintenance of the Philippines. But Brereton found that the situation in Australia did not justify a hope that reinforcements and supplies could reach MacArthur's hardpressed forces. The lack of necessary equipment, personnel, and transportation and communication facilities interfered. Even the few aircraft available were grounded in Australia for an indefinite time. The 27th Group was still awaiting the arrival of parts necessary to prepare the A-24's for combat, and P-40 pilots in Australia were equally frustrated by the lack of prestone, essential for operating liquid-cooled P-40 engines. None had been sent in the convoy with the planes, and although every effort was made to obtain prestone locally, it was believed that only enough for 10 aircraft might be found. In the meantime, the P-40's, like the A-24's, remained grounded. Furthermore, it was becoming more and more unlikely that any aircraft could be ferried into the Philippines without running undue risk of being destroyed. The Japanese, who were using air bases on Mindanao by

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96

the last week in December, were astride almost all possible routes from Australia, and A-24's or P-40's, with a range of little more than 500 miles and limited to the use of bases within that distance of Philippine airfields, would be relatively easy to intercept.³⁷

General Brett, who had reached Australia by 1 January, soon relegated the Philippines to a secondary position in future Allied plans. On 2 January, he radioed General Marshall that he could carry out little in the way of tactical operations until "a stable establishment" existed in Australia, and that this involved the construction of a large air base at Darwin and a "major repair, maintenance, and supply base at Townsville." Obviously, the time available would be insufficient for so large an undertaking. During a recent conference with General Wavell, who had been transferred from the Middle East to India in July, General Brett had found rather surprising agreement with the British leader on general principles of strategy. On 5 January Brett presented their conclusions to a conference at which Australia was represented by the chiefs of staff, their deputies, and a number of government officials. The American representatives were Generals Brett, Brereton, and Barnes, and Colonels Perrin and Merle-Smith, the last being the American military attaché to Australia. At this conference, Brett made it quite clear that he regarded the war in the Pacific as a "slow pressure war" in which Allied strategy should be defensive until sufficient forces had been accumulated to go on the offensive. This would be carried out: "(a) by working from Burma into China towards

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27

Shanghai to acquire advanced bases; (b) by exerting slow pressure through the Netherlands East Indies and Malaya; and (c) by exerting similar pressure from Australia into the islands to the north." Obviously Brett's strategic plans did not include an immediate attempt to push reinforcements through to the Philippines. Indeed, he immediately ordered the only vessels on the way to MacArthur, the Holbrooke and Bloemfontein so laboriously reloaded at Brisbane, to put in at Darwin and to discharge their cargo and all troops at that port.²³

By this time, the War Department too had to all practical purposes abandoned hope for a large scale reinforcement of MacArthur's forces. It was clear that a reservoir of supply could not be built in Australia before all facilities for transfer of existing equipment were cut off by the enemy. No illusions were any longer held as to the possibility of ferrying short-range planes to the Philippines, and the prospect of breaking the sea blockade with a naval escort was even less promising. President Roosevelt and Prime Minister Churchill with their chiefs of staff had considered such an operation and had decided that the Navy, hard hit at Pearl Harbor, could not release combat vessels committed to Europe or the Middle East. After such a decision, no other conclusion seemed possible than that the "forces required for the relief of the Philippines" could not be placed in the Far East "within the time available." On 3 January, therefore, a memorandum signed by Brig. Gen. Leonard T. Gerow,

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93

Assistant Chief of Staff, recommended that "operations for the relief of the Philippines be not undertaken," and that for the time being operations in the Far East be limited to holding the Malay Barrier, Burma, and Australia and "projecting operations to the northward to provide maximal defense in depth."²²

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Chapter V

THE AREA COMMAND

By 1 January 1942, the Philippines no longer were considered of foremost importance in American Pacific strategy, except possibly in the mind of General MacArthur. Not only had the Japanese forced a large proportion of the Far East Air Force to abandon its forward bases, but they had also isolated the Philippines and were pushing back the Allied line of resistance. Allied strategy was accordingly changed to that of holding the Malay Barrier, "defined as the line Malay Peninsula, Sumatra, Java, and North Australia."¹ The new line was anchored in Burma to the west and Darwin in the east, its center fortified by the "impregnable" bastion of Singapore and the limited military resources of the Netherlands East Indies.

The acquisition of the Netherlands East Indies had long been an essential part of Japan's "Greater East Asia" policy. Her failure to penetrate these islands peacefully, together with the growing determination of England, Australia, and the United States to support the Netherlands government in case of war, had undoubtedly contributed to a Japanese decision to strike before that coalition had had an opportunity to gather its strength. The first blows of the war, struck at Pearl Harbor and the Philippines, were probably designed principally to clear the way for an invasion of

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100

the Indies. To carry out such an attack, the Japanese needed bases for their land planes and a port for their shipping. With the capture of Davao late in December, they had acquired both a port and an air base strategically situated with reference to northern Borneo and Celebes. Prior to this, attacks on Indies bases had consisted only of sporadic air raids. The development of Davao, however, brought more aggressive tactics. By 1 January Sarawak, a British protectorate in northwestern Borneo, had fallen, air raids on Tarakan on the northeastern coast occurred regularly, and nine days later enemy landings had occurred at that point and at Menado on the northern tip of Celebes.²

To carry out the difficult task of conquering this island empire, the Japanese had powerful forces available. An Allied intelligence estimate of 13 January placed 66 pursuits and 130 bombers at Hainan and Formosa, 103 pursuits and 144 bombers in Thailand, 90 pursuits and 34 bombers in the Philippines, 138 pursuits and 114 bombers in Malaya, and 24 pursuits already in the Indies. In addition to these land-based planes, the Japanese had 11 aircraft carriers with an approximate capacity of 132 dive bombers, 310 torpedo bombers, and 126 pursuit planes as well as 12 seaplane carriers which could base some 176 float planes. This concentrated air power could provide protection for troop transports and supply ships drawn from a merchant marine already swollen by the spoils of war. Furthermore, the Japanese were able to furnish a naval escort of cruisers, destroyers, and battleships if necessary. The Japanese victory at

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101

Pearl Harbor and the subsequent sinking of the British Prince of Wales and Reinse disastrously limited naval resources available to the Allies.³

The Netherlands government, long aware of the danger from Japan's ambitions in the Far East, had not neglected the defenses of the East Indies. It had a regular army of some 40,000 men, supplemented by perhaps 100,000 native troops. Unable to defend all islands in the empire with such a small force, the Dutch command posted small garrisons at strategic points, chiefly to carry out demolitions, and concentrated its main force on Java. The plan was to defend this key to the Malay Barrier with ground troops and to break up Japanese convoys with Allied naval and air forces.⁴ The air forces would fly principally from airfields in Java of which there were a number suitable for military aircraft and others used by commercial air lines. Batavia, Java's capital, had both a commercial and a military airfield. The well-camouflaged military airfield, 3 miles southeast of the city, had 5,000-foot runways of grass and underground fuel storage tanks equipped with electric pumps. Other military airports were at Kalidjati, Bandoeng, Kgelang, Madioen, Malang, and Soerabaja. Soerabaja, the principal Dutch naval base, was equipped to handle both land and sea planes. It had runways paved with asphalt and pipelines for the refueling of seaplanes. In addition to these fields, there were commercial airports at Cheribon, Semarang, Jogjakarta, and Soerabaja, while numerous emergency landing fields, some of which were to be used later as secret bases for pursuit planes, dotted the Java countryside.⁵

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102

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Landing fields were thus adequate for basing a sizeable air force. The Dutch, however, had not achieved equal success in building up a supply of modern aircraft. On 1 January 1942 they possessed approximately 150 planes, all of ancient make. The pursuits were of either Curtiss or Brewster models armed with 2 x .50-caliber and 2 x .50-caliber machine guns, and the bombers were principally Martin B-10's. The Dutch had counted on replacing these obsolete aircraft by acquiring a share of Allied production, but the only success achieved in this had been on paper. For example, Maj. Gen. L. E. Van Oyen, commanding the Netherlands East Indies Air Force, had made frequent attempts to purchase modern aircraft from the United States, requesting at one time 16 four-engine bombers and at another, 100 pursuit planes. According to Van Oyen, his requests were countered with the statement that Japan, the only possible enemy, did not have modern aircraft, and that the East Indies would therefore have to be satisfied "with a type that is definitely not the best." Van Oyen, writing in November 1941, admitted that the United States had offered him 100 P-40E's, but added that their delivery dates, October, November, and December 1942, would be too late. "How sad and utterly dangerous the situation is in our country," he concluded, "is best indicated by the number of pursuit planes we have at the present time."⁶ These were

24 Curtiss Interceptors Model 21-B
 19 Curtiss Pursuit Planes Model P-36
 70 Brewster Fighters Model 339D
 20 Brewster Fighters Model 339E

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103

Clearly the Dutch air force could offer little opposition to a Japanese invasion, and it soon became apparent that the Australians and British were in no position to offer much assistance. In fact, the British Far Eastern forces were so hardpressed in December that they had called on the Dutch for help, and the Dutch had sent their Glenn Martin to bases in Sumatra where they could assist in the defense of Indrag. Until the fall of Singapore little aid was received from the British, and the EAAF, except for a squadron or two of Hudsons, never could spare more than a few Vildebeests and other obsolete aircraft.⁷

The burden for the air defense of Java, therefore, was to rest upon the Far East Air Force. General Brereton, during his flight from the Philippines to Darwin via Soerabaja, had decided that the Bomber Command would move to Java rather than remain in Australia. The number of aircraft able to make such a move, however, was appallingly small. On 1 January, 4 of the 14 B-17's which had been evacuated from the Philippines, were in need of depot overhaul, and thus only 10 heavy bombers were available for duty. Moreover, although the ground crews of the 7th Bombardment Group were rapidly erecting the knocked-down A-24's, their pilots and gunners were still fuming at a lack of machine-gun parts which would keep the dive bombers out of combat for an indefinite period. At the same time, the only American pursuit planes in the theater were still grounded owing to a lack of prestone.⁸

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104

Nevertheless, the War Department was completing an ambitious plan designed to create something more than a token force in the Australian area. Early in January, it decided that the air organizations should consist of 3 heavy bombardment groups, 2 medium bombardment groups, 1 light bombardment group, and 4 pursuit groups. It was hoped, moreover, that aircraft would be coming off the production line in sufficient numbers to permit a 100 per cent reserve at all times. This would require a more careful appraisal of attrition than was possible in January, although Breckton's first estimate of a 40 per cent monthly attrition in heavy bombers, 50 per cent in light bombers and pursuits, 40 per cent in light-bomber and pursuit crews, and 30 per cent in heavy and medium crews was accepted for the time being by the War Department.²

If this program of reinforcement were carried out according to plan, however, it would not be completed until March or April. Obviously, aircraft, regardless of unit designation, were needed to meet an immediate Japanese threat. There was some hope that a sufficient number of planes might arrive in time. By the first week in January, the SS Polk and the SS Hornack Sun were under way loaded with 112 P-40's and 5 C-50's, and the SS Marinosa and SS Coolidge with 50 additional pursuits were almost ready to depart the United States. The urgent need for heavy bombers was to be filled by the dispatch of 160 B-17's and 12-30's as rapidly as they came off the production line. The plan called for the ferrying of the first 30 of these aircraft to begin on or about 24 December with 3 B-17's leaving on both the first and the second days, 5 LB-30's

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105

and 3 B-17's on each of the next five days, and the remaining 44 clearing the United States at the rate of 6 B-17's a day. Actually by 3 January, 20 B-17's and 6 LB-30's were en route and 45 B-17's and 9 LB-30's were awaiting the take-off.¹⁰

Scarcely less important than aircraft was the maintenance of a flow of ammunition, fuel, and necessary parts from the United States to the USAFIA which in turn would supply the Far East Air Force. This required a coordination of effort between agencies in the theater and authorities in the United States which at first did not exist. Within a week of General Brett's arrival in Australia, he had submitted an estimate of his weekly requirements at 20,000 gallons oil, 500,000 gallons 100-octane gasoline, 600 x 1,000-pound bombs and 16,000 x 600-pound bombs. He added that the following suitable ammunition for aircraft operations should be on hand: 5,000,000 rounds .30-caliber and 5,000,000 rounds .50-caliber. This message, apparently written before Brett had had a chance to arrive at a reasonable estimate of his immediate needs, brought the reply that limited shipping would prevent the building up of supplies for "long-time operations," and that he should limit his requests for supplies and personnel "to those absolutely necessary for effective air and anti-air operations of the immediate future."¹¹

The problem of supply continued for many months to be a most bothersome one. A message would be received in the theater listing the contents of a convoy. Itemized inventories of the shipment would be given, but, frequently, the items would be no more definite than "1,000 tons of airplane spares" or "1,400 tons of supplies."

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106

Ship manifests, moreover, were usually of little help in determining the exact type of equipment in a ship's cargo, since the manifests too were often incomplete and usually general in nature. To make matters even more complicated, the War Department continued to oppose the sending of a unit's equipment and supply on the same ship as its personnel. This policy, followed for almost six months, resulted in countless hours lost in trying to find special parts or supplies. Equipment might arrive in one port and personnel in another. Vehicles, tools, and side arms, as in the case of the 35th Pursuit group, might arrive as much as 3 months after the personnel. Parts, when they did arrive, might be defective, or supplies might have been damaged en route. In the case of the P-40's on the Mariposa and Coolidge, for example, ¹⁴ fuselages were damaged owing to improper loading in the United States. ¹²

It was hoped that some of the inadequacies of supply could be overcome by utilizing commercial air lines to speed spare parts and ammunition to the forward areas. By 31 December a contract with Pan-American Airways had authorized extending its services from Khartoum to Darwin. To furnish adequate service, however, it was essential for Pan-American to sign subcontracts with foreign air lines, particularly with KLM, a Dutch company, and Qantas of Australia. For over a month, Harold Gatty, Pan-American representative, attempted to obtain authorization from some qualified American official to deal with Qantas and KLM. But not until the first week in February did General Brett finally grant the authority, and all details had not been settled by the end of the month. Meanwhile,

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the Air Corps Ferrying Command had taken steps to establish at least token service. It stationed a detachment consisting of a weather officer, a control officer, and 6 enlisted men at each control point from Miami to Bangalore. Three B-24's were also sent to the ABDA area to transport personnel and supplies when the need was unusually urgent. Indeed, the pilots of these planes (Funk, Hutchinson, and Davis) were to prove themselves indefatigable in transport missions. Nevertheless the supplies arriving by air routes were never more than a trickle during the Java campaign. Even the attempt to ferry heavy bombers could hardly have been considered a complete success since by 23 January there had been an estimated loss of 75 per cent over the Atlantic route.¹³

As January opened, these and other problems of organization and supply remained to be solved. In Australia the Far East Air Force had no pursuit planes or light bombers in commission; it could not depend upon a constant supply of fuel; and its ground crews had few spare parts and little maintenance equipment. Nevertheless during the last 3 days of December, 10 B-17's of the 19th Group set out for Malang, Java, to participate in the campaign for the defense of the Netherlands East Indies.¹⁴ For the first time in this war, an American air unit was to be engaged in the active defense of foreign soil and would operate, theoretically at least, under the supreme command of an officer of another nationality.

The need for a supreme commander over the area was clear. The Netherlands East Indies held a strategic position in the Malay

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100

Barrier which Britain, Australia, and the United States had agreed must be defended. To attempt an uncoordinated defense of segments of that line would obviously result in frittering away available forces in hopeless efforts. The ABDA powers--American, British, Dutch, Australian--accordingly found themselves faced with the necessity of experimenting with a unified command consisting of air, land, and sea forces.

Previous attempts to bring about military coordination among these associated powers had accomplished little more than to prepare the way.¹⁵ On 23 December, however, Winston Churchill arrived in the United States to confer with President Roosevelt. Within three weeks there had been established not only an over-all strategic command for the conduct of war in the persons of the Combined Chiefs of Staff but also a unified command for the Netherlands East Indies known as the ABDA Command. Furthermore by 1 January Gen. Sir Archibald Wavell, already in India, had been directed to assume a supreme command subject only to the over-all direction of the Combined Chiefs of Staff. Wavell, whose theater of operations was to include the Philippines, the Netherlands East Indies, Malaya, Burma, and that portion of Australia maintaining troops specifically allotted to the ABDA area, was given broad administrative powers. He was "to coordinate . . . all organized land, sea, and air forces . . . ; to dispose reinforcements; to require from subordinate commanders such reports as may be necessary; to control the issue of all communications . . . ; and to organize task forces for specific missions."¹⁶

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109

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In general the orders given by Wavell to members of his staff were to "be limited to those required for strategic coordination" in the defense of the Malay Barrier and the support of the Philippines. He had no authority over the "internal administration" of any national force, nor might he interfere with communication between a national commander and that commander's government. Furthermore, such a commander was authorized to appeal to his government if he felt that the execution of any order would jeopardize the national interest of his own country.¹⁷ Aircraft coming to Australia over the ferry routes, for example, were subject to the authority of an American commander only, and were to be organized into American combat units before being assigned to the ABDA Command (ASDAGO.) for operations.¹⁸

In spite of the fact that the original directive in its definition of the ABDA area included the Philippines, some confusion remained as to the exact relation of Wavell's command to that of MacArthur. This was apparent when General Wavell, in announcing that he proposed to assume command on midday, G.M.T., of 15 January, stated that he did not wish to acquire any responsibility for the Philippine Islands at that time. President Roosevelt immediately radioed a concurrence with Wavell's decision, but added that this was contingent upon the approval of the Prime Minister. Actually it was General Marshall who convinced the President that the Philippines were not to be excluded from the ABDA area. Marshall admitted that "comprehensive operations" for the immediate relief of MacArthur's forces were not feasible at that time, but contended

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110

that even the temporary exclusion of the Philippines would destroy "the basis of the ABDA agreement."¹⁹

Meanwhile, several problems had arisen in the choice of General Wavell's staff. The selection of Brett, ranking American general in the theater, for Deputy Supreme Commander was a logical one, as was that of Admiral Hart for the Naval Command, but Wavell's personal choice of Maj. Gen. Sir Henry R. Pownall as Chief of Staff at first caused some concern. Apparently Pownall outranked Brett, and this, it was felt, might adversely affect the prestige of the United States. To avoid the friction which might arise if Wavell's choice were questioned, however, it was decided to promote Brett to the rank of lieutenant general, the promotion dating from 7 January 1942. This improved Brett's position, but did not settle the question of rank to everyone's satisfaction. For several months Americans found themselves dealing with Allied officers of superior grade; at one time it was even feared that Australians might be given the command of American units.²⁰

Even more difficult than this question was the problem of defining the duties of the principal Americans in ABDACOM. During that command's existence, orders were so vague, the area so vast, and complications so many that responsible American officers rarely knew what their responsibilities were. General Cleggott, who held an over-all command in the Townsville area, was considered by Brett as unqualified for a higher position, but was not ordered back to the United States until February. General Barnes was subordinate

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It was obvious that Brereton's duties required careful definition, but it was not until the end of January that some of the confusion began to clear away. For several days, therefore, Brereton attempted to carry out two jobs at the same time, one in Australia and the other in Java. This division of responsibilities brought immediate objections from General Wavell. Officially Brereton was subordinate to British Air Marshal Peirse, who had not yet arrived in the theater, but Wavell pointed out that as Deputy Chief of Air Staff, Brereton actually would be responsible for "the organization, preparation, and operation" of all American Army forces in the AEDA area. Since the added responsibility of the Australian command imposed too much on a single individual, General Marshall

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112

had suggested that Brett "volunteer" to assume some of Brereton's duties, pending Peirse's arrival. Wavell stated, however, that Brett had responsibilities of his own since he was to have a "large measure of operational direction" over Brereton's forces and was to see that supplies reached the ABDA area both from Australia and from India. In Australia, according to Wavell, Brett should have a "high ranking air officer" other than Brereton in charge of part of the supply route.²²

Wavell's recommendations, concurred in by both Brett and Brereton, were carried out almost to the letter. A War Department radio of 17 January designated Brereton as Commanding General of the American tactical forces in the ABDA area and Barnes as commander of base facilities in Australia, although Barnes did not formally assume that command until 29 January. Brett's duties were more complicated as he had two official responsibilities, Deputy Commander and Intendant General. But on 20 January he was able to say that as deputy to Wavell, he was to supervise all air activities in the area, while as Intendant General he was responsible for coordinating all administrative, supply, and maintenance activities for both ground and air forces.²³

Although there had thus been some clarification of the duties of the American commanders, neither Brett nor Brereton was at all satisfied with his status in the theater. Brereton was particularly disturbed. He believed in the first place that ADBACOM was interested in its left flank, Malaya and Burma, at the expense of Australia,

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113

but he also complained that he was not getting the necessary results from the American command in Australia. It is rather difficult to determine upon whom Brereton put the blame for this alleged lack of cooperation. At one point, he apparently felt that the problem could be solved by a complete separation of ASDAOCM from Australia, with America taking "charge of the internal situation" of that country through its ministers. Shortly thereafter, however, he approved a cable which recommended that the air forces in the ASDA area be under one command, that Australia as a supply reservoir for this force should be under another command, and that the Deputy Commander should "direct and control" operations in Australia in order to insure proper coordination.²⁴

The War Department was disturbed over the confusion which still existed in the ASDA area, chiefly because it seemed to threaten the principle of unity of command. The feeling of the planners in Washington obviously was that Brereton wished the re-establishment of the original command which had been changed at Wavell's request with both Brereton and Brett concurring. At this critical point, General Marshall was not willing that the success of ASDAOCM be threatened by a lack of coordination among American officers, and he forcibly expressed his feelings to Barnes and Brereton during the last week in January. In Marshall's opinion, "the fixed policy of the War Department" was "to see defeat of the enemy in that region through unification of effort under the command of a single

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114

individual, namely General Wavell," and Brereton's mission was to carry out Wavell's orders with all available forces.³⁰

At this point a decision to change the naval commander of ABDAJCU presented further complications. Admiral Hart had indicated that he considered himself too old for a combat command, and President Roosevelt agreed to his replacement by the Dutch Admiral Helfrich if Wavell should approve such a change. In that event, Roosevelt, believing that it was "essential that the United States have one of the important commands in the ABDA area," suggested to Prime Minister Churchill that Brett should replace Air Marshall Peirse in the air command. It would seem that this would have been a most satisfactory solution for Brett. He had complained about the difficulty of convincing Australians and the British of the importance of his position, about the lack of a clear definition of his tasks, about an insufficient number of trained American personnel for his staff, as well as about a number of other things, but it was now Brett who opposed a change. On 3 February he informed Marshall that as Deput, Commander he exercised "a very tangible control" over all American forces in the ABDA area, that he was requiring more control over those in Australia, and that as Intendant General his duties were similar to a G-4 in the War Department. Furthermore, he opposed the replacement of Peirse who was "capable, energetic" and cooperative. According to Brett, "drastic change," such as replacement of Peirse by an American and Hart by a Dutchman, "would be upsetting."³¹

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Brett's objections apparently had some influence upon the final decision as to a change of command. On 14 February, Vice Admiral Helfrich did replace Hart, a change which Brett had opposed. But Brett continued in his previous duties, and Feirse remained in the air command with Brereton "in the driver's seat" in charge of operations. At this time, however, it was clear that more than a reorganization was needed to halt a Japanese advance which had won victory after victory since the first attacks had brought disaster to Pearl Harbor and to Clark Field. Moreover, the principal defence of the Malay Barrier, had fallen, and Japanese forces could now be concentrated upon the Netherlands East Indies. Differences over personalities and command functions at such a time were insignificant when the immediate need was to stop the enemy.

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Chapter VI

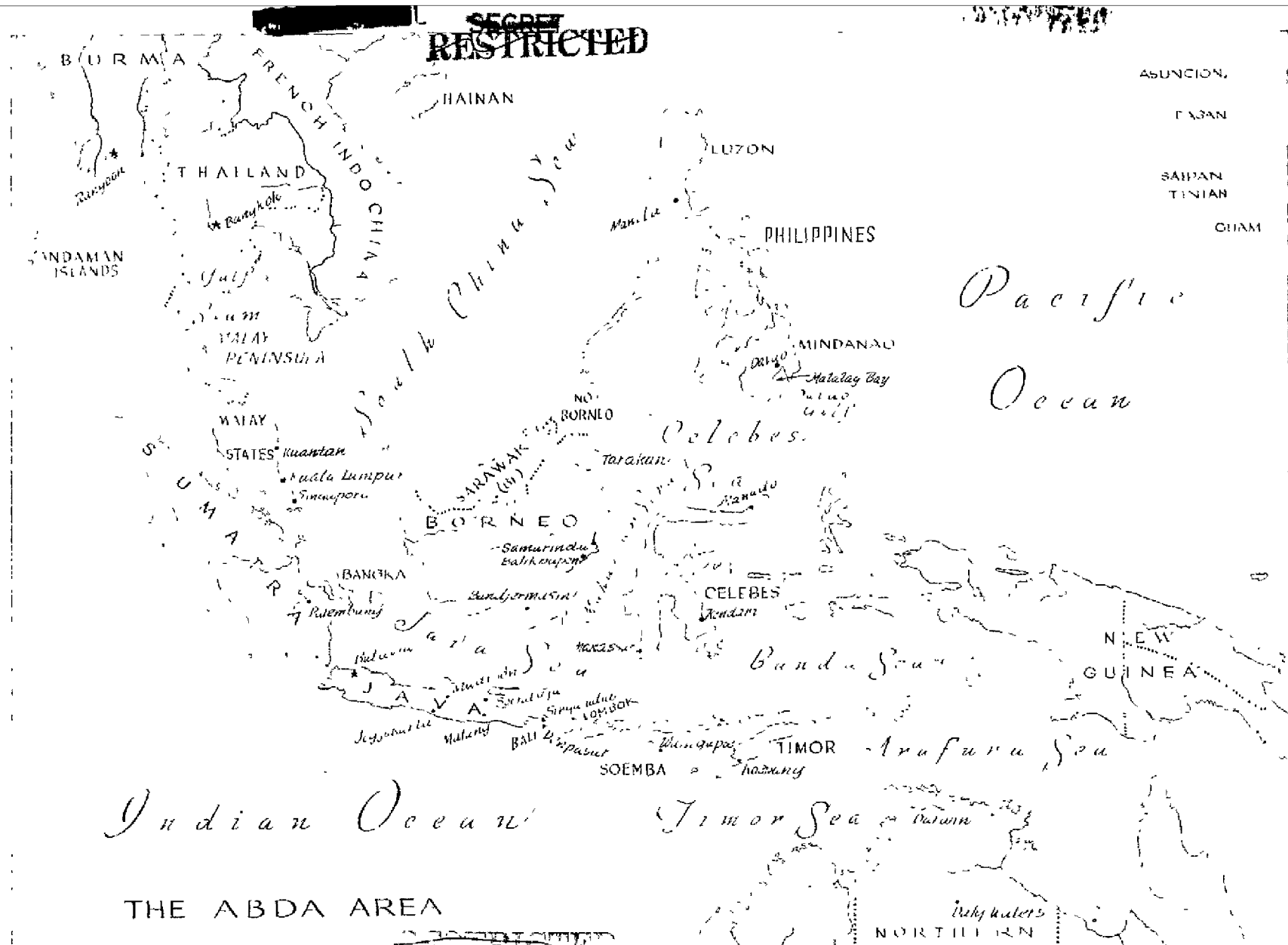
OPERATIONS IN THE NETHERLANDS EAST INDIES
 1 JANUARY-20 FEBRUARY 1942

The establishment of ALBACON was a necessary step in the attempt to halt the Japanese advance. For such a command to function, however, a headquarters had to be set up, communications established, and countless other practical details settled, all of which took time. The need for establishing a more extensive system of communications than had hitherto existed, for example, dangerously interfered with carrying out the command function of ALBACON. It had been thought that Dutch equipment and communications channels could be used with British codes and ciphers. But these facilities proved incapable of expansion, and when ALBACON headquarters moved from Batavia to Lembang on 18 January, it had to depend principally on a U. S. Navy radio unit located there. Indeed, this served as the only communications system for American forces in Java at the beginning of the campaign.¹

Since over-all direction was lacking for almost the entire first month of the NEI campaign, the Far East Air Force was able to make many of its own decisions regarding operations. Although General Brereton was officially in command of the air air force, he had left its administration in the hands of his chief of staff, Col. Francis Brady, while devoting his own efforts largely to negotiations

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117

among Australian, British, and Dutch officials. Brady, aided assisted by Capt. Louis E. Hobbs, Capt. William Higgs, and Maj. Emmett O'Donnell, continued in this capacity until 23 January 1942 when he officially assumed the command. Prior to 14 January, when FEAF Headquarters was moved from Darwin to Java, this organization had been able to exert only a remote control over American air operations in the Netherlands East Indies. Accordingly upon the shoulders of Col. Eugene L. Hubank, V Bomber commander, rested the principal responsibility for the first operations of the 10 B-17's of the 19th Group in Java.²

By 1 January 1942 when Colonel Hubank's command had reached Malang, a good air base had been established and tentative plans had been completed for a new series of operations against enemy outposts. The air base itself, known as Singosari and approximately 5 miles northwest of Malang, consisted of an all-sod field some 5,000 feet in length surrounded by rice paddies and jungle. In spite of its lack of paved runways, it proved to be a satisfactory base with a reasonably agreeable climate and comfortable quarters. The obvious targets for heavy-bomber operations at this time were at Davao and on the island of Jolo, situated about halfway between northern Borneo and Mindanao. U. S. Navy patrol planes, the PBV's of Patrol 10 which had escaped from the Philippines, were keeping a careful check on Japanese activities and reported large concentrations of Japanese shipping at both these points. Indeed, six of these highly vulnerable planes attempted to attack shipping at Jolo

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118

on 27 December, but enemy pursuits interceded then and shot four down.

Heavy bombers based at Malang would have to use intermediary bases for operations against Davao, 1,500 miles distant. Fortunately good staging points within easy bombing range of Philippine targets were available at Kendari in Celebes and Samarinda on Borneo. These bases had been surveyed by Capt. Edwin B. Broadhurst acting as the 19th Group's engineer officer and had been declared suitable for heavy-bomber operations. The first mission was planned for 2 January, and Samarinda was alerted to service a flight of American aircraft. Eight B-17's took off from Malang, but after fighting storms and poor visibility for more than 4 hours, they were forced to return to base. On the following day, however, the weather was fair with unlimited visibility, and nine B-17's reached Samarinda shortly after noon. Maintenance men had accompanied crews and, assisted by Dutch ground personnel, spent the remainder of the day in servicing the planes, loading each with 2,100 gallons of 100-octane gasoline and 4 x 500-pound bombs. At 0515, 4 January, the aircraft began to take off, and 20 minutes later the entire flight, except one plane which "broke an oil line," had cleared the field. For over 500 miles of the 730-mile trip, the bombers flew at 10,000 feet, but as they approached Davao Gulf, now harboring at least 12 transports and over 24 warships, they climbed to 25,000 feet. Choosing the warships as targets, the formation led by Maj. Cecil

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119

Combs divided into flights and bombed at 1-minute intervals. Anti-aircraft fire never caught up with the bombers, and although pursuit aircraft took off from Davao airfield, they could not reach the altitude required in time to intercept. The bombing was fairly accurate: one destroyer was sunk; a number of hits were scored on a battleship; and bombs fell near enough submarines and other small vessels to cause some damage. The American bombers escaped unscathed and landed at Samarinda at 1430, each plane having less than 250 gallons of fuel in its tank.⁴

Combs' squadron returned to Malang on 5 January. The mission had been successful, but Samarinda had not proved ^{an} entirely satisfactory base for heavy-bomber operations. Apparently more than a week of dry weather was required to prepare the unpaved runways for heavily loaded aircraft, and although new runways had been completed, the sod would not be firm enough for the use of B-17's for several months. Furthermore, fueling the nine planes for the trip back to Malang had exhausted Samarinda's supply of 100-octane gasoline. By 7 January, however, Colonel Luban had learned that 100-octane fuel was stored at Kendari, an alternate staging base, and on the following day nine planes, again led by Major Combs, left Malang for that point. The field there proved to have better facilities than Samarinda. It had a dispersal area which would accommodate 35 heavy bombers and near-by fields which could be used by pursuits; construction of extensive living quarters was well under way, and sufficient 100-octane gasoline was available for at least one nine-plane mission.⁵

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120

At 0100, 9 January, Major Combs led his formation off the Mendari field. The weather was not favorable for a mission; the equatorial front was unusually turbulent, and flying at high altitudes brought an added danger from carburetor icing. Only the flight composed of Combs and his two wingmen, McIntyre and Weiser, completed the operation in formation. Visibility was poor as the three planes roared over Malalag Bay in the Gulf of Davao, but bombs were dropped on warships spotted in the bay. After the bomb run, smoke was seen pouring from a battleship and it was observed that one bomb which had missed the ships had crashed into shore installations causing further damage. The other six planes had less success. Two aircraft developed engine trouble, and two more failed to find their formation, all four returning to Mendari without having reached the target area. The remaining two planes, piloted by Captain Parsel and Lieutenant Connally, carried out several bombing runs over a number of transports, but failed to score any hits.⁶

The air missions of 4 and 9 January, although partially successful, did little to interfere with Japanese plans. High-ranking Japanese officials were establishing a headquarters in Davao, and the forces already in that area were being reinforced by portions of a Japanese expeditionary fleet. It was not clear at first where the next enemy blow would strike, but by 9 January Tarakan in northeast Borneo and Menado in northern Celebes were under attack. ASDACOM's naval forces could offer little resistance to these assaults, for

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Admiral Hart, against his better judgment, had acceded to a British demand that naval escort be furnished convoys headed for Singapore. As a consequence he had too few ships available for a striking force.⁷

It was hoped that the air force could give some support to the small Dutch garrisons which were fiercely resisting the Japanese landings. Although only seven B-17's were available, a mission was planned for 11 January. Weather conditions were unusually bad on that day, and the planes as they rolled off the Sinasari runway were subjected to a severe battering from wind and rain. Four planes soon lost the formation and turned back. Major Combs persisted, however, reached Tarakan, and dropped 4 x 600-pound bombs in the general target area. Meanwhile two of a flight of enemy pursuits which attacked the B-17 were shot down. Lieutenants Kurtz and Connally also succeeded in penetrating the equatorial front. Bombs were dropped from 29,000 feet on Tarakan, but visibility was so bad over the target area that no results could be discerned.⁸

Again, bombs dropped by half a dozen courageous bomber crews could hardly be expected to halt a Japanese attack launched in overwhelming strength. Tarakan and Menado both fell that same day--11 January. It is possible that the few heavy bombers available to the 19th Group might have slowed down the Japanese advance in that area had their crews been permitted to follow up the 11 January attack with others directed against the same targets. Instead of followin

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100

this strategy, however, the limited resources of the bomber command were diverted, by order of General Savell, for a single mission against a point in Malaya, 1,000 miles from their earlier target at Tarakan.⁵

The target designated for this mission was the Soengi Patani airfield, halfway up the Malay peninsula and recently captured by the Japanese. Fifteen hundred miles from Malang, it was beyond the B-17 radius of action from that base, and required the use of an intermediary field. The one chosen was near Palembang in Sumatra, about halfway to the target and known to have some maintenance facilities. The mission started on 14 January when seven B-17's, again led by Major Combs, took off from Singosari for Palembang. Little had been known of the servicing facilities at Palembang, and it was found that although some preparation had been made for the mission, there was a lack of proper equipment and trained maintenance personnel. Only three 65-gallon servicing trucks were available, and these had to be filled from drums. The American crews considered that this method of refueling unduly delayed the take-off, but the process of loading bombs resulted in even further delay. The Dutch had planned to use 100-kilogram bombs, but the Americans preferred 50-kilogram; so these were loaded on the ships. It was then discovered, after considerable search, that proper fuzes could not be found. The 50-kilogram bombs were therefore unloaded, and 100-kilogram substituted. By this time, the crews had been taken into

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123

town for food and a few hours of rest. And since the men remaining on the field did not know how to fuse the bombs, the test had to be left for the following day. Not until 0000, 15 January, were the seven planes ready to take off.¹⁰

Five planes, led by Major Combs, reached the target area. Two ships were forced to turn back to Palembang, after Lieutenant Teats had lost the formation during a storm, and Lieutenant Vandevanter's B-17 had developed a faulty supercharger. The remainder of the formation was afflicted with unfavorable weather throughout the 700-mile flight. In addition to storms which frequently buffeted the planes, windows frosted over in the freezing temperatures of a 37,000-foot altitude, and the frost had to be removed by hand to make vision possible. At this altitude, however, the bombers were relatively safe from enemy attack. Pursuit planes unsuccessfully tried to intercept the ., and although anti-aircraft fire reached their altitude, it regularly burst far behind. Several bomb runs over the target area were made with inconclusive results. Some bombs fell short, over 20 hit the airfield, fires were started, and several enemy aircraft were probably destroyed on the ground. Instead of trying to reach Palembang, on the return trip, the five aircraft landed first at Thong, a "poor emergency field in North Sumatra." On the following morning, one plane flew directly to Belong, while the other four stopped briefly at Palembang for service before returning to base. In spite of the dangers of the unfamiliar 3,000-mile mission, it was performed without serious mishap until the last

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134

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sufficiently aware of the threat posed by the enemy's now well-established position in northern Borneo and Celebes. No American bombers operated against the Japanese landing on Celebes, and only the one unsuccessful mission of 11 January had been directed against Tarakan. Since then the enemy had had time to bring in land-based planes and to prepare for their next move. Already within 350 miles of both Samarinda and Kendari, they were in a position to strike at those staging bases with bombers escorted by fighters. The realization of this fact probably accounts for a mission of 13 January flown by crews which had little more than reached Java after an exhausting 12-day ferrying trip from the United States.¹⁵

Shortly after noon on 13 January, 3 LB-30's and 2 B-17's, all of the 7th Group, took off from Malang. Their target was Menado at a distance up the northern arm of Celebes which required the use of the staging base at Kendari. They arrived at that point 4 hours later, were refueled, and each LB-30 loaded with 12 x 100- and each B-17 with 10 x 100-pound bombs. Before dawn on the following day, they took off, the lead plane piloted by Maj. A. A. Straubel and carrying Captain Broadhurst, the only officer on the mission familiar with the area. The LB-30's flew over Langkan, 20 miles south of Menado at an altitude of 12,500 feet and dropped their bombs scoring hits on an airfield there. Enemy pursuit planes caught up with the bombers almost immediately after the bomb runs and subjected the inexperienced American crews to a concentrated 5-minute attack. Three men, S/Sgt. Walter B. Kolbus, Lt. Francis McGivern, and Col. E.

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126

Jonner, were wounded in Lt. John E. Dougherty's LB-30, and the plane itself was badly damaged. Dougherty succeeded, however, in making a crash-landing on a tiny island with "a streak of sandy beach" off southern Borneo where the crew was stranded for 6 days before being rescued by a navy PBY. In the same attack, Lt. W. E. Bayse's plane was as badly hit, and two of his crew were wounded. Bayse could manipulate the controls only with the help of co-pilot Victor J. Boncic, but even then they were forced down at Macassar in southern Celebes, the plane damaged beyond repair.¹⁴

The two B-17's meanwhile were carrying out an attack over Menado Bay. Several bombing runs were made over a number of transports at the docks, and one transport was seen to capsized. Within 5 minutes 15 enemy pursuits, two of which were identified as Messerschmitts, intercepted the bombers and attacked from the rear and from below. Maj. G. F. McCrason's plane reached Kendari after his gunners had shot down five enemy pursuits, 60-year-old 1st Sgt. Louis T. Silva particularly distinguishing himself in shooting down several planes with one of the side guns and in assisting the wounded tail gunner, Pvt. A. J. Magdahl. The other B-17 suffered more heavily from Japanese attack. One engine was soon shot out and the fuselage riddled, but the pilot, Lt. J. I. Dufrane succeeded in landing at Kendari. On this occasion, however, Japanese pursuits followed the heavy bomber to the field. McCrason had sufficient warning to get his plane off the ground, and reached Malang after a running battle, but Dufrane could not get his plane into the air. For 3 days enemy

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131

With inadequate antiaircraft facilities, Java was in sore need of an interceptor command. Unfortunately, although a Dutch organization existed, MILAGI never had a sufficient number of pursuit aircraft to defend its naval and air bases. Only obsolete Dutch planes were available for this purpose until late in January, and their pilots were usually advised to stay out of the way if any Japanese aircraft were in the vicinity. The American P-40's in Australia were still in the neighborhood of Brisbane. Indeed toward the end of January General Arnold was beginning to wonder why he had received no reports of their operations at a time when his records indicated that approximately 160 of them had been delivered at Townsville. Actually the first American pursuit plane did not reach Java until 24 January, and no more than 40 ever did arrive there.³¹

This fatal delay was caused by a number of factors. In the first place, the crate P-40's which had arrived in Australia, had to be erected by untrained maintenance personnel, the ground crews of a heavy-bombardment group. In spite of unfamiliarity with the pursuit plane, however, a portion of the 7th Group erected 138 P-40's from approximately 22 December until 1 February. The first P-40's to be erected had been grounded owing to a lack of prestone, but fortunately, by February sufficient prestone for the use of several squadrons had been found. Further delay was caused by a lack of trained pilots. A training school at Amberley had been giving instruction in flying and gunnery to the pursuit pilots who had arrived from the United States during December and January, and the original staff of the school had been improved by the addition of three pilots who

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132

had been evacuated from the Philippines, Lts. Boyd D. Warner, Grant Mahoney, and Allison M. Strauss. These veterans were appalled by the inexperience of the students assigned to them. Colonel Brady later stated that the new arrivals from the states had averaged no more than 2 hours in a combat plane, and that few of them had fired guns. Warner, Mahoney, and Strauss radioed the War Department on 1 February that it would take 3 months and 15 wrecked planes to train the "seventy so called pursuit pilots" for combat operations. Already, they said, there had been eight accidents "all due to pilots inexperience." 12

Of the first American pursuit pilots to fight in Java the majority were chosen from those evacuated from the Philippines. They had arrived in Australia on 31 December and 1 January. Within 2 weeks 17 P-40's had been erected, and sufficient prestone for these planes had been found. On 14 January, therefore, General Brereton authorized the activation of the 17th Pursuit Squadron (Provisional). The flying personnel of the new unit consisted of 13 Philippine veterans, its commander (Maj. Charles A. Sprogue) and 12 lieutenants (Coss, McKillup, Blanton, Cole, Kiser, Kruzel, Henson, Roland, Gilmore, Geis, Mori, and Irvin), and four second lieutenants (Trout, Thompson, Brown, and Stenter) recently arrived from the United States. 13

The P-40's were to be ferried to their destination. From Brisbane to Java is 4,000 miles, approximately half this distance

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133

being over a portion of the Australian continent which had few easily distinguishable landmarks and a communications system not understood by American pilots. On 10 January, when the 17th Squadron left Brisbane for Java, therefore, they were escorted by two Australian-manned Fairey-Battle aircraft. Following a route via Rockhampton, Townsville, Cloncurry, and Daly Waters, 14 P-40's had arrived in Darwin by 10 January. The other three planes were delayed by accidents, at least one having been completely "washed out" in making a landing. While waiting in Darwin for final orders, the squadron's enlisted personnel arrived in C-39's to service the planes for the remainder of the flight.²⁴

On 20 January, the squadron left for Java. Within three days 13 planes had reached Soerabaja. For a part of the distance, notably the 540-mile hop over water from Darwin to Koonang in Timor, they had been guided by a two-engine Beechcraft, but one flight of the squadron had flown the last leg of over 500 miles from Maingano in the island of Soemba without escort. While at Soerabaja, the American pilots worked on aircraft identification and carried out test flights in cooperation with the Dutch Air Defense Command. On one occasion they were called upon to provide protection for a crippled Dutch submarine off the coast of Borneo, but the weather was so bad that the six planes which took off were soon forced to return, and one of them crashed on landing.²⁵

The permanent base for the 17th Squadron was under construction at Blimbing, 10 miles southwest of Djordjan. cleverly concealed in

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134

a jungle landscape, the field, known to the Americans as Igoro, had two 4,000-foot runways surfaced with smooth sod. Taxiways, in which planes could be completely camouflaged with a protective covering of tree branches, were cut into the surrounding jungle. By 1 February the field was ready for occupation, and 12 P-40's with 13 pilots arrived on the field. In addition to the combat personnel, the squadron had 17 crew chiefs, 17 armorers, 1 line chief, and 1 first sergeant, who did their best to keep the planes in operation with almost no special tools or spare parts.²⁶

If the American pursuits had been further delayed in leaving Australia, it is doubtful if as many would have reached Java safely. Japanese air raids were increasing against points from Samarinda and Balikpapan in Borneo to Macassar, Dilli, Ambon, and Koebang further to the south. At Koebang on 30 January, a P-40 which had been left behind was destroyed in a Japanese strafing attack, and two days later three Hudsons were destroyed on the ground at Ambon. Even more foreboding were continued enemy air raids and movements. On 30 January, British aircraft had reported that 50 to 40 transports escorted by 15 warships were sailing southwestward through the Celebes Sea. On the following day, American submarines stationed in Macassar Strait had spotted a part of the same convoy, and from then on the ubiquitous PT's of Patwing 10 had maintained contact. At first it was not clear at what point the Japanese intended to land, but by 30 January, Patwing 10 reported 5 transports, 4 cruisers, and 14 destroyers moving toward Balikpapan and other reports were received at

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SECURITY INFORMATION

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127

nursuits paid frequent visits to the airfield, hampering the efforts being made to repair the B-17. Finally learning that enemy ground forces were infiltrating toward Kendari, the crew destroyed their plane and returned to Malang.¹⁵

The aggressive Japanese pursuit tactics together with the infiltration south through Celebes and Borneo effectively barred the further use of Kendari and Samarinda as staging bases for heavy bombers. Since these points were over 700 miles from Malang, it was clear that, with a radius of action of approximately 750 miles, a B-17 would have difficulty in operating north of either Kendari or Samarinda. In fact, the only possibility which seemed feasible was to attempt shuttle-bombing missions between Malang and Del Monte. This would involve not only flying 1,500 miles through an unpredictable equatorial front and over the Jap-infested Celebes Sea, but landing and being serviced on a precariously held airbase subject to almost daily air attack. On the other hand, such a mission would permit two-way bombing attacks on targets between Java and the Philippines and would facilitate the evacuation of the trained personnel of the 19th Group still at Del Monte.

Apparently it was considered that these advantages warranted the trial of at least one such operation, for on 19 January nine B-17's set out for Del Monte. The flight led by Lt. John D. Connally consisted of the five veteran crews of Connally, Meiser, Schaezel, Nash, and Deats and the recently arrived 7th Group crews of Maj. Kenneth B. Hobson, Capt. H. M. Key, Lt. G. H. Hillhouse,

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138

and Lt. J. M. Hughes. Marine trouble caused Robson and Hughes to turn back, and Killhouse was forced down at Samarinda, but the other six planes arrived safely at Del Monte. They had fought heavy rains and severe thunderstorms and had bombed shipping near Jolo scoring possible hits on a cruiser and a tanker. On the return trip, storms shut out Jolo and hindered bombing operations, but the planes had all reached Malang by noon of 20 January carrying 33 officers of the 19th Group evacuated from Mindanao.¹⁶

The Del Monte mission was a success, if for no other reason than that 33 trained men were added to the short roster of the PAF in Java. The lack of air force personnel, particularly maintenance personnel, was one of two principal obstacles in the way of efficient air operations in the Netherlands East Indies. The B-17's which had originally flown from Darwin to Malang had been able to carry few trained mechanics. As a consequence, the crews themselves had to service their own planes. This required hours of labor both before and after exhausting missions carried out over almost unfamiliar seas and through weather which rarely favored long-range flights. The situation was made worse by a rapid deterioration of the few heavy bombers available. Large hangars at Malang gave adequate shelter while the planes were on the field, but continuous rains, slippery landing fields, and, worst of all, complete lack of spare parts and repair tools prevented anything like satisfactory maintenance. The duties of the few trained mechanics were at first increased by the

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129

arrival of new planes, particularly the B-30's about which little was known. Several of these aircraft had carried a cargo of spare parts when they left the United States, but by the time they arrived in Java, many of the new parts had been used to replace those worn out during the ferrying trip.¹⁷

By 1 February, although the lack of spare parts continued to be a pressing problem, the arrival of additional personnel had brought some relief to the exhausted mechanics. On 15 January the ground echelon of two squadrons of the 7th Group, who had been erecting B-40's and A-24's in Australia, sailed for Java. Three days later Lt. E. G. Lane in an B-30 and Lt. Don Furr in a B-24 evacuated 7 officers and 39 enlisted men from Del Monte, and, at about the same time, an American field artillery battalion, reaching Java with no ammunition, began to perform the tasks of an air force service unit.¹⁸

Until 30 January the home base of all heavy bombers in Java continued to be the Sinasari airfield, near Malang. Work had been continuing, however, on another field near Jogjakarta, 150 miles to the west, and with the imminent arrival of a part of the 7th Group's ground crews, it seemed a propitious time to transfer that unit to the new base. Meanwhile heavy bombers were continuing to arrive over the ferry routes. By 1 February, 18 more B-17's and 4 B-30's had reached Java, three of the latter by the Pacific route. A number of these were used by the 19th Group to replace B-17D's which were being sent back to Australia for depot overhaul. Seven of the new

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130

planes, however, were sent to Jojakarta where the first of the 7th Brown's enlisted men had arrived on 21 January.¹⁹

The opening of the new base made possible a greater dispersion of the heavy bombers, but a principal fault of Java airfields continued to be their vulnerability to air attack. Although General Brett stated that every effort was being made to protect aircraft on the ground, he had little equipment to work with. The aircraft warning facilities and antiaircraft protection were even more inadequate than that which had existed in the Philippines. There were no modern antiaircraft gun batteries, and many of the Dutch automatic weapons had apparently never been tried out until the enemy actually appeared for the first time. There were no radar sets, and thus the TMAF had to rely for warning of the approach of enemy planes upon a fairly efficient spotter system. This system centered in a control room at Soerabaja. A large number of ground observation stations, each represented on an operational map by an electric light, were connected by telephone with the control room. When an observer spotted a formation of aircraft, he sent in its approximate altitude and the number and general type of plane in the formation. This information was filtered and checked against the known position of friendly planes. It was thus possible to trace the course of approaching enemy aircraft. Fairly accurate instructions could be communicated to the airfields either by direct telephone or by radio.²⁰

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135

headquarters of enemy forces off Zenderi. The Dutch, immediately beginning the demolition of oil refineries and other installations, sent their ancient Glenn Martin bombers based in southern Borneo against the enemy ships, and Admiral Mason ordered attacks by American naval and air forces.²⁷

The most successful American phase of the operation consisted of an attack by Rear Adm. W. A. Glassford's destroyers. In addition to half a dozen submarines already in Makassar Strait, Admiral Hart on 26 January sent 4 of his destroyers supported by 2 cruisers against the restly superior Japanese force. The cruisers were able to give no help during the engagement since the Karlsruhe developed engine trouble and the other, Olney, ran on to an uncharted rock, but the destroyers performed admirably. Confused by darkness and the presence of their own destroyers, Japanese shelling had no effect. The American hour-stickers raced upon, the transports and with torpedoes and gunfire sank at least 5 ships, the count of a later submarine captain placing the figure at 13.²⁸

Meanwhile American heavy bombers were also striking at enemy shipping, at widely separated points. From 27 January through 3 February, at least 16 missions exclusive of reconnaissance flights, involving a total of 34 heavy bombers, were carried out. Of these, however, 3 missions of 33 heavy bombers were not completed on account of unfavorable weather conditions, and other individual planes were forced to turn back before reaching the target owing to mechanical failures which more satisfactory maintenance service might have

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136

prevented. The servicing facilities available simply could not cope with weather and combat conditions in Java. Meanwhile attrition continued. On 22 January in an air-ship mission against ship in off Sumatra, one P-17 was completely destroyed when it overshot the field at Palembang. Two days later, 3 B-17's sank a transport and shot down 3 enemy aircraft, but 3 B-17's were damaged. On an air-ship mission against Balikpapan on 24 January, only 3 returned to Halim Sadeli, 1 overshot the landing field, another was forced down at Pangajene and badly shot up, 2 others landed "wheels up" in the mud of Celebes, and the eighth landed on a beach near Arosajaja, Java, where a wooden runway had to be constructed to get the plane off the ground. On 27 January 1 transport was sunk, and hits were scored on a cruiser during a mission in which 5 out of 11 B-17's reached the target, but 3 days later Major Robinson, 7th Group Commander, leading his ninth mission in a week was shot down between Halim and Balikpapan when a formation of 4 B-17's was attacked by more than 30 Japanese fighters. Robinson's plane was riddled, and no crew member was seen to bail out before it crashed into the sea.²⁹

The Japanese advance continued. By 28 January they were already in control of Balikpapan and were moving seaward in Sumatra. Northern and eastern Celebes, including Manado, were also in their hands. The capture of Manado posed a serious problem to the Allies, for it brought the enemy dangerously close not only to the pursuit ferry route from Lanna, but to the principal Allied bomber bases.

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157

In fact the Dutch force at Balikpapan was twice attacked on 27 January, and seven Glenn Martin's were destroyed on the ground. In spite of the fact that obvious targets of importance were now within bomber range of Balikpapan, the PMAF was ordered to fly another mission against points in Molucca. Major Conner again led the flight consisting of three veteran crews to ether with two from the 7th Group. Early on the morning of 28 January, the five B-17's left Halang. Two and a half days later the ships returned. One ship had not reached the target, the others had flown a total distance of over 5,500 miles and had bombed two Japanese-held airfields in Molucca. Using Balikpapan as an advanced base, they had flown against Kuala Lumpur, the Malayan capital, on the first day, but owing to misadjustment of the bombsight, all bombs missed the target area. On the following day, they had more success against an airfield at Muantan where at least 60 bombs hit runways and hangars.⁵⁰

Operations against Molucca were of little value except as token missions in support of the hard-pressed British. Targets closer to American bases and to the heart of the Dutch empire in Java were obviously of more consequence. Missions on 1-2 February against the Balikpapan area, for example, resulted in the sinking of 3 transports. Lieutenant Dougherty, who had been shot down in an earlier mission, was credited with one of those during a night operation performed by 3 B-24's; the other was sunk by 7 B-17's during a daylight attack. On the following day, 3 B-17's of the 7th Group led by Major Holcomb again struck at numerous ships off Balikpapan. This

~~CONFIDENTIAL~~
 SECURITY INFORMATION

133

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mission was less successful than those of the day before. Bombs were dropped, but low-lying clouds obscured the targets, and no results could be observed. Meanwhile other troubles had beset the formation. The oxygen supply failed at one point in Lt. E. C. Hrabetski's plane, and Pfc A. J. Love died as a result. Enemy pursuit also were attacking the B-17's and had wounded Pfc E. H. Good and Pfc J. Delfott in Major Hobson's plane. An engine of another B-17 burst into flame. Five of the crew bailed out, but the pilot, Lt. Theodore E. Swenson succeeded in landing wheels up on Aradon Island.⁶¹

While Major Hobson's flight was thus occupied, Japanese bombers and low-range fighters opened the campaign for Java with a series of savage strikes at Soerabaja, Indoen, and Malang. At Sinasari the air-raid alarm sounded shortly after 1600. Half an hour later enemy aircraft were overhead. Pursuit planes and dive bombers thoroughly saturated the field, and bombers loosed their bomb loads from 30,000 feet. The principal damage, however, was done by the strafers, which concentrated their fire on American bombers standing on the field loaded with bombs. Two B-17D's and two B-17G's either exploded or burned to the ground. The same raiding formation also shot down a B-17G flying a test flight 10 miles south of Malang. Lt. Ray E. Don's entire crew died in the crash. In the meantime, another Japanese formation had hit Soerabaja, damaging Dutch naval installations and destroying three Catalinas on the water. It overhauled a B-17 which happened to get in its path, shot it down,

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and killed its entire crew including Maj. A. L. Straubel who had succeeded Major Robinson as 7th Group commander.³²

In these first raids of importance against Java, the aircraft warning system had been tried and found wanting, at least for a pursuit squadron unfamiliar with Dutch procedure. Twenty to 30 minutes before the raid, the American pilots at Negro learned that enemy aircraft were approaching Soerabaja, some 40 miles away. By the time the P-40's had climbed to 21,000 feet, the Japs had done their damage. However, one flight of four American pursuits (Lieutenants Kiser, Stauter, Lolo, and Hannon) intercepted about 17 enemy bombers of the B3 series as they were heading out to sea. Kiser and Stauter soon had to turn back owing to a shortage of gasoline; Lolo made one pass at extreme range; but only Hannon was able to get near enough to shoot down a bomber. Meanwhile another American pursuit flight had made contact with a strong force of enemy "long-range Severely fighters and Cors" south of Soerabaja. Lieutenants Goss and Roland flying in a two-ship formation attacked six of the enemy. Apparently these were serving as decoys, for other Japanese pursuits pounced upon the two Americans from above and the rear, and although Goss destroyed one enemy plane, Roland was shot down and killed.³³

For the next 5 days after the disastrous operations of 5 February, the Bomber Command was almost completely frustrated in carrying out normal bombing operations. Missions were scheduled,

SECURITY INFORMATION

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but frequently planes became bogged down in the mud before they could taxi to the runways, and, at other times, mechanics working almost a 24-hour shift still could not put the engines in satisfactory working order in time for a take-off. When aircraft were able to get off the ground, their instructions were usually to remain in the clouds in order to avoid a Japanese attack. Two missions were attempted on 5 and 7 February, but in each case enemy pursuit intercepted the B-17's before they could reach their targets. Reinforcements still trickled in from both the east and the west. During the first week in February, 7 more heavy bombers arrived, 5 B-17's from the Atlantic route and 2 LB-30's from the Pacific. Moreover, 20 more officers and men of the 19th Group reached Java after having been evacuated in 2 LB-30's from Mindanao, and 4 other officers escaped by submarine from Corraidor. Every new arrival did bring some relief to combat and ground crews, and permitted more work to be done on defense facilities of the airfields. But only a few machine guns were emplaced at Singosari for protection against air attack, and new revetments and dispersal facilities could offer little protection for bombers unless the Interceptor Command were able to provide pursuit defense against low-level strafing.⁵⁴

The outlook for an effective interceptor command, however, was becoming desperate. By 4 February 50 per cent of the Dutch air force had been destroyed, and only 11 P-40's of the American pursuit squadron were operational. Furthermore, the Japanese were in a

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SECURITY INFORMATION
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141

position to cut the route over which additional pursuit planes were to come from Australia. On 1 February a large enemy convoy had approached the strategic island of Arboina. Within 3 days the Japanese had knocked out the few Australian and Dutch planes that remained there, and overwhelmed a battalion of Australians and "one of the best units of the Netherlands East Indies Army." Arboina, with its important naval base of Arbon, was only 500 miles from Timor, a key point on the ferry route. In spite of Timor's importance, however, no unusual efforts had been made to defend it. The Dutch did not have troops to garrison the island, and, according to General Brett, the Australians were interested more in concentrating forces in Portm and Port Loresoy than in sending them to the Indies, even to Timor.

Brett was particularly disturbed over an Australian attempt to divert American P-40's to Port Loresoy. Indeed Capt. William Lane, Jr., commanding officer of a recently organized American air unit, the 35th Pursuit Squadron (Provisional), had actually received orders late in January instructing him to take 25 P-40's to New Guinea base. At the last minute, however, the destination was changed, and, on 4 February, 13 pilots, most of whom had arrived in Australia during January as a part of the 35th Pursuit Group, took off from a Darwin field for Java. The flight from Darwin to Timor was difficult enough for a short-range P-40 even under the best of conditions, but in this case flyers, who had been in the theater less

~~RESTRICTED~~
~~SECURITY INFORMATION~~

~~RESTRICTED~~

143

then a month, found themselves playing hide and seek with an
 monstrous thunder storm. They nevertheless reached Koepang safely
 and successfully flew a 500-mile leg to Bali, arriving at a Dutch-
 held airfield there on 5 February.²⁰

The Dutch garrison at Bali seemed to be fearful of Japanese
 attacks, and Captain Lane ordered his flight to get off the ground
 as soon as the planes were refueled. Seven F-40's (William Lane, Jr.,
 Jesse E. McQue, Winfred L. Gallienne, Larry D. Landry, William L.
 Turner, Dwight S. Luckley, and Ken S. Irvin) had taken off and had
 reached an altitude of approximately 7,500 feet when Gallienne
 spotted approximately 20 enemy pursuit planes circling overhead.
 At the time Lane had signaled the others to drop their auxiliary
 fuel tanks, the air seemed full of enemy planes. Meanwhile 3d Lts.
 Paul E. Garbonini, Gene L. Pound, and G. L. Pergen had succeeded in
 getting their F-40's off the ground. All were immediately engaged.
 Pound destroyed one enemy plane, but his own was so badly shot up
 that he parachuted; he landed in a tree and crawled there until
 rescued by natives 45 minutes later. Turner, who also shot down an
 enemy plane, and Pergen both crash-landed, "washing out" their planes,
 but escaping themselves. Early in the action, Landry had found him-
 self without the support of other American pursuits. Surrounded by
 enemy aircraft, his plane was soon riddled, and he crashed into the
 sea. The J's were not occupied with the American pursuits were
 meanwhile thoroughly bombing and strafing the airfield. Garbonini

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 SECURITY INFORMATION

~~RESTRICTED~~

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145

who had taken off with only a partially filled gas tank was forced to land in the midst of bursting bombs. His plane and several others also on the ground were destroyed. After shooting down an enemy plane, Lane went into a steep dive, evaded the enemy pursuits, and headed for Java. Although he had to elude another enemy formation before making a landing at Beling, he was able later to join Luckley, Hogue, and Gallienne who had succeeded in reaching Soerabaja. Within 2 days other flights of F-40's had flown the ferry route with more success, and by 1 February the new arrivals had increased the number of F-40's in Java to 37.⁵⁷

Of the American pursuit planes which had left Darwin since 1 February, 13, or almost half, had been destroyed en route to Java. It was clear that no future flights would be free from interception so long as the Japanese could base aircraft at Kendari, less than 100 miles from Timor. By the first week in February, the Japanese were securely ensconced there, but it was hoped that bombing attacks might wipe out its airfields at least temporarily. On 6 February the first attempt was made. Early in the morning, nine P-17's of the 7th Group led by Captain Bultrane took off from Simoesari. The target, Kendari, was 730 miles away, at almost the limit of a P-17's operating radius. The weather was typical, providing a cloud cover which appeared inviting but which contained so much turbulence as to make formation flying almost impossible.⁵⁸

Two hours after the take-off, when the formation was holding across the Java Sea, it was set upon by 5 to 12 enemy pursuit planes.

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landing, coordinated attacks from the front, they concentrated fire on Larcene's plane. Immediately a great mass of flames burst from the bomb bay. Six men were able to bail out, but enemy planes continued to fire on them as they floated toward the open water 14,000 feet below. A few minutes later the plane exploded. Dufranc's place in formation was taken by Capt. Donald E. Strother who maneuvered into the lead while bullets crunched into his plane, knocking out one engine, cracking another, bursting a high-pressure oxygen bottle, and blowing out the hydraulic system. Again the pursuit turned and obtained a position to make another frontal attack. This time the plane piloted by 1st. William J. Prichard, who had arrived from the states 3 days before, was hit. It burst into flames and exploded before no more than one man had been able to bail out. Three other planes were also badly damaged. Explosive bullets ripped into the bomb bay tank in Capt. Joseph J. Preston's plane, but Sgt. Lewis De Simone rushed from the radio room to kick the tank free from its shackles and thus saved the plane. No one was seriously injured in this near-disaster, but in Lieutenant Hoeserstad's crew Pfc Homer D. Bilyeu was killed. Machine-gun bullets riddled the tail section of another B-17 piloted by 2d Lt. Paul M. Lindsey, also a newcomer to the Java area. Two men succeeded in keeping the plane on an even keel until it reached cloud cover. But then, caught by air currents and battering gales, it began to spin. The co-pilot, navigator, and tail gunner bailed out, but Lindsey with the aid of Sgt. James A. Moushins brought the plane out of its spin at 4,000 feet, and without any navigation aids flew it back to Singosari.⁵⁹

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145

According to the returning flyers, this was the best-executed enemy attack yet encountered in Java. Since the attack took place below an altitude of 30,000 feet, the pursuits had had the advantage, and the speedy and highly maneuverable Japanese planes had been able to choose their angle of approach almost at will. The top turrets had been unable to cope with head-on attacks, and the .50-caliber machine gun in the nose of the B-17's had insufficient range, although it had shot down two Japanese planes in the day's engagement. Three others were shot down by converging fire from top turrets, side guns, and tail guns, but the bottom turrets had been ineffectual against planes swooping up from below to pour explosive bullets into vulnerable bomb bay tanks.⁴⁰

Defeats both on land and in the air continued to confine Allied movements within smaller and smaller areas. It was primarily Japanese air superiority which restricted the ABDA fleet almost entirely to night operations. On 4 February, for example, enemy aircraft drove back an Allied naval thrust of 4 cruisers and 7 destroyers in Macassar Straits and seriously damaged the Marblehead and Houston. Regular air attacks against Java and Sumatra, furthermore, continued to whittle down Dutch and British air strength. Admiral Hart learned that by 10 February "nearly all of the 100 new Hurricanes" which the British had brought into the ABDA area had been "used up." On land the Japanese were advancing at so many points that no effective opposition was possible with limited Allied air resources.

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By mid-February the enemy held virtually all strategic areas in Borneo and Celebes, though they were slow; eliminating a courageous Australian garrison at Ambon, and the increased tempo of air raids on Palembang warned of an early move against Sumatra. The Japs struck on 14 February when approximately 100 planes flew in over the Palembang area and dropped some 700 parachute troops armed with light mortars and submachine guns. A Dutch force of two battalions was sufficient to thwart this attempt to seize the airfield, but on the following day, they had time only to destroy the oil refineries before enemy troops, landed from some 40 transports, had overrun both the town and the airfield.⁴¹

The situation, complicated by miserable weather, untrustworthy natives, and poor communications, became more and more confused. Between 5 and 10 February, for example, Admiral Hart lost track of the ASDA air command, and discovered later that it had moved without notice from Lembeh to Bandoeng. Such a lack of coordination can be explained in part by the inadequate communications facilities available. Indeed, the telephone network had become so undependable that in certain instances conversations literally had to be carried on in double talk as it was known that all wires were tapped. For the flyers themselves, however, the weather continued to be the most frustrating feature. Between 9 and 15 February, exclusive of reconnaissance, ferry, and courier flights, planes of the 7th and 19th Groups took off on 13 missions involving 70 B-17's and 3 B-24's.

RESTRICTED**SECURITY INFORMATION**~~SECRET~~~~CONFIDENTIAL~~

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147

Of these operations, 10 missions of B1 planes were forced to turn back before they had reached the target owing to storms or impenetrable fogs and clouds.⁴²

Of the planes which actually reached the target area, few could claim any real success. On 10 February, 3 B-30's took off to bomb an aircraft carrier reported off southern Celebes. Two planes bombed the target, but results were uncertain. Two days later, 11 B-17's bombed a number of enemy ships in the vicinity of Macassar. Again results were uncertain, but one flight of three planes "believed they hit a boat." Eight B-17's on 14 February searched an area near the island of Bandar, but the convoy which had been reported there could not be found. On the following day, however, five B-17's did find enemy ships off Kalenbang. Bombing from 20,000 feet, they scored one hit on an auxiliary vessel and another on a cruiser. This success was matched on 16 February when 6 B-17's flew at an altitude of 20,000 feet beneath stormy clouds to bomb ships in the "Sanjoensin River." Automatic weapon fire from below ripped into the planes, but bombs were dropped scoring hits on 2 transports and 2 barges; while fragments from their own bombs hit the low-flying B-17's.⁴³

The failure of the heavy bombers to break up Japanese landings highlighted a critical situation which had obtained since enemy air attacks upon Java had become a daily occurrence. The relentless crescendo of these air raids brought appeals from General Brett for

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SECURITY INFORMATION~~SECRET~~~~CONFIDENTIAL~~

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148

more reinforcements. Indeed by the first week in February the American command realized that if antiaircraft, aircraft warning equipment, and pursuit planes did not arrive soon, Java would become untenable for the heavy bombers, and it was considered necessary to make plans to meet this contingency. Colonel Brady was dispatched to make a complete survey of facilities, supplies, and munitions in Burma, and General Ames was directed to render a report on similar conditions in Australia. If northern Australia and Burma could be developed into powerful bases, Brett, Brereton, and Brady believed that they might still be in a position to cut off the extended enemy lines of communication.⁷⁴

A principal weakness in Java's defenses continued to be the lack of a sufficient number of pursuit aircraft. Without pursuits to protect air bases, the new heavy bombers, which continued to be ferried over the Atlantic and Pacific routes, had to spend a large part of their time in flying from one field to another in order to avoid enemy air raids. Indeed on several occasions the Bomber Command ordered the heavies to fly up and down the coast simply to get them off the ground. When these flights continued for 5, 6, and even 7 hours, some flyers wondered why they could not have carried bombs and attempted to drop them on a target. A mission to California, it was felt, could have taken no more fuel and would have had far more tangible results than a coast patrol. The available American pursuers, still handicapped by inadequate maintenance

SECURITY INFORMATION

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140

Facilities and poor communications, wore themselves out in frequent patrols and attempted interceptions. On 10 February, only 13 out of 16 P-40's in Java were in commission. For 3 days these planes had carried out patrol flights over the Soerabaja area and had gone on missions which, in several cases, resulted in the interception of friendly planes owing to faulty information which had come over the warning network. The only actual contact with an enemy formation occurred on 9 February when five pilots (Cass, Williams, Jackson, McMerter, and another) shot down one of a "return formation" of 16 enemy bombers north of Soerabaja.⁴⁵

Two days after this engagement, the arrival of nine more P-40's swelled American pursuit strength to 30 planes. Although this was a considerable reinforcement, it actually represented the arrival of only 30 per cent of a series of aircraft which had left Darwin 3 days before. The authorities in Darwin had scheduled two flights to leave Australia on 7 and 10 February. The first was to consist of 1 B-30, 1 P-40, and 6 A-24's, the latter being the first of the 47th Group's 30 dive bombers to be prepared for combat. Leaving Darwin in the late afternoon of the 7th, the planes proceeded toward Elor. One P-40, piloted by Maj. W. P. Fisher, developed engine trouble shortly after take-off and turned back, and the A-24's, unable to keep up with the B-30 which was serving as a guide for the formation, soon fell behind. By the time the Liberator, now escorted only by the eight P-40's, had reached Elor, meteorological storms had completely shut out the island, and it was forced to return to

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180

Darwin. The A-20's left to fend for themselves, could not find suitable fields, and, running out of gas, were all lost in crash landings. Meanwhile the three A-24's, still flying steadily toward Timor, succeeded in reaching Koepang owing to the skill of one of the pilots, Capt. Edward N. Sadrus, a veteran flyer with 7 years previous experience in commercial air lines. As the small flight came in to the airfield, Australian anti-aircraft gunners opened up on the unfamiliar A-24's, seriously damaged Sadrus' plane, and punctured another in several places. On the following day, Sadrus limped on to Java, but the other two returned to Darwin. Weather that day seemed to favor flying; so another flight of nine A-20's took off from Darwin and succeeded in reaching Soerabaja on the 11th without mishap.⁴³

The new planes were immediately incorporated into the 17th Pursuit Squadron and placed under the Interceptor Command. The survivors of the 20th Squadron also joined the 17th Squadron, and Captain Lane became Major Corrigan's executive officer. As a unit the squadron was well organized, but relations with higher echelons were still not clear. Complete coordination had not been achieved between squadron headquarters and the Dutch interceptor control organization, for example, although two Dutch officers and a Dutch radio detail were attached to the squadron to facilitate proper liaison. Corrigan made frequent attempts to better the situation, but a lack of aircraft warning and communications equipment was an

RESTRICTED
SECURITY INFORMATION

~~SECRET~~ **CONFIDENTIAL** 141
RESTRICTED

obstacle which better personal relationships could not improve. An attempt to increase the efficiency of the Intercenter Control organization, however, was made by placing Maj. M. B. Fisher in command on 10 February.⁴⁷

At this time, the 17th Squadron was preparing for its first major offensive mission. A flight of P-40's was to carry out a bombing and strafing attack on Japanese shipping and aircraft now being concentrated in the Balikpapan area. On 11 February final arrangements had been made at HMF headquarters in Manado, and eight planes (Captains Bone and Moneg, Lieutenants McCallum, Miser, Kruzel, Jones, Hanson, and Ludley) had flown to Madaya, 75 miles west of Balikpapan, for their base load. After being loaded with four 250-lb. bombs, the planes departed for Batavia, 525 miles further to the west. Here they were joined by Major Sprague, and on 12 February eight P-40's (Ludley had crashed on in landing at Batavia) took off for a 275-mile hop across the Java Sea to Balikpapan. The weather was favorable for this mission, but before the P-40's had reached the target, six Japanese ZV-type pursuit planes intercepted the American flight and broke it up. Sprague, Miser, McCallum, and Kruzel each shot down an enemy plane, but only Moneg, Miser, and Hanson fought their way through to the target area and completed dive-bombing and strafing attacks. No American planes were lost, and by 14 February all had safely returned to their base at Madaya.⁴⁸

RESTRICTED
SECURITY INFORMATION

CONFIDENTIAL

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RESTRICTED

112

The occupation of virtually every strategic point on Sumatra by the Japanese together with their simultaneous advance toward Java from the east meant that lucrative targets were now within range of American warships and dive bombers. The Palembang mission, although it had probably not upset any Japanese plan of action, had demonstrated the possibilities of low-level attack. Unfortunately, the unit best equipped to carry out such missions, the 37th Group, which had left the United States over a month before with 52 A-24's, was not yet ready to place all its planes in combat. One squadron, however, the 91st, was ready, and on 17 February, the day after General MacArthur had arrived in Java with one A-24, 11 others headed out over the Indian Sea from Darwin. An EB-10 guided them to Moerang, where on the following day they divided into flights and headed for Java over different routes, one flight going by way of Bali and the other via Waingapoe, Soemba. At Waingapoe one A-24 crashed up, but by the late afternoon the other 10 planes had arrived at a new airbase being built at Lodjokerto, Java, approximately 100 miles west of Soemba.⁴⁰

The airfield was being constructed where there formerly had been only rice fields. Some 1,200 natives commanded by two Dutch officers had laid a base of bamboo matting over the rice fields and had covered this with a 4-inch layer of dirt. Living conditions on the base were pleasant, for the Dutch people in the area opened their homes to the Americans. Not since they had left the United

RESTRICTED
SECURITY INFORMATION**CONFIDENTIAL**

RESTRICTED~~SECRET~~~~CONFIDENTIAL~~ 105

States had they enjoyed such "good bottles, good food, good whiskey, good beds." Included with these luxuries was news of former comrades who had been left behind in the Philippines. One of the first persons to meet them at Nodjokerto was Lt. Cleverton Stephenson of the 11th Squadron, 27th Group. He reported that "Colonel Vance, Bill Dulaney, McAfee, Pete Lender, and Old Fort Stafford," all of the 27th Group, had been evacuated from Luzon by submarine, and were performing a number of duties throughout the air command in Java. Stephenson himself "had been hobnobbin' with the Javanese princess and Dutch army officials" and was in a position to do "a magnificent job in getting things done." He was not able, however, to provide sufficient qualified mechanics, and only two were available. For the next 4 days, therefore, pilots and runners worked on the planes from dawn to midnight. Of the A-24's which had reached Java, one was cannibalized for the repair of others, and a second was lost when it landed in Soerabaya Bay, but on 19 February, seven arrived at Nodjokerto and were incorporated into the 7 Bomber Command.⁵⁰

The A-24's arrived at a time when the Javanese were on the advance. The expected attack against Java from the east had begun, and bombers and pursuits were conducting numerous air sweeps over the island of Bali and over Java itself, and on 19 February a strong enemy force landing on Bali speedily overwhelmed the airfield. The Japanese raids of the 14th occurred before Sergeant's flight of P-40's had returned from the Palau campaign mission, but the remainder of the squadron, led by Lt. Colonel H. Stanton, intercepted one

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of the enemy sweeps carried out by mine sweepers escorted by pursuits. Blanton, Mahoney, Milmore, and Irvin each shot down a bomber, and Mahoney destroyed a pursuit plane. In the exchange one P-40 was lost, but its pilot, Lt. Morris C. Caldwell, parachuted safely to the ground.⁵¹

The first Allied strike against Japanese shipping off the island of Bali was carried out by the Bomber Command. During the morning of 12 February the 7th and 19th Groups carried out six strikes involving 13 B-17's and 5 B-24's from Hollandia and Madaya, the latter airfield then being used extensively by the 7th Group. Cruisers and destroyers threw up a heavy screen of antiaircraft fire, and enemy pursuits attacked so ferociously that only eight heavy bombers fought their way through to bomb the targets. Their runs were carried out at altitudes from 3,000 to 23,00 feet. B-17's at 11,000 and at 14,000 feet scored hits on two cruisers while bombs dropped from 27,00 and 23,00 feet destroyed two destroyers. Two enemy pursuits were shot down, and all American bombers returned to base, although the B-24's were badly damaged from pursuit attack.⁵²

Meanwhile at Hollandia the 61st Squadron, still waiting to try out its dive bombers on enemy shipping, was having shackles and adapters for Dutch bombs adjusted on the planes. By noon, bombs were loaded on five A-24's which were in revetments and on two others which were out in the open. Three-quarters of an hour later, an air raid alarm sounded. Summers and Gelineau, the pilots of the two exposed A-24's,

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155

were ordered to get their planes off the field, and so with their runners, T/Sgt. H. A. Hartman and Pvt. D. S. McKay, they took off. At this point, according to the squadron history, "Galusha called to Summers and asked, 'Shall we go over Bali way and see what we can see?' Summers knowing full well what Galusha was thinking about . . . replied, 'You're the man with a wife and kid, let's go.'" The two flyers carefully flew between two layers of cloud and thus escaped being intercepted by enemy patrols. Arriving over Bali at 11,500 feet, they spotted several Japanese ships and went into a dive, Galusha setting his main-shift sights on a transport and Summers on a cruiser. At 5,000 feet, they released the bombs. Direct hits were scored by 50-kilogram bombs on both ships, but the one 500-kilogram bomb which each carried seemed to fall short. Apparently, however, these bounced against the ships under water, and PSY's reported a hour later that transport and cruiser had been sunk.^{SE}

On the same day, 10 February, the Japanese had struck at Java both from the east and the west. In the west, 50 enemy pursuits roared over Blitzenburg airbase early in the morning, destroying 3 transport planes and 3 Australian or British Hudsons on the ground. Later Jandoeng was hit by another formation of 50 planes. Dutch pursuits took off to intercept, five were shot down, and two B-17's just arrived from the United States were destroyed on the ground. American pursuits had more success against a Japanese formation of bombers escorted by pursuits over . . . , probably the same flight

RESTRICTED
SECURITY INFORMATION~~SECRET~~

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156

which had sent Sailors and Balloons on their mission. Two flights of the 17th Squadron broke up the bombing formation while two other flights intercepted the pursuit escort. None of the bombers was shot down in a curious engagement which ensued, but Lane, Mahoney, Kruzel, and Malone each destroyed a Zero pursuit plane. Three P-40's were lost. Lt. Francis R. Fields was killed, but Gilmore bailed out of his plane successfully, and Blanton escaped in a crash landing.⁵⁴

Japanese air attacks were rapidly winning down the Allied air forces and reducing their striking potential. The extensive raids on Java on 19 February had demonstrated that no Allied base in the Netherlands East Indies could now be considered safe from enemy attack. On the same day, Larain, vital supply point for all operations in the Indies was attacked and its supply depots and dock facilities virtually destroyed. Like the destructive raids during the first days of the Philippine campaign, Japanese success at Larain could be explained by a combination of clever enemy tactics, Allied unpreparedness, and just plain bad luck. The air board at Melbourne had chosen 19 February as the day for a new pursuit unit, the 33d Pursuit Squadron (Provisional), to set out for Java. At 0630 nine P-40's commanded by Lt. Floyd Bell took off from Larain. Before reaching Larain, however, they ran into such fierce storms that they were forced to turn back. When they arrived over an Allied base near Larain, Bell ordered a part of his flight to patrol the airfield. Several of the planes remained at 15,000 feet, therefore, and the remainder landed.⁵⁵

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At this point, a brief warning was received of Japanese aircraft approaching Muro Island, some 50 miles away. Before other details could be ascertained, however, the radio frequency was jammed. Pell, immediately ordering entire formations removed from the P-40's, led the into the air. At approximately 1040, a wave of enemy aircraft consisting of over 70 type-97 dive and medium bombers, protected by some 18 pursuit planes, appeared in the distance and soon were thoroughly engaged in Darwin's crowded harbor, the airbases, and gun emplacements. In quick succession this attack, another was carried out by a second wave of 54 type-97 bombers. The only opposition which the Allies could throw against this onslaught - in force of nearly 150 enemy aircraft were 14 for Pell's pathetically few P-40's. One after another they were shot down. 2d Lts. John G. Glover, Max R. Wicks, Robert F. McMahon, Kurt H. Rice, and William E. Miller bailed out of riddled planes and reached the ground safely. But 2d Lts. Charles W. Hughes, Jack P. Peres, and Elton S. Perry were killed, and Pell himself, after making a number of suicidal attacks, also lost his life. Only 2d Lt. Robert G. Ostreicher succeeded in bringing in a bullet-riddled P-40 to a forced landing.¹⁵

The defeat was crushing. In the engagement from 5 to 10 enemy aircraft were shot down, not one of them being an experienced American pilot. Not in addition to the 9 P-40's destroyed in the air, the Allies lost 3 Hudsons, 2 P-40's, and 1 B-24 on the ground. Furthermore Kall facilities and the Darwin civil airbase were badly hit,

RESTRICTED
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150

all ships were destroyed. A new base was created in the harbor. Three American ships, the transport USS, the merchant-ship USS, and the destroyer USS, together with three or four other Allied ships were sunk, and others were badly damaged. Bombs and armed into wharves, piers, and docks, filling the harbor with debris and rendering it unusable for many months to come. The city itself was almost in a panic. Communications to other areas had been disrupted, homes had been destroyed, and fires in many sections could not be extinguished. The significance of this one destructive raid, however, is more than can be suggested by a mere list of what was destroyed. Perhaps more than any other single event, it hastened the fall of Java. Reinforcements from the Pacific were effectively cut off, and, possibly of even greater importance, it presented Australia with a threat of immediate invasion. Precautionary measures were at once taken by Australian authorities. Britain was ordered to partially evacuate, and a series of airbases seriously constructed by Australian and American engineers at 100-mile intervals inland from Java were ordered destroyed. From this time, the fear of an invasion of Australia was undoubtedly the determining factor in Australian policy, and it undoubtedly hastened a decision, already under consideration, to withdraw all American air elements from their precarious position in Java.⁵⁷

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Chapter VII

THE EVACUATION OF JAVA

The destructive Japanese raid against Darwin on 19 February clearly pointed to the possibility that the Allied forces might be cut off in Java. The American command in the ABDA area had been aware of this danger for several weeks and had been laying plans to avoid such a catastrophe by evacuating their units. In principle, General Wavell concurred with the opinions of his American colleagues on the future of the ABDA command even though he intended to continue the defense of Java with all forces available. He believed that the Dutch would continue to resist as long as there was any possibility of success, that an Allied evacuation would have a corroding effect on Dutch morale, and that both Australia and Burma should be built up as bases for future operations. To him the strengthening of Burma was of particular importance since an Allied operation there might help to relieve enemy pressure on Java.¹

General Brett's views differed only slightly from those expressed by General Wavell. He also favored the continued defense of Java, but he believed that any further efforts there were doomed to failure. From 18 to 20 February he had made a thorough aerial reconnaissance of Java. He returned to Bandoeng convinced that the long, ragged coast line with many strategic points virtually

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SECURITY INFORMATION~~SECRET~~~~CONFIDENTIAL~~

~~SECRET~~ ~~CONFIDENTIAL~~ 180
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undefended could not be held against amphibious tactics which the Japanese had already tested many times. Moreover he did not have complete faith in the Dutch will to resist. He considered their military and naval forces "courageous and loyal," but in view of the efforts being made by Japanese propagandists, he did not trust the native troops, and he feared that the civil authorities might be willing to compromise in order to save their island. With Wavell's views on Burma and Australia, however, the three ranking American officers, Brett, Brereton, and Brady, were in almost complete agreement. Brett had first recommended, on 29 January, to the War Department the creation of a Burma force. In warning that precious time had already been lost he radioed on 18 February: "From this point, it seems clear that the one chance to overcome the odds stacked against us is to build up a rapid striking offensive through Burma and China toward Japan, at the same time building up as the slow but progressive pressure force our bases in Australia."²

Brett did not wait for War Department authorization before preparing for the evacuation of American units from Java. One of the first moves in this direction was Colonel Brady's mission to India during the first week of February. Brady reported that by 20 February American heavy bombers would be able to use Akyab as an operating base and other fields in the vicinity of Toungoo and Nagwe as advance bases. Moreover he stated that the British had guaranteed to furnish pursuit and antiaircraft defense for these bases, and that there was already in Burma a sufficient supply of

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161

bombs and ammunition for 4 days of operations by a heavy bomber squadron. This report encouraged Brett to consider a diversion to India of the B-17's and LB-30's bound for Java by way of the Atlantic route.³

The War Department agreed, in part at least, with Brett's plan for future operations. In view of successes in Burma scored by the Japanese in early February, however, an attempt to establish an American air force there would have been extremely hazardous. It is not surprising, therefore, that the Combined Chiefs of Staff following a directive from the President approved the establishment of an American air force initially to be located in the Bombay-Karachi-Calcutta area rather than in Burma. A part of the aircraft for the new force was to be drawn from those originally allocated to Australia. All heavy bombers, being ferried to the Far East via the African route, for example, were to be held at Bangalore, while at least 80 pursuit planes were to be transferred directly from Australia. Furthermore, General Brett was requested to advise the War Department whether another 80 pursuits allocated to India should be sent from those already in, or en route to, Australia or directly from the United States.⁴

With this relatively specific statement on allocations to India, clarity of thinking on Far Eastern policy at this time seems to have ended. In the first place, General Brett was now apparently devoting attention to plans for the Indian theater almost to the exclusion of Australia. On his own initiative, he directed Brereton to proceed

SECURITY INFORMATION

CONFIDENTIAL

~~CONFIDENTIAL~~
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162

to India, and the latter departed on 22 February. Moreover by 20 February, Brett had decided to "send the mass of all troops" and a total of 160 pursuit planes to India since he considered the equipment still remaining or expected in Australia sufficient to meet "present needs." This conclusion was expressed to the War Department 2 days after the Japanese air victory at Darwin of 19 February and a month after the Japanese had overwhelmed Australian garrisons in New Britain and New Ireland in such force that a further move toward the south was clearly indicated. Brett himself intended to go to Australia only "for temporary duty," and after completing "urgent work" there, he planned to proceed to India.⁵

The British views, which had apparently crystalized since the fall of Singapore, conflicted somewhat with those of Brett. After that defeat, Burma had been transferred from the ABDA command to that of India, and Great Britain had thus lost her immediate interest in the Allied command. She naturally favored the building up of the India theater, and recommended a rather general division of the Far East into a Pacific area under American control and an Indian Ocean area under British control. Wavell himself informed the Combined Chiefs of Staff that he favored a dissolution of ABDACOM rather than its transfer elsewhere. He argued that the "local defense of Java" could be better exercised under the original Dutch organization, and that a dissolution of the command "would be much less damaging to public morale in Java than withdrawal of the headquarters elsewhere." Although Brett was in basic agreement as to

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163

the importance of the India-Burma theater, he opposed the establishment of another command in which American officers would be subordinate to their Allies. He bluntly informed the War Department that "previous and present difficulties" had convinced him that in any organization of a new theater of operations, "American control must be insisted upon from the beginning."⁶

American policy on the future of ABDACOM meanwhile was not too clear. It actually boiled down to an apparent determination to defend the Netherlands East Indies as long as possible, but at the same time to defend them from some point other than Java. The situation was somewhat similar to that of 2 months before when the 14 B-17's based in Australia were supposed to defend the Philippine Islands 1,500 to 2,000 miles away. The Dutch were opposed to attempting the same strategy with respect to Java. Lt. Gov. H. F. Van Mook expressed this view forcefully to General Marshall on 22 February. He asserted that to abandon the ABDA area would irreparably damage the white man's prestige in Asia and would make a defeat by the Japanese much more costly by giving them access to bauxite, nickel, and other strategic materials; and that the ABDA command, in spite of a slow start, could work well if its recommendations about supply could be followed up by speedy action. "For God's sake take the strong and active decisions," he concluded, "and don't stop sending materials [and] men pending deliberations as time factor [is] more pressing than ever."⁷

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SECURITY INFORMATION~~CONFIDENTIAL~~

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164

This appeal had little effect upon Allied policy. Wavell was directed to dissolve ABDACOM, and Brett, in spite of his desire to go to India, was ordered to assume command of American forces in Australia. Officially Allied policy as explained to Lt. Gov. Van Hook was that ABDACOM had been dissolved because "the territory involved in the battle is almost exclusively MMI and it was considered necessary that direction and control be placed in Dutch hands." Van Hook was assured, however, that American land, sea, and air forces would continue to give full support to the Dutch, and that Brett in Australia was taking personal charge of "U. S. troops seeking opportunity to enter the ABDA battle."⁸

Although official policy had been stated, a number of points still remained to be clarified. One question involved Brereton's relationship with the new Indian command. On 21 February, Col. G. V. Haynes was informed that he had been selected to command a heavy bombardment group in India. At that time, however, it was not clear whose command he would come under. It was known that Brett had ordered General Brereton to proceed to India, but General Arnold was uncertain enough as to Brereton's movements to instruct Haynes to report to General Stilwell, in the event that Brereton was not in India. Another question involved the status of the Philippines following the dissolution of ABDACOM. Officially that area had been a part of the ABDA area. With the changed status of its command, therefore, MacArthur would find himself technically under a Dutch commander. The former was assured, however, that

~~RESTRICTED~~

SECURITY INFORMATION

~~RESTRICTED~~~~CONFIDENTIAL~~

165

because of his special situation, he would continue to conduct operations as before. More pressing was a need to determine the role of Australia in Pacific strategy. On this subject, Brett was cautioned to proceed slowly. He was told specifically that he should be governed by an American policy to aid the Dutch in the Indies. Nevertheless the War Department was aware of the threat to Australia and had decided to protect the sea lanes to that point by garrisoning New Caledonia with infantry and antiaircraft and to send additional troops, at least one infantry division, to Australia. So far as air operations were concerned, Australia held a secondary priority, and it was stated that "circumstances" would determine "the extent and nature" of future American air operations in the Southwest Pacific.⁹

ABDACOM was dissolved as of noon 25 February, and the Dutch immediately assumed full authority over the area. General Wavell upon his departure from Java left British officers in charge of all British forces still remaining, and Brett and Brereton, both of whom had left by the 25th, had provided for the eventual evacuation of all American units. Unarmed troops and surplus air force personnel were ordered to leave by boat and transport plane as soon as possible, but there was still a need for Dutch liaison officers among Allied forces. The American air force, moreover, now under the direction of Colonel Eubank, remained to carry out the last attacks on Japanese forces, which now had overrun almost every strategic point in the Netherlands East Indies except those in Java.¹⁰

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SECURITY INFORMATION

RESTRICTED~~SECRET~~

166

The enemy landing at Bali, which was fairly well secured by 20 February, was of particular interest to those who were charged with hampering a Japanese invasion of Java. No more P-40's could be ferried from Darwin so long as the enemy held a secure foothold on Bali, and consequently it was clear that every effort should be made to discourage the enemy there. Following unsuccessful attempts by the Bomber Command on 18 and 19 February, the Allied navy carried out a cruiser and destroyer assault during the night of the 19th and 20th. Naval authorities classed this action as "successful" although one Dutch destroyer was sunk and there were no confirmed enemy losses. Three or four hours after the Allied naval forces had withdrawn, the Bomber Command resumed the attack with 7th and 19th Group heavies performing three strikes which seriously damaged a cruiser and probably sank a transport. All aircraft involved, 10 B-17's and 3 LB-30's, returned to their bases.¹¹

The heavy bombers which carried out these attacks dropped their bombs from an altitude of more than 13,000 feet. More successful was a dive-bombing attack performed by the A-24's of the 91st Squadron. This mission was particularly noteworthy in that it was the first in which American bombers were escorted by pursuit planes in the Java area. At 0614, 16 P-40's led by Major Sprague took off from Ngoro and headed for Singosari. A half hour later 7 A-24's, each loaded with 1 x 300- and 2 x 50-kilogram bombs, had joined the P-40's. Major Backus, with Ferguson and Launder as wingmen, led one flight: Galusha led the other with Tubb and Hambaugh on the

RESTRICTED
SECURITY INFORMATION~~CONFIDENTIAL~~

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167

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flanks; and Summers brought up the rear. Arriving over the Strait of Lombok at 12,000 feet, they spotted six naval vessels, and each A-24 went into a dive, releasing bombs at from 2,000 to 4,000 feet. Backus scored three hits amidships on a cruiser; Galusha and Hambaugh scored hits with each of their 50-kilogram and near misses with the 300-kilogram bombs. Summers, who was at first undecided as to his target, "fiddled around and dived on one of the biggest ships he claimed he'd ever seen," scoring two hits.¹²

Meanwhile enemy pursuits had swarmed off Den Pasar airfield to attack the American dive bombers and pursuits. They eventually succeeded in breaking up the pursuit formation, but the P-40's prevented an enemy attack upon the A-24's. In a furious encounter, 3 Zeros were destroyed in the air and another on the ground. Five P-40's were lost, 1 cracked up on landing at Ngoro, 2 others crashed on a beach owing to a lack of fuel, and 2 were shot down with their pilots, Gallienne, originally of the 20th Pursuit Squadron (Provisional), and Sprague, able squadron commander, who had just that day received a promotion to lieutenant colonel.¹³

Five of the seven A-24's returned safely to Singosari. Heavy antiaircraft fire over the target area was probably responsible for the loss of the other two. One of these failed to come out of its dive and carried Lt. D. B. Tubb and his gunner to their death. Lt. R. E. Launder's plane was so badly damaged that he was forced to crash-land approximately 8 miles from a Japanese outpost. After 2 days of walking he and his gunner, Sgt. Irving W. Inenicka

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SECURITY INFORMATION

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168

~~CONFIDENTIAL~~ ~~SECRET~~

succeeded in reaching a fisherman's village in northwest Bali. The Dutch inhabitants and natives were friendly and hospitable, giving them bread, coconut juice, bananas, tea, an occasional bottle of warm beer, and even bicycles to speed them on their way. Finally they acquired an outrigger canoe, and with the help of two natives paddled for 13 hours across the strait to Java. By the late evening of 23 February, they had returned to Singosari.¹⁴

The Japanese lost no time in striking back after the American raids of 20 February. Five hours after the A-24's had landed, nine pursuits appeared over Singosari. Interceptor Control Headquarters had identified them as friendly, so normal routine was continuing on the field. A-24's were in revetments, but a number of B-17's were in the open, ready to take off in case of an alert. Many of the crews were occupied, as was that of Lt. John A. Rouse, in unloading equipment from B-17's. Within 5 minutes of the sighting of the so-called friendly pursuits, Rouse heard the "pop, pop, pop sound of exploding cannon shells." The friendly planes were Japs. They had turned in the clouds, cut out their motors, and glided in for an attack. Rouse and his crew jumped out of their B-17 and piled into a nearby slit trench, one of the men just escaping from the radio compartment as "a stream of bullets came down through the center" of it. Three B-17's were burned to the ground, and two others were badly damaged.¹⁵

Following this air raid on Singosari, the heavy bombers of Colonel Euban's command were fighting what amounted to a rear-guard

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~~CONFIDENTIAL~~ ~~RESTRICTED~~

163

action. Enemy air raids occurred daily, and more Allied planes were destroyed. On 22 February, for example, 1 B-30 was burned to the ground at Jogjakarta and four B-17D's at Pasirpan. Moreover planes still officially in commission continued to suffer from a lack of spare parts and inadequate maintenance. These difficulties, together with the rains and fogs of February, caused the complete failure of 11 missions carried out from 21 to 23 February by a total of 31 heavy bombers. During this same period only five missions of 17 heavies did reach the target. One on 22 February knocked out a number of grounded aircraft and a hangar at Den Pasar airport on Bali; another 2 days later "definitely sank" two transports at Macassar; and a third sank one transport and damaged another off the north coast of Java on 23 February.¹⁶

The 17th Pursuit Squadron was engaged in a futile attempt to protect Allied bases. Superior forces of enemy bombers and pursuits frequently flying at 30,000 feet, too high for battered P-40's, continued their daily assaults. Nevertheless tired American pilots maintained almost a constant patrol. On 21 February although four enemy pursuits were destroyed and two bombers probably destroyed, Lts. George W. Hyner and Wallace J. Hodge were shot down and killed. In the next four days, three more enemy bombers and three fighters were destroyed, but on 23 February Lt. Gerald McCallum, acting squadron commander, was forced to bail out of his plane and was machine-gunned to death as he parachuted to the ground. At the end of the operations of 23 February, only 13 P-40's were in commission. Six Brewster Buffaloes and 6 Hurricanes, flown by Dutch pilots, had joined the

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170

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Americans, but these lacked ammunition and hydraulic fluid and could not be flown until 1 March.¹⁷

At the request of the Dutch, one last attempt was made to reinforce the battered Interceptor Command. General Brett had at first intended to send all available P-40's to the Indian theater. This was still his intention when a convoy, containing 52 P-40's assembled on the flight deck of the seaplane tender Langley and 27 crated in the hold of the Seawitch left the harbor at Fremantle, Australia, on 22 February. Shortly after sailing, the Langley's commander received orders to leave the convoy and proceed to Tjilatjap, Java. According to Brett, he had acquiesced in this change of orders only after Admiral Helfrich had given assurances that the Langley would be "suitably and properly protected." The Seawitch received similar orders, but left the convoy considerably later than the Langley. Early in the morning of 27 February, the two American destroyers Edsall and Whipple met the Langley to serve as an escort. At 0900, an enemy aircraft spotted the 3 ships and within 3 hours, 9 twin-engine bombers escorted by pursuit planes had begun an attack. On the third bombing run, the Langley "shuddered under the impact of five direct hits and three near hits," and sank at a point approximately 74 miles south of its destination. All the precious P-40's, of course, were lost, but of the personnel only 6 were killed and 5 missing. The survivors were picked up by the Edsall and Whipple and transferred on 1 March to the tanker Pecos. The Pecos then headed for Fremantle carrying a total of approximately 670 men.

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171

It had no more than started, however, when enemy planes appeared overhead and carried out a series of bombing attacks. In the middle of the afternoon, after a furious battle in which every weapon available was fired at the enemy, the Pecos also went down. The Whipple had received distress signals but arrived on the scene in time to pick up no more than 220 survivors.¹⁸

It is doubtful if the arrival of the 32 P-40's aboard the Dangle would have retarded the Japanese advance. The fate of these planes would probably have been the same as those aboard the Seawitch which did arrive at Tjilatjap safely, but which was little more than unloaded before the Japanese arrived.¹⁹ By 27 February, Java was an island beleaguered by air and sea. Enemy amphibious forces were assembling to the northwest and the northeast, the last apparently for a main effort. On 25 February, a reconnaissance plane had reported that approximately 80 ships were moving south through Macassar Strait. Early in the morning of the 27th, the V Bomber Command learned of a formation of 11 ships off the north coast of Java, and was told to carry out attacks with "all available heavy bombers and dive bombers." Shortly thereafter the order was countermanded because "it was believed" the ships sighted were friendly. Three B-17's in two flights, however, had already reached the target area and had dropped bombs. Fortunately, if the ships were friendly, the bombing was not particularly accurate. More successful was an effort of the 91st Squadron made in the middle of the afternoon. At that time three A-24's escorted by two flights of P-40's struck at Japanese

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172

shipping off the north coast of Java. The dive-bomber pilots (Galusha, Summers, and Ferguson), releasing their bombs from an altitude of from 3,000 to 4,000 feet, scored hits, and the pursuit escort reported that these were sufficient to sink one transport.²⁰

These operations, although carried out by courageous pilots and with all available bombers, were insignificant when compared with those of the powerful Japanese task forces now converging on Java. Only the Allied naval forces remained to offer any effective resistance, and these forces had been weakened by losses and damage in recent action and by transfer of several British units to the Indian Ocean area. Nevertheless on 26 February, Admiral Helfrich ordered a determined assault, and that evening a striking force, consisting of the Dutch light cruisers De Ruyter and Java, the American heavy cruiser Houston, the British heavy cruiser Exeter, the Australian light cruiser Perth, the Dutch destroyers Kortenaer and Mitte de With, the British destroyers Jupiter, Electra, and Encounter, and the American four-stackers J. D. Edwards, Alden, Ford, Pope, and Paul Jones, moved out of Soerabaja naval base. This force of 5 cruisers and 10 destroyers threw itself against a convoy consisting of "39 to 45 transports, escorted by 2 or 3 cruisers and 8 to 12 destroyers" and a covering force of 2 battleships (or large cruisers), from 4 to 7 cruisers, and 13 destroyers.²¹

In the late afternoon of 27 February, the battle was joined. For almost 24 hours it continued with shell fire and torpedo attack carried out in part during a night illuminated by star shells and

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173

by flares dropped from Japanese planes. Two or three Japanese cruisers and at least an equal number of destroyers were hit and several probably sunk. But the Allied force suffered a crushing defeat. It was not able to reach the Japanese transports. The De Ruyter, Java, Kortenaer, Electra, and Jupiter were sunk. The remainder of the ships were not only damaged, several seriously, but their ammunition reserve was badly depleted. Of the five American destroyers, for example, all but the Pope had exhausted their supply of torpedoes.²²

In spite of this defeat, Admiral Helfrich still planned to attempt another strike and ordered the remnants of his fleet to assemble at Tjilatjap. The Exeter accompanied by the Encounter and the Pope set out for that point on the evening of 28 February. They never reached their destination. The last report from them received at 1200 on 1 March stated simply that three enemy cruisers were approaching. The Houston, Perth, and Evertsen in like manner simply disappeared after a rather vague report of a sea battle in the Java Sea. Of the Allied ships which had fought the previous days' decisive battle, only four American destroyers, Alden, Ford, Paul Jones, and J. D. Edwards succeeded in fighting their way out of the East Indies.²³

Meanwhile the air force was completing its evacuation. On 23 February, five officers (Bridges, Tagan, Schwanbeck, Pease, and Rouse) had been sent to Broome, Australia, to organize an evacuation center

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174

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for Java refugees. Broome proved to be a mosquito-infested and almost deserted town. The Australian inhabitants had taken to the bush to escape Japanese raids, and its large prewar Japanese population had been interned. Fortunately the town, although completely isolated except for sea and air transport, had fairly adequate housing and mess facilities. By 25 February flying boats, DC-3's and other transport planes, together with B-17's, LB-30's, and two or three transport B-24's had begun to bring in evacuees. In Java everything that would fly was being loaded with men, women, and children. One B-17, for example, which had been classed as irreparable was put in flying condition by T/Sgt. Harry McRayes and several Dutch mechanics. With McRayes as co-pilot and a civilian who had never before flown a B-17 as a pilot the plane made a successful night flight on three engines to Australia. Boats of every variety also aided in the evacuation and escaped with an unknown number of Americans, Australians, and Dutch.²⁴

The need for speed was becoming more and more evident. By the night of 28 February, the Japanese had landed at two points on the north Java coast. On the following day, the last mission of importance from Java bases was carried out by the 17th Squadron, reinforced by Brewsters and Hurricanes, against one of the enemy landings. At 0530 all available pursuits, 9 P-40's, 6 Hurricanes, and 4 Brewsters headed toward the north Java shore where about 30 transports were anchored, and materiel and troops were still being put ashore in small craft. Guns from the ships and the shore

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176

The B-17's and LB-30's proceeded to what was supposed to be the safety of Broome. That town had become a haven for most of those who had escaped. The danger of air attack, however, existed even there, and transport pilots were straining their endurance by ferrying one batch of refugees after another further down the Australian coast to Perth. During the night of 2 March, a Japanese reconnaissance plane made a leisurely survey of the completely defenseless Broome. Realizing that this probably indicated an early enemy attack, American officers warned all flying boats and other aircraft to leave the town before 1000 of 3 March. During the morning the airfield was crowded with men loading planes; crews were preparing others for the take-off; two Dutch flying boats loaded with Dutch evacuees had landed on the water; and others were waiting to leave Perth. At 1000 a crowded B-24 transport piloted by Lt. Edson E. Kester cleared the field. It had climbed to 300 or 400 feet when 9 to 13 Japanese pursuit planes swept in over the harbor. Machine-gun bullets punctured the gas tanks of the helpless B-24. It crashed into the sea, breaking in two and throwing its more than 20 passengers into the water. All except one enlisted man were drowned or devoured by sharks. The Japanese turned their guns on the airfield and the harbor. The personnel on the airfield ran for cover in the low scrub bush near-by, and watched every plane on the field either explode or burn to the ground. Those in the flying boats in the harbor could not run for cover. The Japanese riddled these planes, most of which were packed with women and children.

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175

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batteries put up a heavy screen of antiaircraft fire, but all the pursuits dived through a crisscross of bullets. They sank a number of small boats and strafed the shore batteries. The AA took its toll. Caldwell crashed into the sea; Reagan was last seen vainly attempting to land his blazing P-40, and Adkins was forced to bail out. Of the three, only the latter escaped after landing some 300 yards from a Japanese position.²⁵

By 3 March the evacuation was virtually completed. The pursuits which had returned from their low-level mission on the first had been so badly shot up that there was little hope of being able to repair them. On the same day, the Japanese prevented any attempt to put the planes into the air again, by sending two Zeros over to strafe the field which had hitherto escaped attack. Every American plane was effectively riddled by accurate Japanese machine gunners. Thus ended the operations of the 17th Pursuit Squadron (Provisional). Its surviving personnel made their way to Jogjakarta, the last base in Java remaining to the Allies, and by 1730 that evening had been loaded into B-17's and sent to Broome. Twenty-four hours later, 260 officers and men were still awaiting evacuation. Five B-17's and 3 LB-30's were available and by loading 35 persons in each LB-30 and 31 in each B-17 all could be evacuated. Just before midnight the last plane had taken off. The Japs were 18 miles away, and the Dutch were waiting for the plane to leave before exploding demolition charges.²⁶

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177

The only opposition to the low-flying Jap aircraft came from a .30-caliber machine gun which a Dutch pilot had removed from a plane. With this make-shift weapon, one plane was probably shot down. The enemy at the same time had destroyed 12 flying boats, 2 B-17's, 2 B-24's, 2 Hudsons, and had killed at least 45 Dutch civilians and 30 American airmen.²⁷

Thus ended the Java campaign in a terrible raid quite characteristic of the Allied 2-month fight against impossible odds. Actually the Dutch ground forces continued resistance for an indefinite period, although all communications with these troops ceased within a week. Some Americans were lost with them. Many members of the field artillery battalion who had performed the unfamiliar task of servicing heavy bombers, for example, could not be evacuated. The Japanese victory in Java had effectively split the Allied forces in the Far East. It had cut off the trickle of reinforcements over the African ferry route, and even an American attempt to establish a new route from Africa to Australia via Coetivy Island, Diego Garcia Island, and the Cocos Islands had to be abandoned. After 1 March Australia, for the time being at least, became virtually a separate theater. The Japanese were converging on it from the northeast and the northwest. Already they were hammering at northern Australia and New Guinea from the air. Within a few days they would land at Lae and Salamaua. In the vast area north of New Guinea and between the Solomon Islands and China, only in the Philippines did organized Allied resistance continue.²⁸

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Chapter VIII

A GALLANT DEFEAT

By the first of March 1942, Japanese military and naval power had accomplished one of its primary objectives, the conquest of the rich resources of the Netherlands East Indies. They had done this by throwing overwhelming forces against strategic points according to a carefully conceived plan. They had moved forward by leaps of approximately 400 miles, preceded first by submarine and flying boat reconnaissance, by "light density" air raids with type-96 "heavy" bombers from nearest land bases usually without pursuit escort, and finally by heavier bombing raids escorted by carrier or shore-based pursuit planes. The immediate objective of the landing parties was to seize an airdrome upon which to base pursuits. Within a week, however, through the use of native labor the Japs usually had repaired and extended the pursuit strips to such an extent that they could be used by heavy bombers.¹

These tactics closely resembled those later employed by American amphibious forces in operations of the Central and Southwest Pacific. When Admiral Nimitz and General MacArthur began their conquests of strategic points in a move back to the Philippines and toward Japan and the China coast, they by-passed numerous enemy strongholds with the intention of permitting the garrisons to wither and die far behind the forward areas. MacArthur was the victim of a similar

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179

type of campaign in the first quarter of 1942. His air force had been defeated in the first day of the war and within 2 weeks forced to evacuate forward bases. His principal land forces had been contained by a naval and air blockade and by the Japanese ground troops. Then the tide of war had swept by him, isolating his troops, leaving them victims of malnutrition, disease, and constant air and land attacks.

When the Far East headquarters had been evacuated to Australia late in December, it had been hoped that supplies from there would flow to the forces in the Philippines. Furthermore the decision to send American units to the Netherlands East Indies had been made in part to protect air and sea lanes to the north. The Japanese conquest of Davao on 20 December followed by enemy movement south through Celebes and Borneo soon disrupted any such plans. Attempts were made to obtain blockade runners, a request even being made of Generalissimo Chiang Kai-shek to furnish small boats to run from the China coast to Luzon. Little success was achieved. Small ship owners in the Indies and New Guinea who were urged to make the perilous run to the Philippines demanded cash in payment rather than checks on American funds in Melbourne banks. This resulted in delay. Seven ships were finally dispatched from Australia; only three reached Cebu. Of other vessels which attempted to slip through the blockade, at least 15 were either sunk or captured. Submarines made several successful runs, and bombers ferried in some medical supplies and ammunition and evacuated personnel from Mindanao. But during the entire period from 7 December 1941 until the capture of Corregidor

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180

only 3 aircraft (P-40's), which reached the Philippines in March, augmented the few pursuit planes left in the Interceptor Command.²

The Interceptor Command had become for all practical purposes the entire air force in the Philippines. After General Brereton's departure on 24 December 1941, Col. Harold H. George, the V Interceptor commander and promoted to brigadier general on 30 January 1942, had in fact become the commander of all air force personnel. By this time, the relationship of the air force in the Philippines to that in the East Indies was obviously vague since each was carrying on its operations according to the exigencies of the moment. On paper, the situation became even more confused following a recommendation by General Brett in January that the Far East Air Force should be redesignated the Fifth Air Force. By 2 February General Arnold had concurred in this recommendation, and 3 days later the adjutant general officially authorized such a change. This did not affect air units in Java, however, as the adjutant general's authorization had stated that the redesignation did not change "the present assignment of units." At that time, the FEAF was still officially assigned to the Philippine Islands, and the redesignation apparently did not apply to the units in Java or to those in Australia. Furthermore those in the Philippines either did not know about the change, or did not give official attention to it. The new organization, therefore, existed only on paper until 3 September 1942, when the Fifth Air Force was actually constituted and Maj. Gen. George C. Kenney put in command.³

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181

This paper reorganization accomplished in Washington meant little to the Luzon forces which by 1 January had retreated to Bataan. What probably interested the air force personnel most was whether they would be assigned to infantry units or retained by the Interceptor Command to fly the dozen or more remaining P-40's. From the middle of January, elements of all squadrons, armed with Bren Gun Carriers, tommy guns, and machine guns, participated in ground fighting. Pilots led ground crews against enemy beach positions or spearheaded an infantry advance. The dwindling number of P-40's were also active until the end. They were constantly in the air serving eyes for MacArthur in performing reconnaissance missions, occasionally patrolling the forward areas, strafing Japanese transport, communications centers, and landing barges. During the night of 26-27 January, for example, 7 P-40's strafed Nichols and Nielson fields and peppered grounded planes with fragmentation bombs. One P-40 crashed on the take-off, but intelligence reports indicated that over 30 enemy aircraft were destroyed on the ground, and that other damage and heavy casualties had been inflicted upon the enemy. On 2 March, four P-40's performed what General Arnold called "the rabbit and hat trick of a famous magician." These P-40's had been equipped with an attachment which would hold a 500-pound bomb, designed and mounted by WO Jack E. Bay and a number of enlisted men of the 17th Squadron. Led by Capt. William E. Dyess, the four pilots dropped the bombs with precision. Although one P-40 was shot down, and the other three were forced to crash-land, 2 and

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182

possibly 3 ships of 8,000, 10,000, and 12,000 tons were sunk and others small boats damaged.⁴

As the Bataan campaign continued, the American troops, air and ground alike, became more and more aware that they were virtually cut off from escape. From the beginning they had been on half rations, with two meals a day. During February, for example, members of the 21st and 34th Squadrons who were being used as infantry received about 10 ounces of rice a day per person, and about twice a week, "the organization got a quarter of a horse or mule." Gradually malnutrition, dysentery, and malaria wore down the troops and became more of a weakening factor than enemy attacks. The Japanese blockade was growing tighter, and only speedy, small boats could slip through it. Consequently a few aircraft which were useless for combat were cherished for transport purposes. P-40's performed an occasional mission carrying medical supplies between Mindanao and Bataan, dropping them to an isolated company, or carrying passengers crowded into the baggage compartment. Two navy PBV's also performed similar missions, but most of the inter-island transportation was carried out by what was referred to as the "Bamboo Fleet." A motley collection of unarmed craft, it consisted of three civil aircraft, "a Duck, a Balanca, and a Fairchild," together with two Beechcraft, a Waco, and two decrepit P-35's. Until these aircraft were destroyed they continued to shuttle between Mindanao and Bataan or Corregidor, carrying in medical supplies and returning with personnel. The Waco was shot down and all its passengers killed near Del Monte; the

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183

Duck was forced down and destroyed by enemy action as were the P-35's; and by the time Davao fell all but the Bellanca had either worn out or had been dispatched to Australia. The Bellanca, flown by Maj. William R. Bradford, made its last flight carrying quinine to Corregidor. It reached its destination successfully but crashed in attempting a take-off from "the Rock's" small landing field.⁵

By the first week in January, General MacArthur had not yet foreseen that his troops would be dependent upon such unreliable means of obtaining vital supplies. He had believed that strong American forces could be established in Mindanao, that supplies could be pushed through the blockade in ships, and that bombardment missions from the south could eliminate enemy air strength in Mindanao. As one step in preparation for this counterblow, he issued a general order early in January directing that airfields be built throughout the entire Philippine islands "with all haste." An emergency program was therefore begun under the supervision of Major Fernando of the Philippine Army and Major Elsmore of the Air Base Group. Air base personnel were scattered throughout the archipelago to request the cooperation of local native leaders and to supervise actual construction work. By 1 March, there were at least 7 all-weather landing fields good for all types of aircraft on Mindanao, 3 on Cebu, 1 on Panay, 1 on Bohol, and 4 on Negros. At the same time there were 9 fields on Mindanao, 3 on Negros, 1 on Panay, and 1 on Leyte suitable for pursuit aircraft only, and numerous others which were recommended for use only in dry weather or in case of emergency.⁶

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ADULT DEVELOPMENT IN THE SOUTHERN PHILIPPINES

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184

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Probably the most extensive construction work was accomplished on Mindanao. Major Elmore subsequently listed 42 fields as having been completed between the opening of hostilities and 1 April 1942. Connected with Del Monte alone there were 8 fields, one of which had its operations headquarters in a tunnel driven 65 feet into an adjacent mountain side. Another Del Monte field had a 3,000-foot runway leading directly into a tunnel approximately 40 feet wide and 100 feet deep in which 5 P-40's could be parked. Sub-bases commanded by air officers had also been constructed at strategic points on the island, at Malabang in the west, Maramag and Valencia in the central part, and Anakin in the northeast. In addition a sea plane base was established at Lake Lanao shortly after war broke out, from which PBY's operated carrying in supplies and evacuating nurses and other personnel almost until the surrender of Corregidor.⁷

MacArthur's desire to build up sufficient forces for a counter-attack could not succeed. He was apparently unaware of the weakness of American air and naval forces in the Pacific. He had requested two or three squadrons of pursuits from General Wavell late in January, and he was surprised to learn that at that time there were only 16 P-40's in the ABDA area. By the first week of February he still had some hopes of bringing aircraft near to the Philippines on a carrier. On the other hand, if it were impossible to provide a carrier, he suggested that either A-24's with auxiliary fuel tanks attached or two or three squadrons of P-39's and A-20's "which have

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185

the range" should be flown in from the south. Other messages to the War Department reflected a varying optimism on the prospect of continuing to hold the Philippines. On 13 January, encouraged by the effect of accurate American artillery fire, he stated that "there is every indication that for the present I have drawn the fangs of the enemy attack." Ten days later, however, he was discouraged over heavy losses which had amounted to approximately 35 per cent of his entire force. At this time he radioed: "I wish to take this opportunity while the army still exists and I am in command to pay my tribute to the magnificent service it has rendered. No troops have ever done so much with so little. I bequeath to you the charge that their fame and glory be clearly recorded by their countrymen. In case of my death I recommend that my chief of staff General Sutherland be designated as my successor." Yet a month later, he believed that the enemy had been "badly mauled" on Bataan, and he radioed: "I may have gained the respite I so desperately need."⁸

Whatever MacArthur's hopes might have been for the outcome of the Philippine campaign, the War Department had decided by February 1943 that he should be withdrawn to Australia. To evacuate MacArthur and his staff, General Brett was instructed to choose the three best B-17's under his control. Brett selected the aircraft crews from a new unit which had recently arrived in the theater, soon to be redesignated as the 435th Bombardment Squadron of the 19th Group. Crews of this unit, although they had been in Australia only since 19 February, had already experienced many combat missions. They had

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186

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flown 168 missions out of Hawaii during a period of 2 months, 12 missions from the Fijis in 12 days, and had participated both in the first American bombing raid against Rabaul on 23 February and on 10 March in a successful raid coordinated with two aircraft carrier groups against Japanese naval forces at Lae and Salamaua.

General MacArthur and his party after a hazardous trip of over 600 miles in a PT boat had arrived at Mindanao during the second week in March. By the 17th he had reached the Australian coast. Three B-17's had flown the unfamiliar trip of some 1,500 miles to Del Monte, had paused there only long enough to unload a cargo of medical supplies and to take on their passengers, and favored by excellent weather had made the return flight without mishap. MacArthur's arrival in Australia indicated that a new phase of the war in the Far East had begun. His instructions from the War Department contained the familiar phrases of checking the enemy's advances along the Malay Barrier and of maintaining the American position in the Philippines, but it was daily becoming clearer that these were missions to be accomplished in the relatively distant future. The immediate aims were to hold Australia and to protect the sea and air lines of communication to the Southwest Pacific.⁹

Although some aerial activity continued during March and April in the Philippines, the efforts of organized air units in the Southwest Pacific during those months were devoted to the defense of Australia.¹⁰ It can be said, therefore, that with the evacuation

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187

of General MacArthur and General George organized air action in the Philippine and Netherlands East Indies campaigns had ended.

The first four months of the war in the Pacific were a tragic experience, tragic not only for those who actually fought in the campaigns but also for the American people who had indulged in the pious hope that by limiting armaments, a nation could avoid war. This feeling had been reflected in the failure to maintain modern defenses in the Philippine Islands. Not until 1941 was a serious program of modernizing that outpost begun. Prior to then, a few professional soldiers had recognized its importance in American Far Eastern policy, but not until legislation such as the extension of the Selective Service Act had been accepted in the spring and summer of 1941 could an adequate Philippine defense program be undertaken. Even then commitments to America's prospective Allies and to defense areas in the Western Hemisphere resulted in further delays. By the fall of 1941, however, some modern equipment including bombers and pursuit planes had begun to flow to the Philippines. This coincided with a change in basic war plans which had previously envisaged an entry into the European war upon the side of the Allies and the maintenance of a "strategic defensive" in the Pacific. With the growing emphasis on air power, however, the plan was revised to permit offensive air action in furtherance of the strategic defensive.

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RESTRICTED**SECRET**

[REDACTED] 188

This growing realization of the importance of the Far East was reflected in a change in the direction of allocations. Requests for additional military supplies and personnel came with more urgency from the Philippine Department in 1941, particularly after General MacArthur's appointment to the American command. He requested especially more aircraft, more aircraft warning equipment, and more antiaircraft guns. The War Department responded by giving his command the highest priority in aircraft and commenced a program of ferrying heavy bombers and of shipping pursuits as fast as they came off the production lines and could be prepared for shipment. War Department policy with regard to aircraft warning facilities is not so clear. MacArthur had urgently requested the equipment. General Spaatz had supported such a request but had complained that all radar sets were being sent to the coast artillery, and urged that the air forces acquire some of this vital equipment. The net result was that on 7 December one primitive radar set was in operation in the entire Philippine Archipelago. Antiaircraft defenses proved to be equally unsatisfactory. Maj. Gen. J. A. Green had reported on 5 November that the AA in the Philippines was inadequate. Two weeks later the War Department had decided to send MacArthur 50 per cent of the 3-inch guns and 100 per cent of the searchlights which he had previously requested. On 27 November, the latter stated that additional antiaircraft was needed and announced that he had prepared a detailed plan for its use. This indicates a realization of the need for more antiaircraft guns, and yet on 7 December there

RESTRICTED

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189

~~RESTRICTED~~

were 3-inch and 37-mm. guns still in crates in the Philippine Ordnance Depot.¹¹

The inadequacy of antiaircraft defense and aircraft warning facilities suggests negligence on the part of officials either in the War Department or in the Philippines. In several other respects, too, there were flaws in the defenses which it is difficult to explain. For example, there does not seem to have been complete cooperation between USAFFE and the Far Eastern Fleet. Admiral Hart has asserted that efforts on his part to arrange for joint operations of Army and Navy aircraft "met with a decided rebuff" from Army authorities. B-17's had been in the area since September and Patwing 10 for nearly that long, and yet the joint patrol was not established until 7 days before the outbreak of war. At the same time, it is difficult to find a completely satisfactory explanation for the limited number of air bases. General MacArthur had requested and received over ten million dollars specifically for airfield construction. On 7 December, however, there were only two heavy bombardment bases and half a dozen others suitable for pursuits. There is evidence that an enemy attack was not expected until March or April, and that the program of airfield construction was influenced by this assumption. Such a belief would partially explain why construction of runways before the war took several months while the same type of work after the outbreak of war could be accomplished in as many weeks.¹²

~~RESTRICTED~~~~SECURITY INFORMATION~~~~CONFIDENTIAL~~

RESTRICTED

190

It is difficult to believe, however, that General MacArthur was not aware of the imminent danger of Japanese attack. Japanese official utterances had been growing more belligerent. By December the War Department had warned of the probability of an early attack; the air force had been alerted for a month; and Japanese planes had been reconnoitering the Manila area for several days. Furthermore USAF had learned of the attack on Pearl Harbor approximately 5 hours before the first bombs were dropped on Philippine soil. In spite of this warning, almost half the combat aircraft strength in Luzon was destroyed on the first day of the war. This was not the fault of the Far East Air Force. It was the result of a combination of fifth-column activity, excellent Japanese tactics, inadequate antiaircraft and aircraft warning equipment, and inexperience of some of the American pilots. Those B-17's which had not been dispatched for safety to Del Monte were either kept in the air or dispersed on Clark Field, and pursuit squadrons covered strategic points on southern Luzon. The Japanese selected a moment to strike when the aircraft warning system had broken down, probably through the efforts of fifth columnists, when the B-17's had returned to base, when the American pursuits in the air were almost out of gas, and when those on the ground were not yet refueled. Antiaircraft kept enemy bombers fairly high, but did not prevent Jap pursuits from sweeping in and riddling grounded planes whether dispersed or not.

Two questions concerning this attack, however, cannot as yet be satisfactorily answered. In the first place, why did General

RESTRICTED
SECURITY INFORMATION

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191

MacArthur fail to consider the Japanese attack on Pearl Harbor justification for an attack by the B-17's on Formosa? If the mission planned by General Brereton had been carried out, the B-17's would not have been on the ground when the enemy strafed Clark Field. Secondly, what is the explanation for an almost complete failure of American counterintelligence in the Philippines? Radio sets located in some cases on American bases were sending information to the enemy; flares were lighted when American aircraft took off; and flimsy houses were even fired to illuminate targets for Japanese bombers overhead.

Even if certain conditions in the Philippines merit some criticism, there is no doubt that the American forces fought with courage and generally with good effect. Pursuit pilots flew their planes, many of which were inferior, against overwhelming formations of enemy bombers and pursuits. They continued to fly them knowing that there was little chance for replacement, and when little chance for escape remained. They even objected to the order which directed that remaining planes should be preserved for reconnaissance, asserting that the "hunting" was just getting good. In spite of the early restriction on combat flying, they destroyed between 100 and 120 enemy aircraft. Handicapped by vulnerable bases and by the early loss of half their strength, the Bomber Command played a less important part in the Philippine campaign. Nevertheless its crews flew planes thousands of miles, used primitive fields, and dropped bombs on targets usually guarded both by antiaircraft and by pursuit planes.

~~RESTRICTED~~
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~~RESTRICTED~~

192

These bombing attacks, however, were only moderately successful. During the month of December, the 19th Group carried out at least 13 bombing missions using a total of 39 B-17's. It dropped 43.3 tons of bombs, probably sank 1 transport, damaged 2 others and a battleship, and hit the docks and airport at Davao on 2 different missions. During these attacks 1 enemy pursuit was shot down and 6 others probably destroyed. Fourteen of the original 35 B-17's escaped from the Philippines. Seventeen or 18 had been destroyed on the ground during the early Japanese air raids and 3 later by enemy action.¹³

The evacuation of the heavy bombers from the Philippines together with that of FEAF headquarters was considered only a temporary withdrawal, for it was believed that a reservoir of supplies could be built up in Australia from which Allied forces would be in a position to launch a counterattack. With that plan in mind, USAFIA was established. It was soon discovered, however, that there had been a complete misconception as to the immediate possibilities of effective American operations from Australia. The principal obstacle was one of geography, the distance of Australia from the United States and the distances separating the Australian ports from the combat areas. But other factors were of almost equal importance. The primitive transportation, communications, and maintenance facilities, the lack of an adequate labor supply, the continuation of a peacetime method of loading convoys, and the failure to send items necessary for the operations of aircraft explain why the USAFIA did not succeed in providing supplies for Philippine operations in 1942.

~~RESTRICTED~~~~CONFIDENTIAL~~

~~RESTRICTED~~~~CONFIDENTIAL~~ 193
~~CONFIDENTIAL~~

The growing realization that the Philippines could not be reinforced together with the beginning of a Japanese advance into the East Indies changed the direction of American operations. The defense of the Indies was of interest to the British, Australians, and Dutch as well as to the Americans. A unified command was an obvious necessity to coordinate the land, sea, and air forces of these four countries. The ABDA command, as established at the conference between Churchill and Roosevelt in December 1941 and January 1942, provided the framework for cooperative effort. It was a rather cumbersome organization, however, and required weeks of conferences and spade work before it could begin to assume any responsibility for operations. Furthermore, the functions of several key officers in the theater were never completely understood either by themselves or by higher authority outside of the theater. Actually this confusion in organization probably had little effect upon the operations of American aircraft in the East Indies. The rapid Japanese advance prevented ABDACOM's being effectively tested. With only very general supervision from the higher echelons, American pursuits and bombers carried out missions as directed by their immediate commander. The ABDA command was significant principally in the precedent it established for cooperative effort by the United Nations.

Other problems which confronted American air units in the ABDA area were far more bothersome than the status of the high command. The lack of depot facilities and spare parts resulted in a rapid

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1994

deterioration of combat planes. The small number of trained maintenance personnel (who worked from 16 to 20 hours a day) made even the most elementary servicing difficult, and doubled the tasks of combat crews. Airfields, though numerous and satisfactory for dry weather, were generally of sod and dangerous after heavy rains. Furthermore, the fields were almost completely undefended. Modern aircraft warning equipment was non-existent, and only a few machine guns defended the American air bases. Owing to the lack of proper aircraft warning facilities and ground defenses, a tremendous burden was imposed upon the Interceptor Command. American pursuit had the responsibility of defending much of the island of Java against enemy bombing attack. To perform this mission, there were rarely more than 20 P-40's in commission. Of at least 130 pursuit aircraft which set out from Australia during January and February, no more than 40 reached their destination in Java. Thirty-two were lost when the Langley was sunk; 27 others which had arrived at Tjilatjap on the Seawitch were probably destroyed to prevent the Japs from capturing them; and the remainder either crashed or were lost in combat at some time during the flight from Darwin to Java fields. Those that arrived always fought with heavy odds against them. Nevertheless they shot down at least 38 enemy planes while at the same time losing 14 aircraft and 9 pilots of their own.¹⁴ The losses in the flights from Darwin to Java and in combat were caused principally by the numerical superiority of the enemy forces which they faced, but a contributing factor was the inexperience of many of the American

~~RESTRICTED~~~~SECURITY INFORMATION~~~~CONFIDENTIAL~~

~~RESTRICTED~~

195

pilots. The short period of training given after their arrival in Australia from the United States in many cases proved insufficient, particularly for those who had never been in a pursuit plane before leaving the United States.¹⁵

Bombardment units faced many of the same problems which confronted the pursuits. The Bomber Command was also responsible for an extensive area including the Philippines, Celebes, Borneo, Java, Sumatra, and Malaya. To cover this tremendous expanse of island and ocean, there were extremely limited resources available. On 1 January 10 B-17's had flown to Java from Australia. During the next two months at least 37 additional B-17's and 12 LB-30's had joined the V Bomber Command, but rarely were there more than 15 of these heavy bombers in commission at one time. Such a force would have had difficulty in halting even a medium-sized convoy, but Japanese strategy was to strike simultaneously at several points in overwhelming strength. The Allied command in several cases was injudicious enough to bite at the Japanese bait by dispersing its bomber strikes. At a time when the principal enemy thrust toward Java was aimed through the Strait of Macassar, for example, all the veteran bomber crews were diverted to carry out raids against the Malayan Peninsula 1,500 miles away. Exclusive of these distant objectives, targets were plentiful. A combination of unfavorable weather conditions, mechanical failure of aircraft, and Japanese antiaircraft and pursuit defenses, however, caused the failure of a majority of the combat missions. Following is a compilation of

~~RESTRICTED~~
SECURITY INFORMATION

~~RESTRICTED~~~~SECRET~~

196

missions performed by heavy bombers during the months of January and February. It does not include reconnaissance missions or the numerous flights in which heavy bombers merely took off and flew around for hours to avoid enemy attack:

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| Missions | 62 |
| Bombers participating | 299 |
| Bombers which did not reach target | 130 |
| Bombers shot down--lost in combat | 6 |
| Bombers destroyed on the ground | 26 |
| Bombers lost in accidents | 5 |
| Enemy aircraft shot down | 23 |
| Ships claimed sunk | 1 destroyer |
| | 10 transports |
| | 2 "ships" |
| Ships claimed probably sunk | 1 |
| Hits claimed on | 1 battleship |
| | 4 cruisers |
| | 1 destroyer |
| | 5 transports |
| | 1 auxiliary |
| | 3 "ships" |

These figures must be used with caution. They are taken from the diary of the V Bomber Command, and the record of ships sunk particularly is open to question. But even if the figures are accepted, the number of ships sunk is extremely small in relation to the number that the enemy was throwing into its southern advance. Moreover, there was little realization of the importance of the weather in bombing operations. Forty per cent of the heavy bombers dispatched on bombing missions during January and February did not reach the target. This failure was caused to some extent by mechanical difficulties, but principally by the inability of flyers without meteorological information and experience in the theater to cope with the weather.¹⁶

~~RESTRICTED~~
~~SECURITY INFORMATION~~

~~CONFIDENTIAL~~~~RESTRICTED~~

187

The need to provide meteorological facilities for air force commands was only one of many lessons learned in the tragic months of combat in the Philippines and the Netherlands East Indies. Perhaps the outstanding lesson for a nation on the defensive was learned during the original Japanese attack on Clark Field: that aircraft on the ground, particularly heavy bombers, are doomed unless strong antiaircraft defenses are available. The importance of camouflage if cleverly executed, of revetments as a defense against horizontal attack, and of dummy airfields and dummy planes was clearly demonstrated. None of these, however, proved to be sufficient protection against strafing in the absence of aircraft warning, of antiaircraft defense, and of a strong interceptor command. Japanese low-level attacks by pursuit planes not only had been destructive, but provided protective escort for the bombers which usually accompanied them. It was clear, too, that American crews had suffered from a lack of preparation for the type of operations necessary in a Pacific theater. Pursuit pilots inadequately trained in the United States had to have transition training in the combat theater. This had been costly in aircraft, both lost and damaged, at a time when every plane was precious. In the bomber units, the bombardiers suffered most from lack of training, for they had neither the bombs nor the opportunity to practice after arriving in the theater. Furthermore it was found that an indoctrination course for the combat units was needed, one that would include a study of the lessons learned from operational use of American equipment and from the tactics of enemy planes, of the geography and weather of the area, and of the communications and

~~RESTRICTED~~~~CONFIDENTIAL~~~~SECRET~~ INFORMATION

~~RESTRICTED~~

198

aircraft warning systems which would be found in the theater.¹⁷

Of particular importance for future operations were recommendations for improvements of materiel made by those who had participated in the early campaigns. It was soon discovered that the B-17E was superior to the LB-30 in combat. The latter plane could not fly satisfactorily above 20,000 feet and was so vulnerable to pursuit attack at that altitude that it had to be restricted almost entirely to night operations. The B-17 too had its faults. Its flying range had proved disappointing, and missions had been limited to 1,500 miles. Its armament had been unsatisfactory in several respects: the transparent nose panels would not withstand the shock of a long burst of machine-gun fire; the .30-caliber machine gun in the nose was inadequate; the side gunners needed armor plate; the bottom Sperry turret was "almost useless"; and there were an insufficient number of tracers in belted .50-caliber ammunition. Its oxygen system too had been somewhat faulty: the side gunners, equipped only with bottles, were at a disadvantage without oxygen outlets; and check valves were needed throughout the system since one broken line put the entire system out of commission. Of several other faults, perhaps of most importance was the lack of self-sealing bomb-bay fuel tanks. Serious as these criticisms were, the crews generally praised their plane. With less than adequate maintenance, it had flown thousands of miles, had been riddled with enemy machine gun and cannon fire, and had come back to base. Probably few would have denied the aptness of a Tokyo broadcast which described the B-17E as a "four engine pursuit ship, used for all purposes."¹⁸

~~RESTRICTED~~~~CONFIDENTIAL~~~~SECRET~~ INFORMATION

RESTRICTED**CONFIDENTIAL**

199

The A-24 seems to have been more effective than the B-17 in its attacks on shipping. So far as the Java campaign is concerned, this can be no more than a tentative conclusion since the dive bomber did not have an adequate test there. Nevertheless in its few missions it scored a higher percentage of hits on ships than the larger plane. The principal reason for this, of course, was that it released its bombs generally from between 2,000 and 4,000 feet, although rarely from a lower altitude because the fuze required a 1,000-foot drop before being armed. Later experience by marine flyers using land bases in the Solomons proved that the A-24 was a highly effective plane. On the other hand, when used without pursuit escort, it was extremely vulnerable, and it did not have the range to operate satisfactorily against distant bases.¹⁹

Although American pursuit planes gave a good account of themselves, they did not prove superior in all respects to those which the Jap threw against them. In the Philippines and Java, the P-40 had been able to outdive the Zero (Zeke), and could also pull away from it in level flight. Furthermore the American plane had an important advantage in its armor plate and self-sealing fuel tanks. In other respects, however, the P-40 suffered by comparison. The Zeke could climb at the rate of between 3,000 and 5,000 feet a minute and could operate at an altitude of 50,000 feet, compared with a rate of climb of approximately 1,000 feet a minute and a ceiling of 27,000 feet for the P-40. The Zeke had a greater radius of action estimated at from 400 to 600 miles, largely by virtue of

RESTRICTED
SECURITY INFORMATION**SECRET****CONFIDENTIAL**

RESTRICTED

200

the larger droppable fuel tank which it carried. Moreover the Japanese plane was so much more maneuverable that the American who hazarded a dog fight was virtually committing suicide.²⁰

It is obvious that the United States, whose war machine was far inferior to Japan's during 1941 had not been able to catch up during the Philippine and Java campaigns. Even if the War Department had been able to send sufficient reinforcements of aircraft to the Far East in January and February, it is doubtful if the personnel would have been mentally prepared for the type of operations necessary in a Pacific theater. The theory of employment of heavy bombers, for example, seems to have been limited primarily to operations carried out from fixed and well-equipped bases and against such targets as factories, refineries, and marshalling yards. This would have been strategic bombing. If heavy bombers were to be employed against shipping, the theory required the use of many aircraft, nine or more, in every formation. Thus, it was hoped, a ship could be caught in a pattern of bombs. Almost none of the prerequisites for this type of bombing existed in the Pacific in January 1942. Few well-prepared bases with overhaul depots were available; bombardment units had to make thousand-mile hops using intermediary bases with primitive and sometimes unknown facilities; in some cases they literally had to carry their mechanics and servicing equipment along with them; instead of strategic objectives, only elusive ships and an occasional airfield were within range, and rarely were sufficient aircraft in commission

RESTRICTED

SECURITY INFORMATION

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~~CONFIDENTIAL~~
RESTRICTED

201

to carry out conventional pattern-bombing attacks.

This inadequacy both of materiel and of theory resulted in failure for bomber operations in the Philippines and Java. The insufficient number of planes was partially responsible for this, and it is possible that a wiser strategy would have been to build up air strength in Australia rather than to commit aircraft piecemeal in dangerous missions flown from undefended bases. In the long run this might have permitted more damaging attacks against Japanese convoys and supply points. General Brereton, it will be recalled, warned before leaving for the Philippines in the fall of 1941 that the employment of heavy bombers from undefended bases would be suicidal.

A policy of withdrawing bombers to Australia and of conserving them until a striking force had been built up, however, would not have taken into consideration the intangible question of morale. It undoubtedly would have been difficult to convince either the American ground and naval forces or the forces of the Allies that such a long-view policy was justified. Australians, British, and Dutch threw their available aircraft, usually obsolete, unsparingly into the fray. Ground troops, including officers and numerous enlisted men of the Air Corps, fought against tremendous odds. The Allied naval force was decimated in the Java Sea. Even a token use of land-based air power seemed to give a noticeable boost to morale. Probably no other course was possible, therefore, than to

RESTRICTED
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~~CONFIDENTIAL~~~~SECRET~~**RESTRICTED**

202

commit immediately all resources of the air force. This was the policy that was followed, both in the United States and in the theater, with resultant successes and failures that taught lessons which contributed to the later American triumphs in similar campaigns. Although defeated, the Allied forces had fought a gallant campaign. General MacArthur in a cable to General Arnold paid his tribute to the air units which had flown under his command during the first few days of the war. The same tribute may be applied to those who patched up the aircraft and who flew them in the tragic months which ensued: "The Far East Air Force took every possible precaution within the limited time and means available here. Their losses [were] due entirely to [the] enemy's overwhelming superiority of force. No unit could have done better but they have been hopelessly outnumbered from the start. Their efficiency has been good and their gallantry conspicuous. Loss can be attributed neither to neglect nor to lack of care. You may take pride in their conduct."²¹

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NOTES

Chapter I

1. Memo for C/S by Brig. Gen. L. T. Cerow, Acting Asst. C/S, 14 Aug. 1941, in AG 370.5 (8-1-41), Pt. 1, Reinforcement and Movement of Troops.
2. Memo for Gen. Arnold by Lt. Col. Carl Spaatz, 1 Sep. 1939, in AAG 381, bulk, 5 Secret Studies.
3. Memo for C/AC by Lt. Col. Carl Spaatz, Chief of Plans, 23 Aug. 1939, in AAG 000-800 Misc., Phil.
4. Memo for C/AC by Lt. Col. Carl Spaatz, 23 Aug. 1939, in AAG 452.1, Airplanes, Phil.
 - Route 1: Langley Field, Newfoundland, London, Marseilles, Cairo, Bagdad, Karachi, Rangoon, Manila. 11,075 miles.
 - Route 2: San Francisco, Oahu, Midway, Wake, Guam, Manila. 7,131 miles.
 - Route 3: San Francisco, Oahu, Fakarava [near the Society Islands], Samoa, Brisbane, Darwin, Manila. 11,127 miles.
 - Route 4: Langley Field, San Juan, Natal, Bethurst, El Geneina, Cairo, Bagdad, Karachi, Rangoon, Manila. 14,615 miles.
5. Ltr., Col. H. E. G. Richards to Brig. Gen. B. K. Yount, in AAG 452.1, Airplanes, Phil.
6. Requirements Army Aviation for Hemisphere Defense, 3 June 1940, in AAG 381 B2, War Plans; ltr., Brig. Gen. B. K. Yount to Col. H. E. G. Richards, 1 June 1940, in AAG 452.1, Airplanes, Phil.; 2d ind., CGAC to AG, 28 Sep. 1940, in AAG 000-800, Misc. Phil.; memo for AC/S, WPD by Col. [W. E. Farthing], 26 Feb. 1940, in AAG 000-800 Misc., Phil. The force now envisaged for the Philippines consisted of: 1 heavy bomb. gp., 1 rcn. sq., 2 medium bomb. gps., 1 medium bomb. gp. less 1 sq., 3 rcn. sqs., 2 pursuit gps. (each less 1 sq.), 2 obsn. sqs., 4 air base sqs., with a total of 441 planes in contrast to 37 there at that time. Ibid.
7. Adm. Thomas Hart, Narrative of Events, Asiatic Fleet, Leading up to War and from 5 December 1941 to 15 February 1942, in K-30605, A-2 Lib. [Hart, Narrative of Events]; ltr., Maj. Gen. George Grunert to TAG, 22 July 1940, in AAG 452.1, Airplanes, Phil.

RESTRICTED203
SECURITY INFORMATION

~~RESTRICTED~~~~SECRET~~

204

8. Procurement of Aircrew Trainees, AAF Historical Studies: No. 15.
9. Memo for AC/S, WPD by Arnold, C/AC, 8 Aug. 1940, in AAG 452.1, Airplanes, Phil.
10. R&R, Col. G. E. Stratmeyer, Exec., Plans to Maj. J. E. Upston, Plans Div., 16 Oct. 1940, in AAG 000-800 Misc., Phil.; memo for C/S by C/AC, 17 Oct. 1940, in AAG 000-800 Misc.; ltrs., AG to CG's, Selfridge and Hamilton fields, 19 Oct. 1940, in AAG 000-800 Misc., Phil.
11. Ltrs., Lt. Col. G. W. Christenberry, Asst. AG to TAG, 23 Nov. 1940, and TAG, Lt. Col. W. W. Dick, to Chief of Engineers, 27 Feb. 1941, in AAG 400 Misc., Phil.
12. Hart, Narrative of Events.
13. R&R, Plans to Exec., 7 Feb. 1941, and memo for AC/S, WPD, by Gen. Brett, 11 Feb. 1941, in AAG 000-800 Misc., Phil.
14. Memo to TAG by C/AC (G. E. Stratmeyer, Exec.), 12 Mar. 1941, in AAG 452.1, Airplanes, Phil.; ltr., TAG to CG, Philippine Dept., 28 Mar. 1941, in AAG 000-800 Misc., Phil. One C-49 and 1 C-39 were also to be shipped during April and 3 C-49's and 10 C-52's in the early summer. Msg., TAG to CG, Philippine Dept., 15 Apr. 1941, in AAG 452.1, Airplanes, Phil. Authority had been granted in February to use the P-26's to train sufficient Philippine Army pilots for an air echelon of a pursuit squadron. It was later agreed that the P-26's would be turned over to the Philippine Army upon the arrival of the P-40's. Msg., TAG to CG, Philippine Dept., 26 Feb. 1941, in AAG 452.1, Airplanes, Phil.; R&R, GCS [Stratmeyer] to Gen. Brett, 25 Mar. 1941, in AAG 452.1, Airplanes, Phil.; ltr., Lt. Col. G. H. Kells to C/AC, 24 June 1941, in AAG 452.1, Airplanes, Phil. It is interesting to note that before the shipment of the P-40's Spatz pointed out that the P-40 had 2 x .30-caliber machine guns and 4 fifties, while the P-40B had 4 thirties and 2 fifties, and added "neither the P-40 nor the P-40B are believed suited for operations against a first-class air power where the target is fleeting and destruction of that target must be rapid." Memo for AC/S, WPD by Brig. Gen. Carl Spatz, AC/AC, Chief Plans Div., 28 Jan. 1941, in AAG 361 B1, War Plans.
15. History of the 24th Pursuit Group [History of 24th Pursuit], App. II, History of the Fifth Air Force (and its Predecessors), Part I, December 1941 to August 1942 [History, 5th AF].
16. GO #16, Hq. Phil. Dept., 6 May 1941.

~~RESTRICTED~~~~SECRET~~~~SECRET~~~~CONFIDENTIAL~~

~~RESTRICTED~~

205

17. Claggett's career after his graduation from West Point in 1906 was a highly unusual one. He achieved the rank of temporary lieutenant colonel before the end of the first World War. 30 #198, War Department, Washington, 1918. He performed the following duties among others: Department Air Service Officer, Southeastern Department; Corps Area Officer, Ninth Corps Area; Commanding Officer, Brooks Field, San Antonio and Commandant, Air Corps Primary Flying School; Commanding Officer, Kelly Field and Commandant, Air Corps Advanced Flying School. As commanding officer of Kelly Field and later of Selfridge Field, he received commendations for his administration. One of these stated: "Kelly Field considered one of the best administered stations in the Army A.C." Synopsis from C/AG to AGO, 28 Mar. 1934, in AF 201, Claggett. In 1933, his efficiency report had rated him as completely unsatisfactory in handling officers and men, in administrative and executive duties, in tact, in judgment, and in common sense. Ltr., Claggett to C/AG, 30 (or 30) July 1933, in AF 201, Claggett. On 29 February 1936, he was made Wing Commander, First Wing, GHQ Air Force, March Field, California. His orders read that he would hold the temporary rank of brigadier general for the period of that assignment. His efficiency report was excellent and superior for the period, but he was relieved from that command 3 July 1936 and transferred to Selfridge Field, Mich. with the rank of colonel. 1st ind. (ltr., Claggett to TAG, 13 July 1936), Maj. Gen. F. M. Andrews to TAG, 20 July 1936, in AF 201. He was promoted to the temporary rank of brigadier general again in the fall of 1940.
18. Extract, ltr. of transmittal, Intelligence Div. to C/AG, 3 July 1941; memo by Col. W. E. Cooper, Medical Corps, 20 June 1941; ltr., Claggett to Arnold, 18 July 1941; ltr., Arnold to Claggett, 29 July 1941, all in AF 201, Claggett.
19. History, 5th AF, 1; memo for the C/3 by Spaatz, 1 Aug. 1941, in AG 320.2 (6-50-41), Aircraft Warning Service; GO #4, Hq. USAFPE, 4 Aug. 1941, in App. II, History, 5th AF. According to ltr., TAG to CG, Phil. Dept., 16 Aug. 1941, in AG 320.2 (6-50-41), Aircraft Warning Service:
1. The Headquarters and Headquarters Squadron, Philippine Department Air Force and Headquarters and Headquarters Squadron, 24th Pursuit Group (Interceptor) are constituted on the active list.
 2. The 24th Pursuit Group (Interceptor) and the 4th Composite Group are reorganized and the units listed below are assigned thereto as indicated.

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Hq. and Hq. Sq.
 3d Pursuit Sq. (I)
 17th Pursuit Sq. (I)
 20th Pursuit Sq. (I)

4th Composite Group

Hq. and Hq. Sq.
 28th Bombardment Sq. (I)
 2d Observation Sq.
 Tow Target Detach.

Actually the provisions of this letter were not carried out until 16 September. GO #10, Hq. USAFFE, 16 Sep. 1941. According to the History of the 24th Pursuit Group, that group had not been activated until 1 October.

20. Memo for Col. Crawford, LFD, by Spaatz, 15 Aug. 1941, in AAG 686 Sites, Philippines. On 9 August the usable length and width of the north-south runway on Nichols was 2,600 x 700 feet. The east-west runway was under construction and not usable. The construction reduced the usable length of the north-south runway. Msg. #54, Manila to TAG, 9 Aug. 1941. By 19 August the situation had changed to such an extent that MacArthur could radio that sufficient airfields were available for the following "additional squadrons": 10 pursuit, 7 medium bombardment, 3 heavy bombardment; within three months, 3 additional heavy squadrons; and in 6 months, 3 additional pursuit, 9 medium bombardment, 10 heavy bombardment. Msg. #147, Manila to TAG, 19 Aug. 1941, in AAG 000-300 Misc., Phil.
21. Memo for Brett by Spaatz, 26 Aug. 1941, in AAG 381.B2, War Plans.
22. Ibid.
23. Memo to C/AAF by Brig. Gen. L. T. Gerow, 18 Aug. 1941, in Air AG SAS 452.1, Phil.; memo for C/AC by Lt. Col. Arthur W. Vanaman, Sec. of the Air Staff, 11 Aug. 1941, in AAG 452.1 Airplanes, Phil. To meet the requirements of augmenting the Philippine Department by 1 heavy bombardment group, it was considered that the following units were required: 1 gp. hq. and hq. sq., 2 bom. sqs., 1 rcn. sq., 1 materiel sq., 1 AC sq. interceptor control, 1 hq. and hq. sq. interceptor command, 1 hq. and hq. co. (AWC), 4 ord. cos., 1 trust co., 1 eng. bn. less one co., 2 decontamination dets., 1 signal AWS, appropriate hospital facilities and medical corps personnel. Memo for C/AS [by office of C/AAF], 18 Aug. 1941, in AAG 321.9, dead files, Air Corps Troops-Hawaii, Panama, Phil., etc.
24. R&R, Chief, Materiel Div. to AC/AC, 24 Apr. 1941, in AAG 373, dead files, Flights-Hawaii, Phil.; ltr., Brig. Gen. Frank D. Lackland to CG, 4th AF, 14 June 1941, in AG 201, Eugene L. Eubank.
25. Memo for C/AAF by ?, 27 July 1941, in AAG 452.1 Airplanes, Phil.; msg., Adams to CG, American Forces in the Far East, 31 July 1941, in AG 320.3, Organization and Reinforcement, USAFFE; memo for

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~~RESTRICTED~~

207

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C/S by Spaatz, 1 Aug. 1941, in AAG 452.1 Airplanes, Phil.; W. P. Fisher, Report on Philippine and Java Operations [Fisher Report], in A-2 Library; ltr., Spaatz to Adm. H. R. Stark, Chief of Naval Operations, 5 Aug. 1941; msg., AAF Air Staff to CG Hawaiian AF, no date, in AAG 373, dead files, Flights-Hawaii, Phil. Definite information was available on the condition of fields on Midway and Wake: at Midway three runways are under construction: (1) 4,500 x 300 feet; (2) 5,500 x 300 feet; (3) 3,200 x 300 feet. Rolled coral base on all runways completed. Asphaltic concrete top paving completed on all runways to width of 160 feet. Topping on runway No. 1 completed 300 feet wide for distance of 2,000 feet from southwest end. This runway now usable in extreme emergency with caution provided prior notice is given to permit removal of construction equipment from runways. If Navy gives priority to this runway paving, 300-foot width for entire length can be completed in 17 days. Estimate entire paving project can be completed by 15 Oct. Adequate quantities of 100-octane gasoline and oil available from Navy and Pan American storage on Sand Island immediately adjacent to Eastern Island. Servicing must be accomplished from drums which can be spotted on Eastern Island on 24-hour notice. Communications, meteorological, and housing facilities for personnel adequate now. At Wake there is one runway of rolled coral 3,000 x 150 feet. Surface rough and covered with small loose coral rocks. Construction started on east-west runway incorporating present runway which will be 5,000 x 200 feet. Contractor on job estimates he can complete this project in 30 days. This runway when completed will be suitable for heavy bombers, but parking mat and warm-up strip immediately adjacent to runway should be provided in order that the landing field can be used by more than one airplane at a time. 100-octane gasoline and suitable oil available in sufficient quantities from Navy and Pan American storage, but 36-hour notice should be given prior to dispatching a flight to this field due to the limited number of drums. Communications, meteorological, and housing facilities for personnel are adequate. Paraphrase of msg. #59, Fort Shafter to C/AG, 11 Aug. 1941.

26. Msgs., Adams to CG Hawaiian Dept., 28 Aug. and 3 Sep. 1941, in AAG 373, dead files, Flights-Hawaii, Phil.
27. Two days before, the ground elements consisting of 1 officer and 174 enlisted men sailed from Hawaii on board the USAT President Pierce. Wing Commander Garing of the RAAF accompanied the flight as far as Port Moresby as a passenger. Msg. #246, Short to C/AAF, 5 Sep. 1941, in AAG 373, dead files, Flights-Hawaii-Phil.

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~~RESTRICTED~~~~SECRET~~

208

28. Maj. E. O'Donnell, Report of the 14th Bombardment Squadron, 19 Sep. 1941, in AG 452.1, Flights of B-17 Aircraft. See Appendix 1.
29. Army and Navy Estimate of United States Over-all Production Requirements, 11 Sep. 1941, in AAG 381, bulk, Plans.
30. Ibid.
31. The plan also considered the possibility of using B-29's or B-32's against Japan from Alaskan or Philippine bases. Ibid.
32. Msg. #277, MacArthur to Marshall, 7 Sep. 1941 and Marshall to CG USAFFE, 9 Sep. 1941, in AG 320.2 (7-23-41), Organization and Reinforcements for USAFFE.
33. Clark Field, \$315,000; Nichols Field, \$575,000; O'Donnell Field, \$500,000; Bataan Field, \$500,000; Malabang Field, \$61,000; Zamboango Field, \$322,000. Memo for C/AS by Col. James C. Shively, deputy chief, Buildings and Grounds, AG/AS, M&D, 19 June 1943, in Air AG, SAS 636, Phil.
34. Ltr., Hq. CG USAFFE to CG Air Force, 11 Sep. 1941, in AG 452.1, Sec. 1, Flight of B-17 Aircraft; R&R, C/AS, AAF to C/AS, 24 Sep. 1941; msg. #293, TAG to CG Phil. Dept., 7 Oct. 1941, in AG 530.32 (9-24-41) MC-G, Air Field Development in the Philippine Islands. On 5 November, the Chief of the Army Air Forces addressed a memorandum to the Chief of Staff recommending that "the Chief of the Air Corps be authorized to include \$20,000,000 from the Second Supplemental 1942 estimates for the construction of aviation and signal facilities in the Philippine area." No action apparently was taken on this recommendation prior to 7 December. Memo for C/AS by Col. James C. Shively, deputy chief, Buildings and Grounds, AG/AS, M&D, 19 June 1943, in Air AG, SAS 636, Phil.
35. Ltr., Hq. AAF, Air Force, USAFFE to CG USAFFE, 10 Oct. 1941, in AG 320.2, Aircraft Warning Service; msg., Marshall to CG USAFFE, 9 Sep. 1941, in AG 320.2 (7-23-41), Organization and Reinforcements for USAFFE.
36. Msg., Marshall to CG USAFFE, 9 Sep. 1941, in AG 320.2 (7-23-41), Organization and Reinforcements for USAFFE; ltr., Hq. CG USAFFE to CG Air Force, 11 Sep. 1941, in AG 452.1, Sec. 1, Flight of B-17 Aircraft; msg. #210, Adams to CG Phil. Dept., in AG 320.2 (9-24-41), Transfer of 2 Pursuit Sq.

~~RESTRICTED~~
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~~RESTRICTED~~

209

37. Memo for the S/W by Gen. Gerow, Acting Asst. C/S, 2 Oct. 1941, in AG 370.5 (8-1-41) Pt. 1, Reinforcements and Movement of Troops; msg. #525 and 526, Grunert to TAG, 8 Oct. 1941, in AAG 452.1 Airplanes, Phil.; msg., Brereton to AGMAR, 1 Nov. 1941, in AAG 452.1G, Airplane Reports. The number of P-402's in the Philippines on 31 Oct. 1941 is open to question, since the Status of Airplanes in Foreign Possessions, 31 Oct. 1941, shows 119 on hand or reported departed. AAG 452.1, Airplane Reports.
38. Ltr., Hq. CG USAFFE to CG Air Force, 11 Sep. 1941, in AG 452.1, Sec. 1, Flight of B-17 Aircraft; ltr., TAG to CG AFCC, 9 Oct. 1941, in AG 370.5 (8-1-41) Pt. 2, Reinforcements and Movement of Troops; R&R, Brig. Gen. G. E. S/trateneyer/ to Materiel Div., 3 Oct. 1941 and R&R, CGAC Materiel to C/AS AAF, 13 Oct. 1941, in AAG 452.1 Airplanes, Phil.
39. Msg., Marshall to CG USAFFE, 9 Sep. 1941, in AG 320.2 (7-28-41), Organization and Reinforcements for USAFFE. R&R, A-3 AAF to A-4 AAF, 9 Sep. 1941, in AAG 321.9, dead files, Air Corps Troops etc. stated that the following units were to be transferred to the Philippine Department at the earliest practicable time: 1 gp. hq. and hq. sq. bomb. (E); 2 bomb sqs. (E) (the 19th Bomb. Gp. less one sq. now stationed at Albuquerque, N.M.); 1 rcn. sq.; 1 materiel sq.; 1 hq. and hq. sq. interceptor command; 1 hq. and hq. co. aircraft warning service-interceptor command; assorted ordnance, truck, engineer, maintenance, and medical units. See also ltr., TAG to CG AFCC, 13 Sep. 1941, in AG 370.5 (9-17-41), Reinforcement and Movement of Troops; msg., Adams to CG Hawaiian Dept., 26 Sep. 1941, and Adams to CG USAFFE, 21 Oct. 1941, in AAG 373, dead files, Flights, Hawaii, Phil. R&R, C/AS AAF to CG AFCC, 13 Oct. 1941, in AAG 373, dead files, Flights, Hawaii, Phil. states that 35 B-17 crews will be prepared by the 7th Bombardment Group for ferry service on or about 1 December and lists the following schedule of heavy bomber flights: 30 B-17's, 1 December; 35 B-17's, 1 January 1942; 30 B-17's, 1 February 1942; 35 B-24's, 1 February 1942. According to R&R, C/AS AAF to CG AFCC, 22 Oct. 1941, the following flights were contemplated: 30 B-17's, 1 December; 25 B-17's, 1 January 1942; 5 B-24's, 1 January 1942; 30 B-17's, 1 February 1942; 16 B-24's, 1 February 1942; 16 B-24's, 15 February 1942.
40. Memo for the Secretary of War by Maj. Gen. H. H. Arnold, Deputy Chief of Staff for Air, 8 Oct. 1941, in AAG 452.1 Airplanes, Philippines estimates the production of B-17's as: September 1941, 5; October, 12; November, 16; December, 25; January 1942, 30; February, 40. Of B-24's: November 1941, 2; December 8; January 1942, 40; February, 45.

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210

41. Memo for the C/S by H. E. Stark, Chief of Naval Operations, 10 Oct. 1941, in W.F. II-C-3, Hawaiian Islands.
42. Msg. #584, Short to TAG, 22 Oct. 1941; ltr., TAG to CG Hawaiian Dept., 27 Oct. 1941, AG 580.82 (9-30-41) HC-G, in AAG Misc. Messages.
43. Memo for C/AC by Maj. Edward P. Curtis, Sec./AS, 28 Aug. 1941; R&R, C/AS AAF to C/AAF, 19 Sep. 1941; memo for TAG by Maj. Edward P. Curtis, 10 Sep. 1941; R&R, CCAS Materiel to C/AS CCAG, 8 Oct. 1941, in AAG 400 Misc., Phil.
44. Ibid.; msg. #452, Short to C/AAF, 9 Oct. 1941 and Arnold to CG Hawaiian Dept., 17 Oct. 1941, in AAG 373, dead files, Flights-Hawaii, Phil. The problem of transporting fuel to the Philippines proved difficult. In September, the objective was to make available 9,000,000 gallons of 100-octane by 1 February. R&R, C/AS AAF to C/AAF, 19 Sep. 1941, in AAG 400 Misc. Phil. Arrangements were also completed with Standard Oil to provide and store approximately 6,300,000 gallons of 100-octane in the Philippines. Whether this was considered a part of the 9,000,000 gallons is not clear. R&R, CCAS Materiel to C/S AAF, 26 Sep. 1941, in AAG 400 Misc. Phil. Steps were also taken in October to insure sufficient fuel at Midway and Wake. In response to an Army request to assist Pan American in providing the necessary amounts, the Navy agreed to have at Midway and Wake, by 25 October, 80,000 gallons aviation gas and 1,600 gallons lubricating oil and, by 15 December, 120,000 gallons gas and 2,400 gallons oil. Ltr., C/S to Chief of Naval Operations, 13 Oct. 1941 and Chief of Naval Operations to C/S, 21 Oct. 1941, in AAG 400 Misc. Phil.
45. Report to CG, AFCC by Lt. Col. E. L. Hubank, commanding 19th Group, 23 Oct. 1941, in AAG 373-6A, Ferry Crews; ltr., Brig. Gen. Frank D. Mac'land, commanding Air Base, Tucson, Ariz. to CG AFCC, 25 Oct. 1941, in Air AG SAS 370.5, Phil.; msg., Adams to CG Hawaiian Dept., 18 Oct. 1941, in AG 452.1 (10-18-41) HC-G.
46. Memo for Chief of Naval Operations by Marshall, 17 Oct. 1941, and msg. to CG Hawaiian Dept., 17 Oct. 1941, in AAG 373, dead files, Flights-Hawaii, Phil.; memo for the C/S by H. E. Stark, 20 Oct. 1941, in AG 452.1 (10-30-41).
47. Memo for CG, AFCC by Maj. Edward P. Curtis, Sec./AS, 30 Sep. 1941, in AAG 373, dead files, Flights-Hawaii, Phil.; msg. #582, 22 Oct. 1941, Ft. Shafter to TAG; msg., Adams to CG Hawaiian Dept., 18 Oct. 1941, 21 Oct. 1941, and Short to TAG, #604, 28 Oct. 1941, in AG 452.1 (10-28-41), Flight of B-17 Aircraft. A series of messages dated from 23 October to 19 November 1941 gives the details of the arrivals and departures of this movement.

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SECURITY INFORMATION

~~RESTRICTED~~
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211

~~CONFIDENTIAL~~

Chapter II

1. Memo for C/S by Maj. Gen. H. H. Arnold, Deputy C/S for Air, 3 Oct. 1941, in AF 201, Brereton; ltr., TAG to Maj. Gen. Lewis E. Brereton, 7 Oct. 1941, in AF 201, Brereton; ltr., Arnold to MacArthur, 14 Oct. 1941, in AG 321.9 C, Phil.
2. Memo for TAG by Maj. E. P. Curtis, Sec./AS, 20 Oct. 1941, including an additional "Memo for the Record," in Air AG SAS 320.2, Phil.
3. Ltr., TAG to CG USAFTH, 28 Oct. 1941, in AAG 321.9, dead files, Air Corps Troops, Hawaii, Phil.; CG #28, Hq. USAFTH, 14 Nov. 1941, in App. II, History, 5th AF. The origin of the V Interceptor Command in the Philippines is not clear. The activation of a Headquarters and Headquarters Squadron, V Interceptor Command was authorized at Ft. Lawton, Wash. by letter, TAG to CG Air Force Combat Command, 14 Oct. 1941, in AG 320.2 (10-1-41) Aircraft Warning Service. This authorization was carried out during November. "The Vth" sailed from San Francisco for the Philippines on 6 December, but put back into port when informed of the attack on Pearl Harbor. It officially remained there until the fall of 1942. History of Headquarters and Headquarters Squadron, V Fighter Command. Although no authority for activation of the V Interceptor Command in the Philippines can be found either in Washington or in Australia, it is listed as operating under Brereton's command on 8 December 1941, and appears on other official documents. History, 5th AF, 3-4. Although the official designation at this time was 5th Bomber Command and 5th Interceptor Command, the practice of referring to commands with the Roman capital, i.e. V Bomber Command, is consistently followed in this study.
4. Msg. #312, MacArthur to TAG, 9 Nov. 1941 and #620, TAG to CG USAFTH, 26 Nov. 1941, in AG 320.2 (7-28-41) Sec. 3.
5. Ltr., Spaatz to Glagett, 7 Aug. 1941; ltr., Glagett to TAG, 12 Nov. 1941, and 1st ind. by Brereton and 2d ind. by CG USAFTH; 22R's, Air AG to A-1, 24 Nov. 1941 and A-1 to AAG, 18 Dec. 1941, in AF 201, Glagett.
6. History, 24th Pursuit; teletype, CG Hamilton Field to TAG, 29 Oct. 1941, in AG 370.5 (8-1-41), part II states that the 21st and 34th Pursuit Sqs. arrived at the San Francisco Port of Embarkation on 29 October. The Hq. and Hq. Sq. and the 70th Sq. of the 35th Pursuit Gp. were authorized to move to the San Francisco Port of Embarkation to sail "on or about" 1

~~RESTRICTED~~
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212

December. Ltr., TAG to CG AFCC, 1 Nov. 1941, in AG 370.5 (8-1-41) Pt. 2, Reinforcement and Movement of Troops to the Philippine Department.

7. Msg., Brereton to AGWAR, 1 Nov. 1941, in AAG 452.1G, Airplane Reports. The records of "the Chief of the Air Corps" as of 31 October did not show any P-40B's assigned to units, but stated that 119 P-40B's were either "on hand or reported departed for Philippines." Status of Airplanes in Foreign Possessions as of 31 October 1941, in AAG 452.1, Airplane Reports. Efforts were also being made to prepare 18 P-40D's for transfer to the Philippines. A part of these planes were participating in the Carolina maneuvers, and thus were not to be released for shipment until approximately 1 December. R&R, C/AS AAF to AFCC, 4 Nov. 1941 and R&R, Ho, AFCC to C/AS AAF, 6 Nov. 1941, in AAG 452.1, Pursuits; R&R, C/AS AAF to CGAC, 4 Nov. 1941, R&R, Materiel Div. to C/AS AAF, 10 Nov. 1941, and R&R, C/AS AAF to CGAC (Materiel Div.), 19 Nov. 1941, in AAG 452.1 Airplanes, Phil. On 26 November, it was stated that 35 P-39D's were being packed and crated for shipment to the Philippines, and that it would be necessary to crate only 55 P-40B's upon completion of the maneuvers. R&R, C/AS AAF to CGAC, 26 Nov. 1941, in AAG 452.1 Airplanes, Phil. There was under consideration a plan to ferry these pursuits from Australia to Manila. Col. Harold H. George believed that to fly the pursuits in from Townsville via Cloncurry, Groote Eylandt, Darwin, Koepang, Macassar, Samarinda, Tarakan, Malabang to Manila was feasible. Msg., Adams to CG USAFFE, 29 Oct. 1941, and 1st ind. by Col. George to ltr., Col. Carl E. Seals to CG Air Force, 30 Oct. 1941, in AG 452.1, Phil.
8. Histories of the 26th, 30th, and 93d Squadrons, in History of the 19th Bombardment Group /History, 19th Bombardment/; msg., Adams to CG, Hawaiian Dept., in AG 370.5 (9-26-41), Transfer of Air Corps units; ltr., TAG to CG Hawaiian Dept., 2 Dec. 1941, in AAG 000-800 Misc., Phil.; msg., Short to TAG, 15 Nov. 1941; History of the 27th Bombardment Group (L); ltrs., TAG to CG AFCC, 22 and 30 Oct. 1941; memo for AG/S G-2 by Arnold, C/AAF, 4 Nov. 1941; ltr., TAG to CG AFCC, 5 Nov. 1941, in AG 370.5 (8-1-41), Reinforcements and Movement of Troops, Pts. 1 and 2; Second Anniversary, in History of the 7th Bombardment Group.
9. Ltr., Lt. Col. J. G. Taylor, chief, Intelligence Div., AG, to chief, Div. of International Communications, Dept. of State, 5 Nov. 1941, in AAG 375, dead files, Flights-Hawaii, Phil.
10. Msg. #5175, American Embassy, London, to Sec. of State, Washington, 30 Oct. 1941; msg. #5180, Sec. of State to American Embassy, London, 31 Oct. 1941; draft of msg. to be sent to

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RESTRICTED

213

- CG Hawaiian Dept., 1 Nov. 1941; msg., Arnold to CG USAFFE, 6 Nov. 1941, in AAG Misc. Cables.
11. Msg. #849, Honolulu to TAG, 15 Nov. 1941; ltr., Maj. Gen. F. L. Martin to Arnold, 17 Nov. 1941, in Air AG, SAS 452.1, Phil.
 12. Msgs. #255 to CG USAFFE, 3 Nov. 1941; msg. #836, Manila to TAG, 16 Nov. 1941; msg. #957, Ft. Shafter to C/AAF, 27 Nov. 1941; msg. #1044, Manila to TAG, 1 Dec. 1941. The Darwin fields became almost unusable in the rainy season. MacArthur advised that future heavy-bomber flights should proceed from Port Moresby directly to Manila. Msg., MacArthur to CG Hawaiian Dept., 3 Dec. 1941, in AG 452.1, Phil. See also History, 5th AF, 6, and ltr., Claggett to C/AS, Melbourne, ibid., App. II, Doc. 12.
 13. The Java Sea Campaign, Office of Naval Intelligence Comsat Narratives, 3; Hart, Narrative of Events.
 14. JBWP-R5-A, Revision of Rainbow No. 5, approved by the Joint Board, 19 Nov. 1941, in exec. office, AG/AS, Plans; ltr., Marshall to CG USAFFE, 21 Nov. 1941, in W.P. II-C-5, Midway Island.
 15. RmR, C/AS AAF to CG AFCC, 14 Nov. 1941, in AAG 373.6A, Ferry Crews; msg., Adams to CG Hawaiian Dept., 14 Nov. 1941, in AG 452.1 (11-14-41), Flights of B-17 Aircraft; RmR, C/AS AAF to C3AG, 15 Nov. 1941, in AAG 452.1, Airplanes, Phil.; msg. #848, Martin to TAG, 15 Nov. 1942, in AG 452.1 (11-15-41), Flights of B-17 Aircraft; memo for C/S by Spaatz, 22 Nov. 1941, concurred in by AG/S G-3, 23 Nov. and WPD, 26 Nov. 1941, in AAG 452.1, Airplanes, Phil.; ltr., Arnold to Martin, 1 Dec. 1941, in Air AG, SAS 452.1, Phil.
 16. Memo for C/S by Spaatz, 22 Nov. 1941, in AAG 452.1 Airplanes, Phil.
 17. Memo for C/AS, initialed as approved by HIA, 17 Nov. 1941; msg. #967, Ft. Shafter to TAG, 28 Nov. 1941. In addition to the aircraft carriers, one of which was said to have been the Kaga, the following aircraft were estimated as being in the Mandates: 8 flying boats at Motje, 8 flying boats and 12 fighters at Jaluit, 6 fighters and 6 heavy bombers at Truk, 3 fighters and 6 heavy bombers at Saipan, 8 flying boats at Palau. Msg., Manila to WD, signed Brink, 27 Oct. 1941.
 18. Singapore to WD, signed Brink, 21 Nov. 1941; ltr., R. Brookes Popham to MacArthur, 24 Nov. 1941, in AG 452.1, Phil.
 19. Msg., Adams to CG USAFFE, 26 Nov. 1941, in AG 452.1, Phil.; msg. #443, Adams to CG Hawaiian Dept., 26 Nov. 1941.

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SECRET

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214

20. Msg., Brereton to CG, EAAF, Port Moresby, 29 Nov. 1941; msg., MacArthur to CG Hawaiian Dept., 29 Nov. 1941; msg., Adams to USAFFE, 29 Nov. 1941, in AG 452.1, Phil.; msg. #499, Adams to CG USAFFE, 2 Dec. 1941; msg. #1044, Hawaii to Chief, AG, 5 Dec. 1941; memo for Adm. Purnell by Brig. Gen. R. M. Sutherland, 6 Dec. 1941, in AG 452.1, Phil.
21. Ltr., Hq. Air Force, USAFFE (from Brereton) to all post, group, and separate squadron commanders, 10 and 11 Nov. 1941, in AG 381 (11-13-40) Sec. 1, USAFFE; ltr., Lt. Don Mitchell to Dr. Bayrd Still of Duke Univ., in Dr. Still's personal files.
22. Msg. #624, Marshall to CG USAFFE, 27 Nov. 1941, in AG 381 (11-27-41), General; Hart, Narrative of Events.
23. Ibid.; msg. #1004, MacArthur to Marshall, 28 Nov. 1941, in AG 381 (11-27-41), General.
24. Chronology of the Philippines, in History, 5th AF, Doc. 62, App. II.
25. Hart, Narrative of Events: W. P. Fisher, Report on Philippine and Java Operations [Fisher Report]; unrecorded interview with Brig. Gen. Francis M. Brady [Brady interview].
26. History, 24th Pursuit.
27. Msg., ASDA 522A, Brereton to Arnold, 29 Feb. 1942; memo for Gen. Marshall by Maj. Gen. J. A. Green, Chief of CA, 5 and 7 Nov. 1941, in AG 320.2 (7-26-41), Organization and Reinforcements of USAFFE. A considerable program for expanding coast artillery and antiaircraft facilities was under way by training units of the Philippine Army. Report by Lt. Col. S. H. Melnik, A/A in the Philippines, in History, 5th AF, Doc. 24, App. II; Brady interview. The 200th CA (AA) Regiment was stationed at Clark Field. It apparently had one battalion of 3-inch guns and another battalion of 37-mm. guns. History, 5th AF, 6.
28. Spaatz complained that although in the near future SCR 265's would be available since they were being manufactured at the rate of about 40 per month, they were all being delivered to Coast Artillery units. Memo for the C/S by Spaatz, 13 Nov. 1941, in Air AG, SAS 320.2, Phil.; msg. #919, MacArthur to TAG, 21 Nov. 1941; History, 24th Pursuit; History of the V Fighter Command.
29. Statement of Lt. Col. Ray Elmore, in History, 5th AF, Doc. 30a, App. II; Brady interview.

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315

30. Ibid.; Statement of Col. Elsmore.
31. History, 24th Pursuit.
32. Msg. #96, Singapore to WD, signed Brink, 5 Dec. 1941.
33. Msg. #1105, MacArthur to EAG, 6 Dec. 1941, in AG 381 (11-27-41), General.
34. Ltr., Hq. USAFFE (MacArthur) to CG Philippine Div., Fort William McKinley, 6 Dec. 1941, in AG 381, USAF in the Far East.
35. Msg. #733, Marshall to CG USAFFE, 7 Dec. 1941, in AG 381 (11-27-41), General. For a complete collection of the warning messages see Appendix 3.
36. History, 5th AF, 6-7.

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1216

Chapter III

1. History of the 27th Bombardment Group.
2. History, 24th Pursuit.
3. The 24th Group received official confirmation of the outbreak of hostilities at "approximately 4:45." Ibid. The bomber base at Del Monte apparently received two notices, one at about 0630, stating "Hostilities have begun. All airdromes alert." The other a few minutes later, "hostilities have commenced, govern yourself accordingly." Interviews with Col. Fry (Doc. 8) /Fry interview/ and with Maj. Heald (Doc. 17), in History, 5th AF, App. II.
4. Interview with Col. Eugene Eubank; interview with Col. Harold Eads, engineer, Far East Air Force; talk by Maj. W. P. Fisher, in AAG 385, Warfare. On 27 May 1944 a letter was written from the Chief of Staff, Fifth Air Force to General Headquarters, Southwest Pacific Area, requesting that persons who had held "key positions" in the Philippines should furnish the historical office of the Fifth Air Force "with such information as they can" on air force activities in the Philippines. Several questions were presented including a request for information on whether a plan existed for the employment of the air force in the event of war, a question as to whether an attack on Hawaii was considered justification for an offensive attack by American bombers against Formosa, and whether General Brereton had received any orders on the employment of bombers on the morning of 8 December. The reply to this letter came in the form of a first indorsement of 7 June, signed by the acting adjutant general by command of General MacArthur: "There is no official information in this headquarters bearing upon the questions propounded in basic communication." Doc. 20, History, 5th AF, App. II.
5. History of the 30th Bombardment Squadron, in History, 19th Bombardment; History, 24th Pursuit.
6. Ibid.; Fisher Report.
7. Ibid.; History, 24th Pursuit; ltr. (?), Col. A. W. Harriner, Dir. of Communications to CG USAFIA, 3 Apr. 1942, in AAG 600 Misc., Phil.
8. History, 24th Pursuit; Fisher Report. The Navy claimed that the first attack on the Philippines was made upon two PBY's at Malalag in Davao Gulf. These two planes were destroyed. Two others had just taken off on a reconnaissance flight and escaped. Hart, Narrative of Events.

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~~RESTRICTED~~~~SECRET~~~~CONFIDENTIAL~~

217

9. History, 24th Pursuit; Keator and Moore received DSC's for their victories. According to the citation, Moore shot down his two planes on 10 December. But the description of the action tallies more with that of 3 December. GO #48, Hq. USAFFE, 21 Dec. 1941. See also History, 5th AF, 12.
10. History, 24th Pursuit; GO #11, Hq. 5th AF, 30 Sep. 1943; Fry interview in History, 5th AF.
11. History, 19th Bombardment, App. B [19th Group Operations Record]. Staff Sergeant Milo Bibin received a Purple Heart for the B-17 action, as he was severely wounded while at his post as an aerial gunner. GO #16, Hq. Far East Air Force, Bandung, Java, 12 Feb. 1943.
12. All these men were decorated. GO #17, Hq. FEAF, 23 Feb. 1942; GO #2, Hq. Southwest Pacific Command, Lembang, Java, 15 Feb. 1942; GO #48, Hq. USAFFE, 21 Dec. 1941; GO #52, Hq. 5th AF, 13 Dec. 1942. Others cited in these general orders for similar feats were 11/Sgt. Thomas J. Crowley; E/Sgt. Anthony Holub, and Pfc Joseph G. McElroy. See also Fisher Report. The one anti-aircraft regiment stationed at the airfields was the 200th CA (AA) at Clark Field. This regiment apparently had one battalion of 3-inch guns and another of 37-mm. guns. But only low-altitude, powder-train fuzes were available for 3-inch shells. History, 5th AF; unrecorded interviews with Brig. Gen. Francis M. Brady [Brady interview] and Col. Cecil Combs [Combs interview]. Major Gibbs commanded the 19th Group from 10 to 12 December. On 12 December he took off in a B-18 for Mindanao during severe tropical storms. Colonel Combs reported that the storms were so severe that even a B-17 had difficulty in penetrating them. Major Gibbs never reached Mindanao, and it is assumed that the storms battered his B-18 to pieces. App. A, History, 19th Bombardment.
13. Fisher Report and Fisher Talk; History, 24th Pursuit; msg. #1133, Manila to WD, 8 Dec. 1941; msg. #1135, Manila to WD, received 9 Dec. 1941. The status of aircraft at other outposts at the same time: Hawaii--40 P-40's, 3 A-20's, 6 B-18's, 7 B-17's; Alaska--12 B-18's, 20 P-36's, 1 P-37. Memo for S/W by Spaatz, C/AS, 8 Dec. 1941, in AAG 452.1 Airplanes, Phil. A flight of the 17th Squadron had attempted to intercept the Jap attack on Nichols Field. Two aircraft crashed on the takeoff because of dust on the runway, and the remainder failed to make the interception in the darkness. The 21st Squadron at Del Carmen Field finally got 16 P-35's into the air, intercepted Japanese formation, and claims to have shot down three enemy planes. No P-35's were destroyed, but several were rather

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SECRET

218

badly damaged. This was the only occasion that the 21st Squadron was able to perform an interception. Their planes were not in good condition, having an average of about 500 hours flying time on each aircraft, and their guns had been used extensively for target practice. Statement of Maj. Stewart W. Robb.

14. Msg. #1135, Manila to WD, received, 9 Dec. 1941; History of the 27th Group; History, 24th Pursuit; msg. #1133, Manila to WD, 8 Dec. 1941; Lt. Col. James S. McAfee's Diary.
15. Report by S. M. Mellnik, A/A in the Philippines, Doc. 24, in History, 5th AF, App. II.
16. 19th Group Operations Record; Hart, Narrative of Events.
17. This information might have been acquired by Lt. Grant K. Mahoney of the 3d Pursuit Group. His citation for the DSC reads: "Volunteering for a vital night mission in thick weather during a complete ground blackout, and in the face of severe ground fire from strongly-held positions, Lieutenant Mahoney secured the information on December 10, 1941, which was needed for a subsequent successful bombing attack." GO #43, Hq. USAFTE, 21 Dec. 1941.
18. History, 24th Pursuit; 19th Group Operations Record; GO #48, Hq. USAFTE, 21 Dec. 1941. Lt. Jack Eale of the 17th Squadron was cited in the same general order for what was apparently the same action. He is described as leading his flight in attacks near Vigan, Ilocos Norte, on 10 December, through heavy AA from "approximately twenty hostile naval vessels, including two heavy cruisers and several destroyers. . . ." For the characteristics of the P-35 see Appendix 3.
19. Seven B-17's had arrived with Major O'Donnell on 9 December. An eighth, piloted by Capt. M. L. Parsel, had reached San Marcelino on the same day after a reconnaissance mission south of Davao. 19th Group Operations Record.
20. Ibid.; GO #3, Hq. Southwest Pacific Command, Lembang, Java, 15 Feb. 1942. This general order is incorrect as to date, giving 9 December as the day of the missions rather than the 10th.
21. The best account to date of Colin Kelly's mission was written by Col. H. L. Eubank after an interview with Lt. Joe Bean, and other officers who had talked to the other survivors. Narrative Report of Flight of Captain Colin P. Kelly . . . , Doc. 25, in History, 5th AF, App. II. The citations indicate that the

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319

warship, usually identified as the battleship Haruna, was sunk. There is no evidence that the warship was sunk. The Haruna appeared in later engagements, such as the second Battle of the Philippine Sea. Washington, Oct. 30, 1944, Pacific Fleet Communique 136; CG 48, Hq. USAFIP, 21 Dec. 1941; CG 432, Hq. 5th AF, 2 Dec. 1942; CG 432, Hq. 5th AF, 18 Dec. 1942. See also Reg. 9, Java to TAG, 18 Feb. 1942 and Fisher Hall's summarizing the engagement. MacArthur on 26 Dec. 1941 mentioned "the sinking of Jap battleship by Capt. Kelly" while on 11 December he had radioed that "at end of attack, ship was burning fiercely." Regs., MacArthur to TAG, 11 and 23 Dec. 1941. Navy PBY's also claim to have disabled a ship of the Haruna class on 12 December. Hart, Narrative of Events.

22. History, 31st Pursuit.
23. Combat Report of Capt. William A. Rowe [Rowe Report], in A-2 Lib.
24. History, 24th Pursuit; CG 48, Hq. USAFIP, 21 Dec. 1941; CG 427, Hq. USAFIP, 16 Feb. 1941; CG 432, Hq. 5th AF, 31 Oct. 1942.
25. Memo for C/S by Acting AG/S, G-3, 10 Dec. 1941, filed in messages in AFIP files. The history of the 24th Pursuit Group states that the 3d and 34th Squadrons combined. But since the 3d had already joined the 17th, it is probable that it was the 21st and 34th which combined on 10 December.
26. History, 5th AF, 17; 19th Group Operations Record. The airbase on Mindoro was operated throughout the siege of Ertan by 78 men who had been evacuated from Clark Field. Fry interview.
27. Regs., Manila to AD, 11 Dec. 1941; Regs., Manila to AGAF, 12 Dec. 1941; Entrying 10 received orders on 14 December to transfer to East Indies Base. Hart, Narrative of Events. CG 48, Hq. USAFIP, 21 Dec. 1941; CG 427, Hq. USAFIP, 16 Feb. 1942. "Please convey my personal congratulations to Captain James A. Villaver for his outstanding contributions to the air defense of the Philippines which have merited the award of the Distinguished Service Cross and Oak Leaf Cluster. His conspicuous acts of courage and intrepid leadership against superior enemy forces symbolize that high sense of devotion to duty which accords with the finest traditions of the Army Air Forces, does honor to his own people, and gives rise to a feeling of intense satisfaction that he and the other officers and men of the Philippine Air Force are now incorporated into the Army Air Forces for combined effort in the common cause." Regs., Arnold to CG USAFIP, 24 Dec. 1941.
28. 19th Group Operations Record; Regs. 1712, Manila to TAG, 15 Dec. 1941; CG 416, Hq. Far East Air Force, Hongkong, Java, 18 Feb. 1942; CG 42, Hq. Southwest Pacific Command, Lae, 1942.

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Java, 15 Feb. 1942; GO #12, Hq. Allied Air Forces, SWPA,
25 May 1942.

29. History, 24th Pursuit; GO #52, Hq. USAFFE, 24 Dec. 1941.
30. History, 5th AF, 20 and statement of Col. Elsmore, Doc. 30a,
App. II.
31. 19th Group Operations Record. After his arrival, Claggett was inspecting the airfield with Colonel Elsmore. He had criticized the 4-foot slit trenches as not being deep enough. When the Zeros appeared over the field in the strafing attack, Elsmore jumped into one of the trenches and landed on top of General Claggett who had been even more agile in diving into the trench. Elsmore stated that "after the raid was over we climbed out of the trench and General Claggett [sic] looked out of the corner of his eye at me and said, 'Elsmore, are those trenches deep enough'. I replied, 'General, they are not deep enough'." Statement of Col. Elsmore.

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221

Chapter IV

1. History of the 27th Group.
2. Msg., MacArthur to Marshall, 10 Dec. 1941; Manila to WD, 13 Dec. 1941. Msg. #40, Manila to TAG, 23 Dec. 1941: "The recommendation contained in my radios of 13th and 14th December re dive bomber and pursuit reinforcement by means of aircraft carriers was one of main features of our air reinforcement attempts here. Interruption of ferry route to South is permitted by present air encirclement by enemy due to day bombardment of Mindanao fields. No reference is made in your radios concerning fact that early reinforcement by carrier would solve this problem. Can anything be expected by me along that line?"
3. Memo for MacArthur by Brereton, 14 Dec. 1941, in AG 452.1, Phil.
4. Msg. #787, TAG to CG USAFFE, 15 Dec. 1941, in AG 381 (11-27-41), General; ltr., to CG AFJC, inclosure to RAR, OPD to Air Service Command, 15 Dec. 1941, in AIG 400 Misc. Phil.; ltr., TAG to CG AFJC, 23 Dec. 1941, in AAG 373 (dead files), Flights-Hawaii, Phil.; msg. #750, Adams to MacArthur, 23 Dec. 1941. The Navy apparently had some doubts about the prospects of holding the Philippines when it radioed Hart that "Army defense of Luzon must be supported as long as practicable whether subs are based at Manila or further south." Msg., C.O to CINCAF, etc., #141535 GRO444, 14 Dec. 1941.
5. Msg., Manila to WD and TAG, unnumbered, 19 Dec.; #13, 20 Dec. unnumbered, #30, and #544, 21 Dec.; #3 and #34, 22 Dec. 1941; Brief Chronology of the Philippine Campaign, Col. Ray Elsmore's Personal Papers [Elsmore Papers], Dec. 82, in History, 5th AF, App. II.
6. 19th Group Operations Record; msg. #41, Manila to TAG, 23 Dec. 1941; GO #16, Hq. FEAF, Bandoeng, Java, 12 Feb. 1941. There were numerous citations for this mission. Among others, Lieutenant Ford received the DFC. Ford was suffering from a severe attack of malaria when the mission was announced. "The seriousness of his condition was withheld because of the shortage of pilots and the importance of the mission. He landed upon completion of the flight in a state of near collapse and was immediately hospitalized. . . ." GO #2, Hq. SWP Command, Lembang, Java, 15 Feb. 1942.
7. Ibid.; GO #10, Hq. 5th AF, 23 Sep. 1942; GO #16, Hq. FEAF, Bandoeng, 12 Feb. 1942; GO #38, Hq. 5th AF, 2 Dec. 1942; 19th Group Operations Record.

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317

9. History, 24th Pursuit; History, 5th AF, 28-27; GO 4-35, II.
Allied Air Forces, 4 July 1942; Statement of L. J. Stewart Webb.
9. History, 24th Pursuit.
10. History of the 27th Group; Macfadden's Diary.
11. Idid.; History of the 27th Group.
12. History, 5th AF, 27-28; Elmore Papers; Far Eastern Air Force Headquarters Diary, Dec. 28, in History, 5th AF; statement of Lt. Col. Ray Elmore; mag., Ft. Mills to AGO, 28 Dec. 1941. The men of the 19th Group had an exciting trip to Mindanao. They traveled at night, putting in 1-day coasts by day. They were discovered by an enemy bomber near the island of Mindoro, and were bombed, but the boat escaped serious damage. At the time, they found several survivors of the boat Enry which had been sunk the previous day by a bomber. It had been carrying munitions to Mindanao. They arrived at Mindanao on New Year's Day. Fisher Report. Many individuals of the bomber command, particularly members of the 27th Group, remained on Bataan, but they became a part of Colonel George's command. History of the 27th Group.
13. Lt. Rob Foy Carruthers, Pearl Harbor, 455th Overseas, in History, 19th Bombardment.
14. The AAF in Australia to the Summer of 1942 [AAF in Australia]. AAF Historical Studies: No. 3, 1-6; mag., 1/1942, Arnold to Brereton, 15 Jan. 1942. The district engineer at Honolulu reported as early as 25 December that the route via Canton, the Filipis, New Caledonia, and Townsville was ready for ferrying heavy bombardment. Caroline was also said to be available, but the availability of lubricating oil, hydraulic brake fluid, and oxygen was questioned. Mag., 1/1942, Harmons to LAC, 20 Dec. 1941.
15. The convoy consisted of USLT Republic, USLT Charente, USLT Yacht Ligeia, USLT Leiga; the freighters, Ad. Hilstead (US), Garst Tarron (US), Joensfontein (Dutch). On 20 November, USLT Kollbrock joined the convoy. History of USLFIA, Dec. 20, in History, 5th AF, Apr. II.
16. Idid.; AAF in Australia, 13; memo for Chief Signal Officer by Gen. Corow, Acting AG/S, 2D, 10 Dec. 1941, in AG 251 (11-27-41), General.
17. History of USLFIA: memo to the Chief of Naval Operations by Corow, 12 Dec. 1941, in CND 4828, Australia; mag., MacArthur to AD, 18 Dec. 1941. "Australian Naval circles as well as our Naval Attache still think it may be practicable to send the convoy soon to arrive in Brisbane to a Philippine port, provided the United States Navy will cooperate adequately. They are also

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223

of the opinion that the ferrying of aircraft to the Philippines is possible. They are surprised unpleasantly by the statements contained in the British Admiralty Delegation cable in which were repeated the suggestion of the Chief of the United States Naval Operations to the effect that the troops and materiel in the convoy may be very important for the defense of Port Darwin and vicinity. They consider this latter view as being opposed to the directions given General Barnes by General Marshall." Msg. #40, Melbourne to MD, 18 Dec. 1941.

18. GO #4, Hq. Task Force, South Pacific, 19 Dec. 1941; History of the USAFIA; msg. #71, AG to Brig. Gen. John Lagruder, Chief of US M11, Mission to Chungking, 15 Dec. 1941, in AG 381 (11-37-41), General; memo for TAG by Acting AG/S Gerow, 17 Dec. 1941, in CPD, 4628, Australia; msg. #1015, Brett to TAG from Chungking, 23 Dec. 1941; msg. #130, Chungking to TAG, 27 Dec. 1941.
19. History of G-4 United States Army Forces in Australia, Doc. 81, in History, 5th AF, App. II; History of USAFIA; memo for Gen. Somervell by Eisenhower, received 17 Dec. 1941, in CPD, 4628, Australia; msg., MacArthur to AGO, 18 Dec. 1941.
20. Msg., Marshall to CG USAFIA, no date, Doc. 48, in History, 5th AF, App. II; unrecorded interview with Maj. John T. Trotter; Brig. Gen. Julian Barnes, General Description of Australia, Doc. 51a, in History, 5th AF, App. II.
21. Ibid.; msg. #1371, London (Royce) to MD, 16 Dec. 1941.
22. Msg., Wing Commander, Directorate of Operations, to Clagett, 19 Dec. 1941, Doc. 54; msg., Brereton to Merle-Smith, 21 Dec. 1941, Doc. 55; msg., MacArthur to Sir Charles Burnett, Chief of Australian Air Staff, 19 Dec. 1941, Doc. 56; msg., SASO Airboard to Clagett, 24 Dec. 1941, Doc. 57; all in History, 5th AF, App. II.
23. Officers at the conference were Sir Charles Burnett, General Clagett, Air Commodore Bladin, Group Captain Iachal, and Major Nicholl. Notes on Conferences Held at Amberley, 23 and 29 Dec. 1941 [Notes at Amberley], Doc. 64, in History, 5th AF, App. II. Msg. #312, Adams to CG USAFIA, 27 Dec. 1941; msg. #866, Adams to CG USAFIA, 30 Dec. 1941; History of the 7th Bombardment Group; ltr., Clagett to Chief of Air Staff, 24 Dec. 1941, Doc. 12, in History, 5th AF, App. II.
24. Msg., MacArthur to TAG, 15 Dec. 1941; Notes at Amberley. See Appendix 4.
25. History of the 27th Group. Lieutenant Noonan was to be the principal instructor in P-40's. It was hoped that he would be assisted by Flying Officer Jackson, who had had considerable experience in flying "Tomahawks." Notes at Amberley.

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~~SECRET~~ ~~CONFIDENTIAL~~ 124
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26. Msg., Marshall to /USAFIA, 25 Dec. 1941, Doc. 47, in History, 5th AF, App. II; msg., MacArthur to ACOMAR, 25 Dec. 1941; msg., Brereton to TAG, OP-11 251501 GROSS, COMUSAFOR 5, 26 Dec. 1941; msg., Clagett to Brereton, undated, Doc. 76, in History, 5th AF, App. II; msg., Brereton to TAG (cable from Navy #GRO369, 23 Dec. 1941). The following aircraft and personnel had been evacuated from the Philippines: 3 B-18's, 14 B-17's, 1 C-39, 2 "requisitioned bi-motored Beechcraft"; 16 officers and 8 enlisted men from Hq. TMAF, 20 pilots from 37th Bomb. Gp., 83 officers and 1 enlisted man from the 24th Pursuit Gp.; 50 officers and 92 enlisted men from the 19th Bomb. Gp. Brereton to TAG, -500630, GE 0828, 31 Dec. 1941.
27. Msg., Clagett to G/S, 31 Dec. 1941, Doc. 77, in History, 5th AF, App. II; msg., #54, Clagett to G/S, 29 Dec. 1941; Arnold to Brett, 25 Dec. 1941. The original route planned for planes with a range of approximately 500 miles: Brisbane or Townsville, Cloncurry, /Charleville/, Daly Waters, Darwin, Koepang in Timor, Macassar in Celebes, Balikpapan (or Samarinda II) and Marakan in Borneo, Del Monte (or Malabang, Zamboanga, Iwaling). Msg., MacArthur to ACOMAR, 2 Dec. 1942, in AG 452.1, Phil.
28. Msg., #36, Brett to G/S, 2 Jan. 1942; Notes on Conference held on 3 Jan. 1942, Doc. 33, in History, 5th AF, App. II; msg., Brett to Adm. Glassford, no date, Doc. 60, in History, 5th AF, App. II.
29. Memo for TAG by Gerow, 25 Dec. 1941, in OPD 4628, Australia; memo to TAG by Gerow, 2 Jan. 1942, in OPD 4639-29, Sec. I; memo for G/S by Gerow, 3 Jan. 1942, in OPD 4639-29, Sec. I. For the full text of this memorandum see Appendix 5.

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325

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Chapter V

1. Memo for TAG by Gerow, 31 Dec. 1941, in AG 371 (17-17-41), Sec. I.
2. Edgar McInnis, The War: Third Year, New York, 1942, 123-126; The O.A.I. Weekly, No. 1, 28 Jan. 1942.
3. Msg. I.B. #30, Melbourne to MD, 15 Jan. 1942; memo to TAG by Gerow, 2 Jan. 1942, in CPD, 4639 to 4622, Sec. I.
4. Edgar McInnis, The War: Third Year, 125-126.
5. Interview with Mr. F. D. Van Horn, representative of Standard Oil in the East Indies.
6. Ltr., Maj. Gen. L. Van Oyen to S/W Stinson, 15 Nov. 1941, in WP IV-G-5, Netherland Indies.
7. Unrecorded interview with Lt. William L. Boom; msg. #1 and 504, Bandoeng to MD, 14 and 11 Dec. 1941; The status of British planes at this time is difficult to determine. A message from Singapore gives the following disposition: at Singapore, the 232 Squadron with 6 Hurricanes; at Tengah, the 4th Army Group Unit with 4 Swordfish and the 453 Squadron with 6 Buffaloes; at Java the 100 and 36 Squadrons combined with 15 Vildebeests; at Palembang, the 258 and 232 Squadrons combined with 16 Hurricanes; and the 225 Bomber Group at some unidentified location with 10 Hudsons and 12 Blenheims. Msg. #78 from Singapore, 6 Feb. 1942. On 16 February, however, the Combined Chiefs of Staff thought that the following aircraft had reached Sumatra from Singapore: the 243, 453, and 483 Squadrons with 13 Buffaloes; the 233, 242, 253, 605 Squadrons with 67 Hurricanes; the 21 Squadron with 12 Blenheims; the 1, 8, and 62 Squadrons with 36 Hudsons; the 27 and 34 Squadrons with 57 Blenheims, the 36 and 100 Squadrons with 17 Vildebeests, and the 205 Squadron with 6 Catalinas. GCS 41, 16 Feb. 1942.
8. Interview with Col. Eugene L. Eubank; History of the 27th Group; msg., Clagett to TAG, 9 Jan. 1942.
9. Msg. #282, Adams to Brereton, 17 Jan. 1942; msg. #65, Brereton to Arnold, 15 Jan. 1942. By the first week in February it had been decided to transfer one of the pursuit groups, consisting of 80 aircraft, to the FAAT "to meet immediate needs for the defense of the northeast approaches to Australia." Memo for TAG by Gerow, 4 Feb. 1942, in CPD, 4630-41, Equipment and Troops, Australia (Sec. II).

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10. Memo for General [Stanley D.] Hibick by Arnold, 15 Dec. 1941, in AAG 452.1, Airplanes, Phil.; msg. #727, Adams to CG USAFFE, 20 Dec. 1941; msg. #1/90 to US MA, Melbourne, 6 Jan. 1942; memo for TAG [orders given by Gen. Arnold], 23 Dec. 1941, in Air AG, SAS 370.5, Phil.; memo for Col. James G. Taylor, AG Intell. Div., by Col. Earl L. Tilden, AG/AS A-3, 23 Dec. 1941, in Air AG, SAS 370.5, Phil. A message to MacArthur gave more specific information as to the pursuit reinforcements to be expected: "In Brisbane now are 46 pursuit pilots, 18 pursuit airplanes. . . . Either now on the water or departing 1st week of January for [Australia] are the remainder of 35th Pursuit Group consisting of one combat squadron and G. Hdq. Sq., 235 additional pursuit planes with 180 combat crews, two pursuit groups complete with 160 planes, mobile air depot and 10 observation planes with combat crews." Status msg. #899 to CG USAFFE, 27 Dec. 1941, in AAG Misc. Msg.
11. Msg. #5, Brett to AGO, 7 Jan. 1942; ms., TAG to US MA, Melbourne, 8 Jan. 1942.
12. Msg. #1/90 to US MA, Melbourne, 6 Jan. 1942; msg. #129, TAG to CG USAFIA, 17 Jan. 1942, in AG 580.81, Sec. 1; AAF in Australia, 39-43; msg. #1/349, Adams to CG USAFIA, 15 Jan. 1942; msg., Clagett to TAG, 9 Jan. 1942; ltr., 3d Lt. Robert E. Odell, Asst. MA, to AG/S G-2, 27 Jan. 1942, in AAG 000-300 Misc., Phil.; msg. #19, Java to [TAG], 10 Feb. 1942, in AAG Misc. Msg.
13. Msg. #CRC918, Adams to CG US Army Forces, Darwin, 31 Dec. 1941, in AG 580.81, Sec. 1; msg. #5, Adams to CG USAFIA, 1 Jan. 1942; msg. #57, Melbourne to AGO, 13 Jan. 1942; msg. #279, Adams to CG USAFIA, 17 Jan. 1942; msg. #C38 AMSG 266, Cairo to TAG, 22 Jan. 1942; msg. #ASDA 170, Java to AGO, 1 Feb. 1942; msg. #ASDA 161, Java to AG, 1 Feb. 1942; msg. #ASDA 50 and 173, Pandeng to AG, 1 and 3, Feb. 1942; msg. #10, Java to TAG, 7 Feb. 1942; msg. #580.81, CHQ Java to AG, 16 Feb. 1942; msg. #25, CHQ Java to AG, 18 Feb. 1942; msg. #3/389, Adams to CG USAFIA for Gatty, 23 Feb. 1942. It was hoped that a more expeditious ferry route to the Indies and Australia could be established. To survey such a route, Col. Herman H. Poh?, Maj. Harold B. Willis, and a noncommissioned officer left the United States for Cairo on 10 February. They were ordered to begin a survey of the Indian Ocean which might be extended to include the Cocos Islands. Msg. #323, Adams to CG USAFIA, 16 Feb. 1942.
14. 19th Group Operations Record.
15. On 14 November it was requested that a cable be sent to MacArthur stating: "General Van Oyen, Commanding Dutch East Indies Air Force, arrives Manila December 6th via clipper. Please meet General Van Oyen and discuss with him thoroughly

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227

air facilities and situation Dutch East Indies, particularly specific information regarding bases, landing and radio facilities. . . ." RmH, A-2 to AAG, 14 Nov. 1941, in AFHFI files, Misc. Cables. Admiral Hart states that so far as the Asiatic Fleet was concerned, the war began with no commitments toward the British or the Dutch. As a result, the personnel of the fleet were unacquainted with the waters in the Indies and around Malaya, and preparations for tactical operations were incomplete. A series of conferences, however, were held with Adm. Tom Phillips at Manila during the first week in December. MacArthur was present at this conference until the "conference became strictly naval in detail." Hart, Narrative of Events.

16. Memo for TAG by Cerow, AG/S, 12 Jan. 1942, in OPD 4638, Australia; General Marshall's Biennial Report, 1 July 1941 to 30 June 1942.
17. If an officer appealed to his own government, however, he was to notify the supreme commander immediately of his intention to appeal and furnish the supreme commander "by the most expeditious means a copy of the appeal." Ibid.
18. Ibid.; msg. #1/90, to MA, Melbourne, 6 Jan. 1942. ABDACOM officially referred to the Supreme Command in the ABDA area. But it is used frequently for the ABDA Command in general or for the ABDA commander in particular.
19. Msg. #00046, from Wavell, 14 Jan. 1942; msg. #160418, COMINCH to CINCPAC (for Wavell from the President), Incl. (b) to COMINCH memo of 16 Jan. 1942; memo by Cerow, inclosing draft of msg., CCS to Wavell, 16 Jan. 1942; memo for Adm. King by Marshall, 16 Jan. 1942; all citations in OPD 4638-29, Sec. I.
20. Memo for C/S by Cerow, AG/S, 4 Jan. 1942, in OPD 4638-29, Sec. I; msg. #10, Brett to MILID, 5 Jan. 1942; msg. #24, Brett to Marshall, 18 Feb. 1942; msg. #54, Brett to Arnold, 19 Feb. 1942.
21. Msg., ABDACOM to Marshall, 12 Jan. 1942; msg. #193, Barnes to TAG, 10 Feb. 1942; msg. #1, Brett to TAG, 6 Jan. 1942; msg. #1/92, Arnold to Brett, no date; memo for AG, 12 Jan. 1942, sent as msg. #51 to Brett, in ABDA (Java) 1942.
22. Msg. #AF 1/209, 13 Jan. 1942; msg. #00071, ABDACOM to British Army Staff, Washington (Wavell to March 11), 16 Jan. 1942, in OPD 4638-29, Sec. I; msg., Brett to Marshall, #381, 16 Jan. 1942; msg. ABDA 7, Brett to Marshall, 17 Jan. 1942, in AG 371 (12-17-41) Sec. I, Field Operations in Australia; msg. #0190545 CR 0699, CINCPAC to AGMAR, 20 Jan. 1942.

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228

23. The "War Department radio of 17 January" was paraphrased in a memo for TAG by General Gerow, 27 Jan. 1942, in OPD 4623, Australia; msg. #0190545 CR 0399, GINCAT to AGMAA, 30 Jan. 1942; msg. #130, Barnes to AG, 29 Jan. 1942. An earlier message to Brett had stated that his duties as supreme commander were not to include "direct responsibilities" for the control and operation of American forces, but that he would represent U. S. Army interests at ABDA headquarters. Memo for the AG, 12 Jan. 1942, sent as msg. #51 to Brett, in Abda (Java) 1942.
24. Admiral Hart also states that too much consideration was given to the Malayan campaign in the earlier conferences of ABDA COM. Hart, Narrative of Events. Memo by Gerow, 27 Jan. 1942, in OPD 4623, Australia; msg., Brett to AG, 31 Jan. 1942.
25. Ibid.; memo for TAG by Gerow, 27 Jan. 1942, draft of msg. to be sent from Marshall to Brereton, in OPD 4623, Australia; memo to TAG by Gerow, 30 Jan. 1942, draft of msg., Marshall to CG USAFIA, in OPD 4623, Australia. Barnes replied to Marshall that he was following the provisions of E. 100-10 regarding the duties of a commander of a service of supply. He added that his mission regarding logistical support of Brereton and liaison with him was being carried out to the fullest extent of the available equipment and supplies. Msg. #133, Barnes to TAG, 31 Jan. 1942, in AG 371 (12-17-41) Sec. I, Field Operations in Australia.
26. Msg. to American Embassy London, "Secret and Personal for the former naval person from the President," 30 Jan. 1942, in OPD 4630-29, Sec. I; msg., Brett to TAG, 6 Jan. 1942; msg. #17, Brett for C/S, 9 Jan. 1942; msg., Java to AG, 2 Feb. 1942; msg. #19, Bandoeng to AG, 2 Feb. 1942; msg. #3, Brett to Marshall, in AG 371 (12-17-41) Sec. 2, Field Operations in Australia; memo for TAG by Eisenhower, 4 Feb. 1942, in AG 371 (12-17-41) Sec. 2, Field Operations in Australia; msg. #9, Adams to ABDA COM, 9 Feb. 1942, in AG 530.81, Sec. I; memo for TAG by Eisenhower, 10 Feb. 1942, in AG 371 (12-17-41), Sec. 2; msg. #273, Barnes to AG, 12 Feb. 1942; msg. #24, Brett to Marshall, 18 Feb. 1942; msg. #54, Brett to Arnold, 19 Feb. 1942; Admiral Hart did not have success in his efforts to cooperate with Peirse. Hart claimed that Peirse had not been trained in methods of cooperation between planes and ships. Hart, Narrative of Events.

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229

Chapter VI

1. Hart, Narrative of Events.
2. Far East Air Force Headquarters Diary, Doc. 38, in History, 5th AF, App. II.
3. The Java Sea Campaign, 12; interview with Lt. Col. R. E. Northcutt; teletype #1, Bandoeng to G-2, 13 Jan. 1942.
4. 19th Group Operations Record; GO #11, Hq. 5th AF, 30 Sep. 1942. A captured Japanese diary has an entry of 4 January 1942 which states that the heavy cruiser Myoko had been bombed off Malalag in Davao Bay, that it was returning to Sasebo, damaged and with casualties. Ens. Toshio Nakamura's Notebook, Joint Intell. Center, POA, Navy #128.
5. 19th Group Operations Record.
6. Ibid.; GO #3, Hq. SWP Comd., Lembang, Java, 15 Feb. 1942; GO #11, Hq. 5th AF, 30 Sep. 1942; msg. #34, MacArthur to AGWAR, 11 Jan. 1942; msg. #52, Melbourne to WD, 12 Jan. 1942.
7. Msg. #36, Melbourne to WD, 9 Jan. 1942; Navy msg. #101331, CR 0002, Brett to TAG, 10 Jan. 1942; Hart, Narrative of Events: The Java Sea Campaign, 14-15; O.I.I. Weekly, #1, 28 Jan. 1942, 10-11.
8. GO #27, GHQ S.W.P.A., 1 Sep. 1942; naval msg. #150237, CR 0142, CINCPAC to TAG, 13 Jan. 1942; 19th Group Operations Record.
9. Unrecorded interview with Col. Cecil Combs.
10. GO #41, Hq. Allied Air Forces, S.W.P.A., 26 Aug. 1942; GO #27, GHQ S.W.P.A., 1 Sep. 1942; msg. #321, Brereton to WD, 16 Jan. 1942; 19th Group Operations Record.
11. Ibid.
12. Ibid.; History, 19th Bombardment, 8-31 Dec. 1941.
13. The Java Sea Campaign, 14-15; Hart, Narrative of Events; memo by Gerow, 27 Jan. 1942, in CPD 4623, Australia; 19th Group Operations Record.
14. Ibid.; GO #36, #38, and #52, Hq. 5th AF, 31 Oct. 2 and 18 Dec. 1942; GO #45, Hq. Allied Air Forces, S.W.P.A., 3 Sep. 1942; GO #16, Hq. FEAF, Bandoeng, 12 Feb. 1942; GO #27, GHQ S.W.P.A., 1 Sep. 1942.

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330

15. GO #2, Eq. SWP Cond., Lembang, Java, 15 Feb. 1942; GO #16, Eq. FMEF, Bandoeng, 12 Feb. 1942; GO #33 and 52, Eq. 5th AF, 2 and 18 Dec. 1942; msg. #1, Bandoeng to WD, 20 Jan. 1942; GO #34, GHQ SWPA, 15 Sep. 1942; 19th Group Operations Record.
16. Ibid.; GO #3, SWP Cond., Lembang, 15 Feb. 1942; msg. 92, MacArthur to AGWAR, 20 Jan. 1942.
17. Interview with Capt. Vincent L. Snyder; 19th Group Operations Record.
18. Ibid.; Brady interview. The two squadrons of the 7th Group, the 11th and 23d, sailed on the USS President Polk. History of the 7th Bombardment Group (H).
19. 19th Group Operations Record.
20. Msg. #1, Drett to Marshall, 12 Feb. 1942; Fisher Report; Brady interview; unrecorded interview with Lt. William E. Boom.
21. Ibid.; msg. #220, Arnold to Breton, 29 Jan. 1942.
22. History of the 7th Bombardment Group; Brady interview; msg., Wagner, Mahoney, Strauss [to WD], 1 Feb. 1942, Doc. 65, in History, 5th AF, App. II.
23. Report of the 17th Pursuit Squadron (Provisional), Activity in Java [17th Pursuit Squadron]. Sprague had been evacuated from the Philippines where he had been stationed since April or May 1941. Msg., Ulio to CG Hamilton Field, 10 Apr. 1941, in AF 201, Sprague. The story goes that Sprague flipped a coin with "Duzz" Wagner for the honor of commanding the new squadron. Sprague won. George Weller, "Luck to the Fighters," in Military Affairs, VIII, No. 4, Winter 1944 [Weller], 268.
24. 17th Pursuit Squadron.
25. Ibid.
26. Ibid.; interview with Maj. Aland D. Moore. Cpl. Kenneth Perry who kept a journal of his experiences in Java, gives the following description of how he was "ordered" to Java: "Late in January the 'unholy ten,' as we called ourselves, was born. There were ten of us, five armorers, five crew chiefs sitting in a tent one night having a beer and wondering where some of our men had gone that had been sent out by air transport a few days before, when we were interrupted by the appearance of a lieutenant at the door. He wanted to know where Sergeant Kelly . . . was sleeping. He told him Kelly was in town, so he asked us to tell him to have

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231

ten men ready to take off at 5:30 AM. He said okay and he left, but after he'd gone we had a bright idea. 'Let's us take that ride ourselves,' one of the fellows said. 'We won't tell anybody. We'll just hop that plane and take off.' So we agreed and it was settled. At 4:00 AM I was wakened, so I dressed, picked up my barracks bag and lugged it down to the plane. Then we had breakfast and as soon as dawn broke, took off. The barracks bag and field bag were all we had with us now. . . . So we were on our way, somewhere." Weller, 271.

27. Msg. #00320 and #00331, ABDAJCOM to War Office, 24 and 26 Jan. 1942; msg. #2, Bandoeng to WD, 20 Jan. 1942; msg. #2, Bandoeng to WD, 22 Jan. 1942; msg. #1734 and #1749, London to WD, 22 and 23 Jan. 1942; The Java Sea Campaign, 16-24.
28. Ibid.
29. Msg., ABDAJCOM to WD, 23 Jan. 1942; GO #33, Hq. Allied Air Forces, SEA, 22 July 1942; GO #2, Hq. SWP Comd., Lembang, 15 Feb. 1942; GO #16, Hq. ESEAF, Bandoeng, 12 Feb. 1942. In a raid of 31 Jan. over Balikpapan, although no bombing was carried out, a formation of six B-17's was attacked by enemy pursuit, and 2/Sgt. John A. Potters was killed. GO #6, Hq. 5th AF, 10 Sep. 1942; ltr., Lt. Col. Earl Truesdell, Jr. to Comd., 17 Mar. 1942, reporting an interview with Maj. Paul Davis, in WOI 9910, A-2 Lib.; 19th Group Operations Record.
30. Msg. #3, Bandoeng to WD, 25 Jan. 1942; msg. #1, Bandoeng to WD, 23 Jan. 1942; interview with Lt. Frank E. Lawrence; Brady interview; 19th Group Operations Record.
31. Ibid.
32. Ibid.; ltr., Lt. Col. Earl Truesdell to Comd., 17 Mar. 1942; naval msg. # 35 from CINCPAC Fleet, 4 Feb. 1942. In addition to Straubel, Col. William H. Murphy, Lt. Glenn H. Soes, Lt. Irvin Roy Eriel, and Sgt. George W. Pickett were killed. These men were radio and radar specialists. Weller, 295.
33. 17th Pursuit Squadron. Dutch pursuits also engaged the Jap planes in this raid. But the slow Brewsters and Curtiss's were no match for the Zero, and at least six Dutch planes were shot down. All their pilots parachuted safely to the ground. Weller, 287.
34. Msg. #351, Brett to Marshall, 7 Feb. 1942, in AG 381 (11-27-41), Sec. 2A; Lt. Col. John A. Rouse Diary; 19th Group Operations Record.

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232

35. Msg. #3, from Bandoeng, 4 Feb. 1942; msg. ABDA 152, Bandoeng to TAG, 1 Feb. 1942; The Java Sea Campaign.
36. Ibid.; Lane interview; Diary of Lt. Paul E. Cambonini.
37. Ibid.; msg. #31, Java to TAG, 9 Feb. 1942; msg. #1, from Bandoeng, 6 Feb. 1942; GO #12, Hq. Allied Air Forces, SWPA, 25 May 1942; GO #25, GHQ SWPA, 27 Aug. 1942; 17th Pursuit Squadron.
38. Msg. #25, Java to TAG, 9 Feb. 1942; 19th Group Operations Record.
39. Ibid.; msg. #3 from Bandoeng, 9 Feb. 1942; GO #27, GHQ SWPA, 1 Sep. 1942; GO #35, GHQ SWPA, 16 Sep. 1942; GO #4, 11, 20, 26, 37, 38, 52, 5th AF, 6, 30 Sep., 12, 31 Oct., 27 Nov., 2, 18 Dec. 1942.
40. 19th Group Operations Record.
41. Hart, Narrative of Events; The Java Sea Campaign; msg. #1, from Bandoeng, 4 Feb. 1942; msg. #2, Thorpe to TAG, 8 Feb. 1942; msg. from F-35 Navy, COMNAV SWPA, filed 7 Feb. 1942; msg. #24 from Brink, 13 Feb. 1942; msg. #3 from Thorpe, 15 Feb. 1942; msg. #12 from ABDA COM, 10 Feb. 1942.
42. Brady interview; Hart, Narrative of Events; 19th Group Operations Record; 19th Bombardment Group Diary Dec. 8, 1941-Feb. 24, 1942, in History, 19th Bombardment [19th Group Diary].
43. 19th Group Operations Record.
44. "Following message has been repeated to Melbourne, Hawaii, and Adler, Cairo. Immediately forward all aircraft, Sourabaya has been attacked." Msg. #1, Brett to TAG, 3 Feb. 1942; msg. #762, Cairo to TAG, 4 Feb. 1942; msg. #13, Brett to TAG, 10 Feb. 1942; Brady interview.
45. From 9 to 30 February, 10 B-17's and 1 LB-30 arrived via the African route, 1 B-17 and 1 LB-30 via the Pacific route. Capt. Cecil C. Knudsen's Diary, in History, 19th Bombardment [Knudsen Diary], 7 Feb. 1942. 19th Group Operations Record; 17th Pursuit Squadron; Cambonini Diary.
46. Two P-40's were washed out between 10 and 12 February. Ibid.; ltr., Maj. John E. Davies to CG, 91st Bomb. Sq., 5 Feb. 1942, in History of the 27th Group; msg. #7, Brett to AGWAR, 11 Feb. 1942; Fisher Report.
47. Ibid.; Lane interview; 17th Pursuit Squadron.
48. An award of a Silver Star to Lt. Huber I. Agenes credits him with having bombed the Palembang airfield and shooting down a Japanese plane, but according to the citation this action took place on 14 February. GO #38, Hq. 5th AF, 2 Dec. 1942. 17th Pursuit Squadron.

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233

49. Msg., ASDACOM #0135 [to TAG], 17 Feb. 1942; msg. #10, Java to AGMAR, 18 Feb. 1942; History of the 27th Group.
50. Ibid.
51. 17th Pursuit Squadron; GO #27, Hq. Allied Air Forces, SWPA, 11 July 1942; GO #11, Hq. 5th AF, 30 Sep. 1942; Gambonini Diary.
52. En. Madicoen airrome was located approximately 6 miles west of the city. There were three hangars which would accommodate three heavy bombers each. Other planes could be parked on mats near the hangars. Northcutt interview. 19th Group Operations Record; 19th Group Diary.
53. Ibid.; 19th Group Operations Record; History of the 27th Group; GO #2, Hq. SWP Cond., Lembang, 15 Feb. 1942. The order giving Galusha a DFC for an action which took place on 19 February was dated on 15 February. GO #20, Hq. Allied Air Forces, 20 June 1942.
54. Msg. #23 from Java, 20 Feb. 1942; 19th Group Operations Record; GO #40, GHQ SWPA, 3 Oct. 1942; GO #30 and #33, Hq. 5th AF, 12 Oct. and 2 Dec. 1942; 17th Pursuit Squadron; Gambonini Diary.
55. Msg. #2456, Fort Shafter to TAG, 27 Feb. 1942; GO #27, GHQ SWPA, 1 Sep. 1942.
56. Ibid.; GO #32, GHQ SWPA, 23 Dec. 1942; msg. #309, Melbourne to TAG, 23 Feb. 1942; AAE in Australia, 24-25.
57. Ibid.; msg. #78, Melbourne to LIUD, 20 Feb. 1942; msg. #293, Melbourne to AGMAR, 20 Feb. 1942; msg. #399, Melbourne to AG, 20 Feb. 1942; msg. #306, Melbourne to AG, 21 Feb. 1942. The Mauna Loa, Leica, Tulagi, and Port Moresby escorted by the cruiser Houston and the destroyer Reary had set out from Darwin on 15 February; loaded down with troops to reinforce Timor. On the following day, the convoy was attacked by Jap planes which drove it back to Darwin. The Java Sea Campaign, 35-36. One account stated that the first boat to leave Darwin after the 19 February bombing carried the 806th Engineer Battalion, which had been constructing airfields near Darwin, to Fort Moresby early in July 1942. Unrecorded interview with Maj. John T. Trotter, 806th Eng. Bn.

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234

Chapter VII

1. Msg. #31, GHQ Java to AGO (Brett for Arnold), 18 Feb. 1942.
2. Ibid.; Brady interview; msg. #3, from Sandboeng, 20 Feb. 1942; msg. #AG 331, 18 Feb. 1942, Brett to Arnold.
3. Msg. #27, Brett to TAG, 17 Feb. 1942; msg. ABDA 448A, Brett to TAG, 18 Feb. 1942.
4. E-1, AAF A-4 to AEF Hqs. Center, draft of msg. to be sent to Brett, 19 Feb. 1942, in AAG Misc. Hqs.; memo to C/S by AEF (unsigned), 20 Feb. 1942, in WP-IV-D-4, Dec. 1941 to Dec. 1942, India.
5. Msgs. #3, 5, and 12, Java to AGMR, 20, 21, and 22 Feb. 1942; msg. #18, Java to TAG, 21 Feb. 1942; msg. ABDA 530, Java to TAG, 23 Feb. 1942.
6. Msg., Admiralty to B.A.D. Washington, 23 Feb. 1942, in C.P.S. 19/D, 24 Feb. 1942; msg. #00076, Cavell to Brittan for CCS, 22 Feb. 1942, in C.P.S. 19/D, 24 Feb. 1942; msg. ABDA 550, Brett to TAG, 23 Feb. 1942; msg. #CPX, Java to AGO, 25 Feb. 1942.
7. Msg., Lt. Gov. H. J. Van Hook to Marshall, 22 Feb. 1942, in OPD 4639-30, Sec. II.
8. Memo to TAG by Eisenhower, 23 Feb. 1942, draft of msg. Marshall to Brett, in AG 371 (12-17-41), Sec. 2, Field Operations in Australia; msg. #00132, ABDA001 to CCS, 23 Feb. 1942, in C.P.S. 19/D, 24 Feb. 1942; memo for TAG by Eisenhower, 24 Feb. 1942, draft of msg. Marshall to U. S. NA, Batavia, to be delivered to Lt. Gov. H. J. Van Hook, in OPD 4639-30, Sec. II.
9. Ltr., Arnold to Hynes, 21 Feb. 1942, in WP-IV-D-4, India, Dec. 1941-Dec. 1942; memo for C/S by Col. George, 23 Feb. 1942, in WP-IV-D-4, India, Dec. 1941-Dec. 1942; memo for TAG by Eisenhower, 24 Feb. 1942, draft of msg. Marshall to CG USAFEB, in OPD 4639-30 Sec. II; memo for TAG by Eisenhower, 25 Feb. 1942, draft of msg. to CG USAFIA, in OPD 4639-30, Sec. II; memo for TAG, 26 Feb. 1942, draft of msg. to CG USAFIA.
10. Lsg., Brereton to Marshall, 27 Feb. 1942; AAF in Australia, 26.
11. The Java Sea Campaign, 40-44; 19th Group Operations Record; 19th Group Diary.

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235

12. Ibid.; 19th Group Operations Record; History of the 37th Group; 17th Pursuit Squadron.
13. Ibid.; GO #2, Hq. SMP Command, Lombang, 15 Feb. 1942; ltr. Maj. W. E. Smith to Mrs. Sprague, 14 Apr. 1942, in AF 301, Sprague; Carbonini Diary.
14. History of the 37th Group; 19th Group Operations Record; GO #30, Hq. Allied Air Forces, SUSA, 20 June 1942.
15. Fous. Diary; 19th Group Diary.
16. Ibid.; 19th Group Operations Record.
17. 17th Pursuit Squadron; GO #37, Hq. Allied Air Forces, 11 July 1942; GO #39, CH, SUSA, 10 Aug. 1942; GO 10 and #39, Hq. 5th AF, 22 Sep. and 12 Oct. 1942; Carbonini Diary.
18. The Java Sea Campaign; msg., COMJCH ASDA, 1 Mar. 1942; msg. #474, Melbourne to AGO, 2 Mar. 1942; msg. #305, sans origine /Brett/ to HRO, 5 Mar. 1942; msg. from F-55 Navy Source, 6 Mar. 1942.
19. Just what happened to the F-40's aboard the Savitch has been impossible to determine. Apparently after the planes were unloaded, the ship escaped to Australia. The planes, still crated, were probably destroyed by the Dutch before the Japs arrived. The Java Sea Campaign, 48-50.
20. 17th Pursuit Squadron; 19th Group Operations Record; Carbonini Diary.
21. The figures of the covering force are approximate. "The Jupiter reported 1 enemy cruiser and 4 destroyers in this locality and later 3 cruisers and 4 destroyers. The Electra reported 2 battleships (really heavy cruisers), 1 cruiser, and 3 destroyers; and later 1 cruiser and a large number of individual ships. The Jupiter made one report of scattered forces consisting of 4 cruisers and 14 destroyers." The Java Sea Campaign, 55-59.
22. Ibid., 50-51.
23. Ibid.
24. GO #12, Hq. Allied Air Forces, SUSA, 22 May 1942; GO #53, Hq. 5th AF, 31 Dec. 1942; House Diary; Hudson Diary.
25. The Java Sea Campaign, 51; Talk by Maj. William F. Fisher, 20 Mar. 1942, in AGO 305, Warfare; Fisher Report; GO #27, Hq. Allied Air Forces, SUSA, 11 July 1942; GO #35, CH, SUSA, 27 Aug. 1942; 17th Pursuit Squadron; Carbonini Diary.

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336

36. Ibid.; Fisher Report; Edward O. Yerington, The Evacuation of Java, in 435th Overseas, in History, 19th Bombardment; 17th Pursuit Squadron.
37. Ibid.; ltr., Maj. Gen. H. L. George to CG AAF, 15 Jan. 1944, in AF 201 Kester; GO 1830, WD, 8 Apr. 1944. Capt. Cecil G. Knudsen claims that he took the machine gun from the Dutch pilot, and shot the enemy plane down himself. Knudsen Diary. Ltr., Lt. Col. Karl Truesdell, Jr. to Tom, 17 Mar. 1943; Rouse Diary.
38. AAF in Australia, 7-8, 33, 44; msg. 2131 from London, 8 Mar. 1943; Brady interview.

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237

Chapter VIII

1. Msg. #433 sans origine to TAG, 3 Mar. 1942, in AG 381 (11-27-41), Sec. 3, Far Eastern Situation.
2. Navy msg. #AEDA 74, to ALUSMA Melbourne (for Brereton), 25 Jan. 1942; msg. #220, Chungking to TAG, 26 Jan. 1942; msg. #15, Java to AGO, 13 Feb. 1942; msg. #295, Melbourne to AGMAR, 30 Feb. 1942; msg. #483, sans origine to TAG, 4 Mar. 1942; msg. #000, Mainwright to TAG, 26 Mar. 1942; General Marshall's Biennial Report, 1 July 1941 to 30 June 1942.
3. Msg. #535, Australia to AGMAR, 30 Apr. 1942; SO #26, MD, 30 Jan. 1942; msg., Arnold to Brett, 26 Jan. 1942, in AG 320.2 (1-26-42), Misc.; msg. #2/31, TAG to AEDACOL, 2 Feb. 1942; ltr., TAG to CG's, Caribbean Defense Comd., Alaska Defense Comd., Hawaiian, and Philippine Depts., 5 Feb. 1942; msg. #3, Java to AG, 13 Feb. 1942; GO #28, GHO S.W.P.A., 3 Sep. 1942.
4. Msg. #005, MacArthur to AG, 5 Feb. 1942; msg. #413, Fort Mills to AGO, 4 Mar. 1942; msg., Arnold to MacArthur, 4 Mar. 1942, in AG 381 (11-27-41), Sec. 3, Far Eastern Situation; GO #39 and #40, Hq. USAFFE, 12 Mar. 1942; History, 24th Pursuit; combat report of Capt. William M. Fove; statement of Maj. Stewart Robb. MacArthur claimed that there were no air losses in the 2 March raid and stated: "In the action we had only 4 worn-out F-40's and to enable all of them to divebomb with 500-lb. bombs, I had them rigged with a special spring device improvised here." Msg. #419, MacArthur to AGMAR, 5 Mar. 1942.
5. History, 24th Pursuit; statement of Maj. Stewart Robb. For the first month after the evacuation to Lataan, the health of the troops was surprisingly good. But by March, malaria and dysentery had become uncontrollable. Lt. Col. William J. Kennard, Report on Philippine and Australian Activities, 14 Nov. 1942, in AAG 726.1 bulk, Reports of Air Surgeon. Combat reports of Capt. William M. Rowe; GO #37, Hq. USAFIA, Melbourne, 5 Apr. 1942; GO #26, GHO S.W.P.A., 23 Aug. 1942. See Appendix 6. Statement of Lt. Col. Ray E. Elsmore.
6. Ibid.; msg. #20, MacArthur to TAG, 7 Jan. 1942; msg. #116, Ft. Mills to AG, 24 Jan. 1942; Report on Airfields, 1 Feb. 1942, and Supplemental Report on Airfields, 1 Mar. 1942. Fields had existed at almost all of these points prior to the war but they had needed much improvement. Interview with Col. Cecil Combs.
7. Elsmore statement.

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238

8. Msgs. #43, 103, 167, 341, Ft. Mills to TAG, 13, 25, 31 Jan. and 23 Feb. 1942. Early in February Marshall informed MacArthur that there was always the possibility that Stalin would feel free to consider action in the Pacific. Memo for TAG by Gero, 8 Feb. 1942, draft of msg. Marshall to MacArthur, in OPD 4639-30, Sec. II. MacArthur in msg. #343, Fort Mills to TAG, 22 Feb. 1942 radioed the following message to be published in Russian newspapers: "All of the great military campaigns of the past are well known to me. I have had the honor to fight for my country in many wars and have personally observed many more, but I have never known of so great, so monumental a military effort as the one the Army and people of Russia are now making. The outstanding military effort of all time is theirs. The Russian Army is truly phenomenal, as demonstrated by their ability to withstand the most powerful offensives that Germany could deliver and their initiating in turn, an irresistible counter offensive on a scale never before attempted. The trust and hopes of the entire civilized world ride on their banners."
9. General Marshall's Biennial Report, 1 July 1943 to 30 June 1945; msg., Hq. USAFPA, Fort Mills to Sharp, Del Monte for MacArthur sgd. Marshall, 15 Mar. 1943; msg., Hq. USAFPA, Fort Mills to Sharp, Del Monte for MacArthur, 16 Mar. 1943, in AG 311.83. Sixteen officers and 1 enlisted man accompanied MacArthur and his wife, son, and son's nurse. The General officers included were Maj. Gen. Richard K. Sutherland, Chief of Staff, Brig. Gen. Spencer B. Akin, Signal Officer; Brig. Gen. Richard J. Marshall, Deputy Chief of Staff, Brig. Gen. William F. Margat, AA Officer; Brig. Gen. Harold H. George, Air Officer; and Brig. Gen. Hugh J. Casey, Engineer. Just a week after the MacArthur evacuation, three B-17's once more made the trip to Del Monte and brought out President Quezon, his family, and staff. The crews on this trip were completely different from those of the previous week with the notable exception of the navigators, 3d Lts. Herbert S. Mobley, Jack L. Carlson, and Robert R. Carruthers. History of the 455th Squadron. GO #37, Hq. USAFPA, 5 Apr. 1942.
10. At Del Monte, for example, there were 2 P-35's, 3 P-40's, and 1 P-13, and 2 PT-13's. These aircraft carried out numerous reconnaissance and strafing missions. Elmore statement; Robb statement. The most publicized air operations during April were those directed by Brig. Gen. Ralph Royce. Between 13 and 14 April, 3 P-17's and 10 B-25's flew from Darwin, Australia, carried out a series of missions in the Philippines sinking at least 4 enemy transports, and returned to Australia without the loss of a man and with the loss of only a single B-17 on the ground. AAF in Australia, 62-64. See Appendix 7.
11. Memo for G/S by Spaatz, 13 Nov. 1941, in Air AG SAS 320.2, Phil.; memo for Marshall by Maj. Gen. J. A. Green, 5 Nov. 1941, in AG 320.2 (7-25-41), Sec. 3; msg. #548, AG to CG USAFPA, 17 Nov. 1941, in AG 320.2 (7-28-41), Sec. 3; msg. #391, MacArthur to AG, 27 Nov. 1941, in AG 320.2 (7-25-41), Sec. 5; #4 in the Philippines, Doc. 24, in History, 5th AF, II

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339

12. Hart, Narrative of Events; Brady interview. See Appendix 3. "Just before the war started the [27th] Group had been busy filling sand bags and building revetments at Nielson for our planes when they came (they were always coming around the mountain). We filled 100,000 and Ed Bacius went down to draw another 150,000. Less than 500 were available. This was two days before the war started. Ed went in to see the Col. in charge of the depot and asked if they couldn't be procured for us. The Col. laughed and said, 'Well, we have authority to buy them locally and local manufacturers can furnish us about 100,000 a week. But I don't think there's enough of an emergency now to justify spending Gov't funds for that purpose'." History of the 27th Group. "Unfortunately during November and early December as we were preparing for eventual war it was the general opinion that we would not see actual hostilities until probably April 1st, at the earliest. With this in mind the tempo of building fields did not get into full swing, although every attempt by the Air Corps was made to gear up the organization which was charged with these responsibilities. Many officers remarked repeatedly that now was the time for martial law; now was the time to take over all existing civilian equipment and facilities for the building of military installations, particularly of air fields. But such a complacency as existed did not permit military control of these vital installations and equipment; in fact, after December 7th many means were never utilized for the full war effort. However, flying strips were constructed in days after December 7, which previously would have required months spent in debating as to location and obtaining leases for the use of the land. The lack of a great number of dispersed airfields was our greatest need before the war and proved to be the greatest handicap afterwards." Lt. Col. William J. Menard, Report on Philippines and Australian Activities, 14 Nov. 1943, in AAG bull., Reports of Air Surgeon. "After December 5, we found that runways five to seven thousand feet in length and suitable for heavy bombardment could be built in from two to three weeks. Between the period from December 8 to December 24, there was built in central and southern Luzon approximately twenty such airports. . . . This program was the direct result of the activity of Colonel Harold H. George." Backes interview.
13. Digest of the Air Phase in the Philippines, in AAG 000-800, Misc. Phil.; 12th Group Operations Records; Activity of the 24th Pursuit Group in the Philippines and Java. All figures on early operations must be used with caution as accurate records are not available.
14. Ibid.; Fisher Report.
15. Of 39 pilots assigned to the 35th Pursuit Group during the last week in February, 27 had never been in a pursuit plane. Also, 95 out of 102 pilots assigned to the 49th Group were similarly untrained. Msg. #503, sans origine to TAC, 5 Mar. 1943. This angered the command in Java and Australia, because they believed that trained pursuit pilots were being kept on the West Coast of the United States. Brady interview.

~~RESTRICTED~~

240

16. 18th Group Operations Record.
17. Msg., Fort Mills to AGMAI, 19 Mar. 1942, in AG 311.03 (3-19-42); msg. #Aquila 5, Erereton to AGMAI, 29 Mar. 1942; Tactical Lessons from Aircraft in Combat, 27 Mar. 1942, Dec. 22, in History, 8th AF, App. II.
18. Ibid.; interviews with Maj. Frank F. Bostro., Maj. Edward C. Yeats, Capt. H. C. Shelsier, Lt. Robert A. Trenkle; Capt. E. S. Green; msg. #ABDA 456, Java to TAG, 19 Feb. 1942; msg. #ABDA 37DX, Java to TAG, 17 Feb. 1942.
19. History of the 27th Group; interview with Maj. John Davies; msg., Adams to CC USAF, Darwin, 5 Jan. 1942.
20. Fisher Report; msg. #3 from Bandoeng, 12 Feb. 1942; msg. #17, Java to TAG, 19 Feb. 1942; msg. #369, Adams to CC USMIA, 22 Feb. 1942; report by Col. William Lane, Information of tactical value on Japanese Navy "O" Fighters, in SEIH files.
21. Msg., Manila to TAG, 10 Dec. 1941.

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| 320.3 (9-34-41) | Transfer of Two Pursuit Squadrons |
| 320.3 (7-28-41) | Organization and Reinforcements for USAFFE |
| 320.3 (1-26-42) | Miscellaneous |
| 320.3 (7-28-41) Sec. 3 | |
| 321.93 | Philippines |
| 370.5 (8-1-41) Pts. 1&2 | Reinforcement and Movement of Troops |
| 370.5 (9-26-41) | Transfer of Air Corps Units |
| 371 (12-17-41) Sec. 1&2 | Field Operations in Australia |

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243

| | |
|----------------------------|---|
| 381 (11-13-40) Sec. 1 | USAF in the Far East |
| 381 (11-27-41) | General |
| 381 (11-27-41) Sec. 2A | |
| 381 (11-27-41) Sec. 3 | Far Eastern Situation |
| 452.1 (9-10-41) Sec. 1.1.2 | Flight of B-17 Aircraft . . . |
| 452.1 (10-28-41) | Flight of B-17 Aircraft |
| 530.81 Sec. 1 | |
| 530.82 (2-24-41) WG-C | Air Field Development in the Philippine Islands |

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| W.P. II-C-5 | Midway Island |
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| W.P. IV-D-4 | India |

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The documents pertaining to the Philippines and the Netherlands East Indies, which were used with the special permission of CPD, are filed in the AGO Classified Files.

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| CPD 4633-41 | Equipment and Troops, Australia Sec. II |
| CPD 4632-30 | Section 2 |

Cable Messages

For this early period, cable messages are useful in determining policies and organizational changes. They are not particularly valuable for operations since they rarely indicate dates of action, and figures given are extremely inaccurate. Unless otherwise indicated in the notes, all messages were found either in the AIF Message Center or in AFIML files.

Histories and Diaries

The documents in this list are filed in the Archives of AG/AS, Intelligence, Historical Division unless otherwise indicated.

History of the Fifth Air Force (and its predecessors), Part I, December 1941 to August 1942.

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243

The only installment of this history so far completed covers December 1941. It was written at Headquarters, Fifth Air Force in 1944. It is an excellent account of organization and operations. Of perhaps even greater importance is Appendix II which is a collection of 34 selected documents including the History of the 24th Pursuit Group, a History of USAFIA, and a Diary of PMAF Headquarters. Appendix I contains a number of useful maps and charts.

History of the V Fighter Command.

Slight, and useful only for a few administrative details.

History of the 7th Bombardment Group (H)

For this period concerned only with the ground echelon.

History of the 19th Bombardment Group (A)

Of most importance in this collection of documents are Appendix B and the Diary of Operations of the 19th Group in Java. Appendix B is a "Consolidation of 19th Bombardment Gp. operations records." It covers the period from 7 December 1941 to 24 February 1942 and includes operations of the 19th, the 7th, and the 27th Groups. It therefore amounts to a daily diary of the V Bomber Command. Important daily excerpts from this document are to be found in Appendix II of the History of the Fifth Air Force. These excerpts extend the diary through 6 March 1942. The following documents in addition to the two noted above and a number of short group histories are in the collection:

History of the 28th Bombardment Squadron
History of the 30th Bombardment Squadron
History of the 93d Bombardment Squadron
History of the 435th Bombardment Squadron
The 435th Overseas

Cool, Maj. Paul E. Excerpts from a diary kept in Java and Australia, 1 January-10 December 1942.

Zmudsen, Capt. Cecil C. A diary kept in Java and Australia, 1 January-27 December 1942.

Activity of the 24th Pursuit Group in the Philippines and Java.

This contains the story of the operations of the 24th Pursuit Group in the Philippines and the 17th Pursuit Squadron (Provisional) in Java together with rosters and statistics. The Report of the 17th Pursuit Squadron is also to be found in the Intelligence Library, AC/AS, Intelligence, Collection Division.

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~~RESTRICTED~~

244

History of the 27th Bombardment Group (L)

Diary of Maj. Paul B. Gambonini, 29 January to 1 March 1942

This document was furnished the Historical Division by Major Gambonini at the request of Lt. Col. C. W. Williams, Deputy Chief of the Historical Division. It is useful for the activities of the 17th Pursuit Squadron (Prov.) in Java.

Diary of Lt. Col. John A. House, 7 December 1941 to 25 November 1942

This valuable document was furnished to the Historical Division by Colonel House, former commander of the 30th Squadron of the 19th Bombardment Group.

Diary of Lt. Col. James L. McAfee, 1 November 1941 to 5 October 1942

This is an interesting, personal record of an officer of the 27th Bombardment Group. In AFHFI files.

Combat Report of Capt. William Rowe

Rowe, a pilot in the 24th Pursuit Group, has given a detailed account of a number of missions flown in the Philippines.

Interviews

Recorded Interviews

The interviews in this list, unless otherwise specified, are on file in AS/AS, Intelligence, Collection Division (cited as A-2 Library). The date is that of the interview.

Members of the 19th Bombardment Group:

Bostrum, Maj. Frank P., 435th Squadron, 5 Dec. 1942
Bohnalter, Capt. William J., 29 Apr. 1942
Green, Capt. E. S., 6 Apr. 1942
Lawrence, Lt. Frank E., 3 Apr. 1942
Northcutt, Lt. Col. E. E.
Shelser, H. G., in AIG 353.40, Bombing Operations, 6 Apr. 1942
Snyder, Capt. Vincent L., engineer officer, 5 Dec. 1942

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245

Tents, Maj. Edward G., 5 Dec. 1942 (?)
 Tremble, Lt. Robert A., 7 Apr. 1942

Eubank, Col. Eugene L., 2 July 1942
 Backes, Col. Charles, 12 May 1942
 Davies, Col. John, 9 Dec. 1942
 Fisher, W. P., Report on Philippine and Java Operations
 Moore, Maj. Alan D., Troop Carrier pilot, 30 Jan. 1944
 Robb, Maj. Stewart, Statement, 30 Nov. 1944, made in
 response to request by historian of 7 Fighter Command.
 In AFMHI files.
 Van Horn, F. D., representative of Standard Oil in the East
 Indies, 30 Jan. 1944

Unrecorded interviews

Boon, Lt. William E., an American who flew with Dutch air units
 in the Netherlands East Indies prior to the outbreak of the
 Pacific War. 1 June 1944.
 Brady, Brig. Gen. Francis L., General Brereton's Chief of Staff
 in the Philippines and Java. 7 Dec. 1944. According to General
 Brady important details as to prewar conditions in the
 Philippines and a chronology of the first days of the war
 were incorporated in a report which was signed either by Brady
 or Brereton. The report was carried to the United States by
 General Cloggett in February 1942. A search of War Department
 files for this report proved unsuccessful.
 Combs, Col. Cecil E., formerly of the 19th Group, 19 January 1945.
 Lane, Lt. Col. William, Jr., formerly of the 20th and 17th
 Pursuit Squadrons (Prov.), 15 May 1944. Colonel Lane supplied
 copies of special orders, citations, and other papers retained
 in his personal files.
 Trotter, Maj. John E., formerly of the 698th Engineer Bn. 18 Oct.
 1944.

Special Studies and Reports

The AAF in Australia to the Summer of 1942, Army Air Forces Historical
 Studies: No. 9
Procurement of Air Crew Trainees, Army Air Forces Historical Studies:
 No. 15
Summary of Air Action in the Philippines and the Netherlands East Indies,
 Army Air Forces Historical Studies: No. 29A. A detailed, day by day
 chronicle of air operations with source citations for each mission.
Hart, Admiral Thomas G., Narrative of Events, Asiatic Fleet, Leading
up to War, and from 8 Dec. 1941 to 15 Feb. 1942, [11 June 1942] in
 AG/AS, Intelligence, Collection Division.

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CONFIDENTIAL 246

The Java Sea Campaign. Office of Naval Intelligence Combat Narrative, 1943.

Marshall, Gen. George C. Biennial Report, 1 July 1941 to 30 June 1943.

Meller, George, "Luck to the Fighters," in Military Affairs, Vol. VIII, No. 4, Winter 1944.

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Appendix 1 - Personnel in First Flight of E-17's to Philippines*

| | | | |
|----------|-----------------------|-------|------------------------|
| Maj. E | Harold C'Donnell, Jr. | E/S | Roger J. Stephen |
| Capt. | William P. Fisher | | George A. Heard |
| | Colin F. Kelly, Jr. | S/S | Arthur L. Richardson |
| 1st Lts. | George E. Schachtzel | | William J. Delchanty |
| | Henry C. Godwin | | Clyde M. Gilbert [sic] |
| | Milfred R. Montgomery | | Joseph A. Glardina |
| | Veldon M. Smith | | Walter Partridge |
| | Edward G. Teats | | James L. Cannon |
| 2d Lts. | Donald L. Kaiser | | Fred D. Secrest |
| | James P. Pezrey | | Robert G. McIntyre |
| | Henry Dittman | | Edwin J. DeBeryfuh |
| | Richard E. Carlisle | | Herbert E. Krist |
| | Morris H. Friedman | | Colley L. James |
| | Donald D. Robins | | John A. Jallach |
| | Robert E. Olin'scales | | William C. Jones |
| | Francis R. Thompson | | Stanley C. Jactola |
| | Ernest C. Wade | | John F. Clark |
| | Curtis J. Holdridge | Sgts. | Vincenzo Spaziano |
| | Stanley Cottage | | William S. Fought |
| | Carl E. Ebersson | | Clevis O. Jones |
| | Francis M. McAllister | | Norman F. Michelen |
| | Paul Rotarbutton | | Lester Krasor |
| | John B. Wright | Cpls. | Meyer Levin |
| Avn. | Eddie J. Mayman | | William T. Johnson |
| CoLets | Robert E. Masson | | Conrad R. Fayne |
| | Joe L. Beem | Pfc | William A. Knorts |
| M/S | Joseph C. Lane | | James E. Schoen |
| | John F. Carter | | Eomer L. Vincent |
| E/S | Thomas M. Meahay | | John J. Labrecque |
| | William J. P. Griffin | | Willard L. Joney |
| | Edward E. Oliver | | Robert E. Altman |
| | Harry L. Whitley | | Glover F. Burke, Jr. |
| | George L. Brandes | | Junior Procks |
| | Amancio G. Ramirez | | John Aresl |
| | John M. Sedtcher | | John W. Kennedy |
| | Roland E. Frevost | Pvt. | Lincoln E. Darron |

On detached service:

Maj. Gordon A. Blaine
Ernest Moore

Capt. Donald D. Flickinger

* Mag. "CSE, Ft. Chaffee to AGO, 30 Oct. 1941, in AG 452.1 (8-1-41).

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Appendix 2 - Characteristics of Airplanes in, and to go to, the Philippine Islands*

| <u>Model</u> | <u>Speed</u> | <u>Service Ceiling</u> | <u>Radius of Action</u> | <u>Maximum Bomb Load</u> | <u>Armament</u> | <u>Combat Protection</u> | <u>Number in Philippines</u> | <u>No. to depart for Phil. prior to 15 Dec. 41</u> |
|--------------------|--------------|------------------------|-------------------------|--------------------------|---------------------------------------|--------------------------------------|------------------------------|--|
| B-24 | 292 | 50,500 | 1249 | None ¹ | (2 30-cal. (6 50-cal. | (L.P. Tanks (Armor | 0 | 2 |
| B-17C, D, E | 323 | 35,000 | 690 | 4200 | (1 30-cal. (6 50-cal. | (L. P. Tanks (Armor | 35 | 43 |
| A-24 | 247 | 23,000 | 176 | 1000 | (1 30-cal. (2 50-cal. | (L.P. Tanks (Armor (B.P. Glass | 0 | 52 |
| B-10A | 215 | 23,900 | 420 | 2500 | 3 30-cal. | None | 18 | 0 |
| P-40D ² | 360 | 30,600 | 235 | 720 | 4 50-cal. | (L.P. Tanks (Armor | 105 | 18 |
| P-40E | 355 | 30,000 | 235 | 720 | 6 50-cal. | (B.P. Glass | | 95 |
| P-39D | 370 | 30,000 | 191 | 600 | (1 37-mm. (2 50-cal. (4 30-cal. | (L.P. Tanks (Armor (B.P. Glass | 0 | 25 |
| P-35A | 290 | 31,400 | 225 | 180 | (2 30-cal. (2 50-cal. | None | 52 | 0 |
| A-27 | 250 | 28,000 | 270 | 270 | 3 30-cal. | None | 9 | 0 |

1 - No bomb racks for these B-24's. They will have to be manufactured.

2 - Instead of P-40D's there were 30 P-40B's in the Philippines. These had 2 x .50-cal. and 4 x .30-cal. machine guns, armor plate, leak-proof tanks, B.P. glass.

* Data concerning Far Eastern situation, the Air Staff, 12-1-41, in AAG 319.1, Bulk.

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Appendix 3 - Paraphrase of Messages to and from the Philippines,
27 November-7 December 1941*

Negotiations with Japan to all practical purposes seem to have ended with only the slightest possibility that the Japanese Government might come back and offer to continue. The future action of the Japanese is unpredictable but it is possible that hostile action will occur at any moment. If it is impossible to avoid hostilities, the United States desires that Japan commit the first overt act. This policy should not be interpreted in such a way as to restrict you to action jeopardizing a successful defense of the Philippines. Prior to hostile Japanese action you are directed to take such reconnaissance and other measures as may seem necessary to you. Report the measures taken. If hostilities should occur, you will carry out the tasks which were assigned in revised Rainbow 5 which was delivered to you by General Brereton. The Chief of Naval Operations concurs and requests that Hart be notified. Msg. #624, Marshall to CG USAFFE, 27 Nov. 1941. Sent also to CG Hawaiian Dept.

Following instructions your Radio 624, air reconnaissance extended and intensified in conjunction with the Navy. Within limitations imposed by the present state of development in this theater, everything in readiness for the conduct of a successful defense. Ground security measures have been taken. Intimate liaison, cooperation, and cordial relations, between the Army and Navy exist. Msg. #1004, MacArthur to Marshall, 26 Nov. 1941.

It is desired that instructions substantially as follows be issued all establishments and units under your control and command. The present critical situation demands that all precautions be taken at once against subversive activities within the field of investigative responsibility of the War Department (Par. 3, Aid SR 3045). Situation demands that all additional measures necessary to provide the following be initiated by you: protection of all activities against espionage, protection your personnel against subversive propaganda and of your equipment, property, and establishments against sabotage. No illegal measures are authorized. Protective measures should be confined to those essential to security. Unnecessary alarm and publicity should be avoided.

On or before 5 December this year, it is also desired that reports be submitted to the Chief, Army Air Forces of all steps initiated by you to comply with these instructions. Msg. #647, Adams to CG USAFFE signed Arnold, 26 Nov. 1941.

On 21 November a copy of a letter, serial 01512-104, dated 11 November was dispatched to you by registered air mail from the Secretary to the British Joint Staff Mission in Washington for

* In AG 301 (11-27-41) Gen.

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250

collaboration, stating proposals of the Chief of Staff and the Chief of Naval Operations for cooperation between the British Commonwealth and the United States in the Far East area. Paraphrase of important paragraphs in that letter follow:

Paragraph 2 - Concur in British proposal to augment by early 1942 their naval forces in Far East to 6 destroyers and 6 battleships. Trust this force will be increased by British aircraft carrier and cruisers.

Paragraph 3 - Believe strategic situation elsewhere warrants the reinforcement of the British air force in Malaya by long-range bombers and fighters and recommend that these be sent without delay.

Paragraph 4 - Agree ASD report does not meet present situation. ASD-1 regarded as a sound major directive on which to base operating plans, but suggest broader basis for air and land forces in Far East and Australia-New Zealand areas.

Paragraph 5 - Desirability of using Manila at least initially as the main base for British Far Eastern Fleet is questioned but Manila and other Philippine harbors are available as advanced operating bases. Local commanders should decide this and include in joint operating plans.

Paragraph 6 - It is suggested that instructions for further collaboration in the Far East Area be broad so that commanders on the spot may solve with minimum interference from above their own problems. Large conference with diverse elements represented in ASD considered undesirable. Corresponding supreme commanders should agree upon major military decisions and from these develop detailed operating plans. Coordination between air, army, and navy elements to be accomplished as found desirable.

Paragraph 7 - British and United States authorities should hold the initial conference in Manila. Staff officers should hold subsequent conferences wherever desirable. Admiral Philipps's visit to Manila is to be kept secret.

Paragraph 8 - Following procedure is proposed if foregoing is accepted: A. Commander in Chief, British Far Eastern Fleet and Commander in Chief, US Asiatic Fleet to collaborate in Manila and agree on broad outline of joint naval operating plan; then invite Dutch naval authorities to collaborate in preparation of joint plan for the three navies. B. Commanding General, US Army Forces in Far East, Dutch and British Air and Army Commanders to collaborate in preparing joint air and land operating plans. Air, land, and naval operating plans to be closely coordinated. C. Except when unity of command for particular task forces is agreed upon by appropriate commanders on the spot, coordination of operations would be by cooperation. D. There should be established at once at the three major headquarters an organization for close liaison, with proper number of permanently assigned staff officers and communication facilities. E. Logistics facilities of the three powers should be pooled as far as possible. End Paraphrase.

~~RESTRICTED~~~~SECRET~~~~SECRET~~~~CONFIDENTIAL~~

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351

Except for paragraphs two and three, the British have agreed to all provisions of that letter, but have deferred reply to those two paragraphs. The British have issued to their military authorities instructions mentioned in paragraph 7. A copy is being sent to you by registered mail. The Chief of Naval Operations and the Chief of Staff desire that you and the Commander in Chief, Asiatic Fleet proceed with preliminary conferences and thereafter according to the general program outlined above hold conferences with British and Dutch. It is expected that Admiral Phillips, Commander in Chief, Far Eastern Fleet will arrive in Singapore on 6 December. Msg. #350, Adams to CG USAFFE, 29 Nov. 1941.

The Secretary and I were disturbed to receive your note of 7 November enclosing the correspondence between yourself and Hart and your letter to Stark of October 18 which he turned over to me. Reassuring was your cable of 28 November, however, stating "intimate liaison and cooperation and cordial relations exist between Army and Navy." The War Department desires that in matters of sea-patrolling and action not directly concerned with immediate threats against the Philippine Islands you will provide the desired air support for naval operations within your means. It was for this reason that emphasis was given to the authorization for you to place Army forces under naval unity of command for such specific tasks. Admiral Stark and I, without regard to past prejudices or incidents, have tried in every way to find common grounds. He has been wholehearted in his approach to these matters, and we do very much that Admiral Hart and you can find a genuinely amicable basis for the conduct of affairs in the Far East. In view of the complications inevitably involved in possible joint action with the British, Australians, and Dutch, this is particularly important. Msg. #353, Marshall to CG USAFFE, 29 Nov. 1941.

That every possible support by army air will be given to all navy operations, you may rest assured. Reurad 456. This point has never been at issue here. The assumption of command by the Navy over Army units was the subject of discussion initiated by Admiral Hart. It is my considered opinion that in view of the forces and mission involved the most effective results can be normally obtained here by a coordination of mission rather than by unity of command under the Navy. The air force commander is insistent on this point as far as air units are concerned. Admiral Hart has now apparently accepted this position and the most complete coordination, cooperation, and cordiality prevail not only between Hart and myself but between all lower echelons of both commands. The different points of view which he represented never disrupted or prejudiced this relationship in any

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SECURITY INFORMATION

RESTRICTED
SECRET

352

way. I am not familiar with the commitments on this general question which may have been made in Washington and realize that subordinate fields of action, irrespective of individual and local merits of the case may have to yield. If my position has in any way prejudiced or embarrassed you, do not hesitate to inform me so that I may effect a readjustment. Msg. #1045, MacArthur to Marshall, 1 Dec. 1941.

In reply to your radio of 23 November and your radio #647 on the same subject, all practical steps are being taken to protect all air and ground installations within the limits of the facilities to this command. Msg. #1046, MacArthur to TAC, 1 Dec. 1941.

In reply to your 647, all air corps stations here are on an alert status. Airplanes are dispersed and each is under guard. Guards on installations have been increased. All air defense stations are manned. Counter subversive activities charged air force headquarters by regulations are being organized and have started functioning in a limited manner. Msg. #1105, MacArthur to AGFAS, 6 Dec. 1941.

"Subject: Far East Situation.

"The Secretary of War directs that the following first priority secret radiogram be sent to the Commanding General, U. S. Army Forces in the Far East; Commanding General, Caribbean Defense Command; Commanding General, Hawaiian Department; Commanding General, Fourth Army:

"Japanese are presenting at one p.m. Eastern Standard time today what amounts to an ultimatum also they are under orders to destroy their Code machine immediately. Just what significance the hour set may have we do not know but be on alert accordingly. Inform naval authorities of this communication." Marshall sigd. D. T. Gerow, Brig. Gen., Acting AG/S. Memo for TAC (through Secretary, General Staff), 7 Dec. 1941.

[Noted below:] "Radios as follows dispatched 11:52 AM, 12-7-41, by code room, WAC Code messages sent out:

12:05, #733 to CG, USMFA, Manila, P.I.
12:17, #529 to CG, Nav. Dept., Ft. Shafter, T.H.
12:01, #519 to CG, Brbn. Def. Grnd., Quarry Heights, O.Z.
12:11, #16 to CG, Fourth Army, Pres. of San Fran."

No commitments have been made here that conflict with your proposed method of cooperation with the Navy, your radio 1045. Gratified that Admiral Hart and you are entirely in accord on the most effective employment of our combined Far Eastern forces. It is intended that Army air units would be placed under Navy unity of command for specific

RESTRICTED**SECRET**

RESTRICTED
SECRET

253

tasks of temporary and definitely naval character. For similar reasons Army unity of command for specific tasks would be established. Msg. #323, Marshall to CG USAFFE, 3 Dec. 1941.

The following message has been sent to Commanding General USAFFE: Hostilities between Japan and the United States, the British Commonwealth and the Dutch have begun. Carry out tasks so far as they pertain to Japan according to Rainbow #5. In addition cooperate with the British and Dutch to the utmost without jeopardizing your primary mission in defense of the Philippines. It is also authorized that you dispatch air units to suitable bases to cooperate with the Dutch and British. Report all operations and daily major dispositions. Msg. #182, Adams to Special Army Observer, London, 7 Dec. 1941.

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Appendix 4 - Extracts from History of USAFIA*

21. Early in January, Headquarters of USAFIA were moved to Melbourne, where were located the Chiefs of the Australian Army, Navy and Air Staffs. On January 3, Gen. Brett, Gen. Barnes, Gen. Brereton, arrived in Melbourne. On January 3, a conference was held between American and Australian Chiefs of Staff of the Army, Navy and Air Force to coordinate their activities. Present were Australian Army, Navy and Air Staffs and their deputies, the Australian Secretary of the Department of Defence Coordination and Gens. Brett, Brereton and Barnes and Col. Merle Smith and Lt. Col. Perrin, U.S. Air Force. In outlining the instructions dated December 24, 1941 given him by Gen. MacArthur, Gen. Brereton stated his mission was to protect lines of communication, secure bases in Mindanao and support the defence of the Philippine Is. by the U.S. Army Forces in the Far East cooperating with the U.S. Navy and the defence forces of Australia and the M.E.I. He stated he was authorized to operate against the enemy in an area to the East of the West coast of Borneo, but not further West so that Sumatra and Malaya were outside his area of operation. Gen. Brett said his logistic plan would have to conform with Gen. Brereton's dispositions. Gen. Brett stated that prior to his arrival in Australia he and Gen. Cavell had independently reached similar conclusions which they discussed together. These conclusions were that the war in the Pacific must be regarded as a slow pressure war in which we would first have to devote our strength to holding on to what we had, meanwhile building up forces to strike at the Japanese:-

- (a) By working from Burma into China through Shanghai to clear defence bases.
- (b) By exerting slow pressure through the M.E.I. and Malaya.
- (c) By exerting similar pressure from Australia into the Islands to the North.

To achieve fulfillment of this plan it would be necessary that there should be big Air Forces based in Burma, Java and Australia, with advance bases as far forward as possible.

Gen. Brett stated his main effort at present was to achieve close cooperation with Australia and establish bases in Australia to support operations to the North. He outlined the U.S. plan to bring long distance aircraft into the S.W.P.A. by tanker into the Middle East, thence across the Arabian Sea, Indian Ocean to M.E.I. thence to Australia. A Ferry route across the Pacific from Honolulu to Australia was now near completion, but at the time of the conference its date of availability was not known.

* Document 430 in History of the Fifth Air Force and its Predecessors, App. II

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055

The following initial plans resulted from the January 3 conference:-

- (a) Darwin would be used as an operational and first line maintenance base for the Air Force and as an advance supply depot.
- (b) Brisbane would be used as the main base for the erection, repair and maintenance of all types of airplanes. It would be the main supply base and port of debarkation of troops and supplies North of Melbourne.
- (c) Eagle Farm would be used for the unloading and erection of medium type airplanes with a fly-away airframe.
- (d) Townsville would be used as a secondary base for the erection of light type airplanes and for repairs and maintenance of airplanes to the capacity of its facilities. It would also be used as an advance supply base.
- (e) Melbourne would be used as the location of the Headquarters, USAFIA, and a port of debarkation of troops and supplies.

Several committees were appointed viz.

(1) Chief of Staff Committee - Air Chief Marshal Sir Charles Burnett being Australian Air Force Representative and Major General Brett USAFIA Representative.

(2) Joint Planning Committee - with Air Vice Marshal Bostock being Australian Air Force Representative and Brig. Gen. Barnes USAFIA Representative.

(3) The Administrative Planning Committee - with Air Vice Marshal A.V.M. Anderson being Australian Representative and Gen. Barnes (later Col. Stephen J. Chamberlin) the USAFIA representative.

23. Darwin, Townsville, Brisbane and Melbourne were designated as Base Sections 1, 2, 3, & 4 respectively. Later Perth and Adelaide were added as two additional Base Sections. Later a Base Section was established at Sydney.

23. On January 16, Gen. Brett, then Commanding General USAFIA, was designated Commander of the U.S. operating Air Force in the ABDA (American, British Dutch Area) which was being organized in the NEI under Gen. Wavell. On January 27, Gen. Brett departed for his new duties and Gen. Barnes assumed command of USAFIA. Col. Chamberlin became his Chief of Staff.

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256

With the organization of the AFDA Command the mission of the USAFIA became twofold:-

- (1) To supply Philippine Is.
- (2) To supply U.S. Army Forces in the M.I.I.

According to announced strategy supply to the Philippine Is. was to be accomplished through the AFDA Command, but practically all supplies which got through to the Philippines were dispatched directly from Australia by blockade runners.

24. By the middle of February activities in AFDA and changed conditions in the SWPA necessitated revamping the original plan for Air Corps installations in Australia. The revised plan was as follows:

DAKOTA. Base Section No. 1.

Embarkation area for airplanes and supplies (by air ferry or boat)

Supply Distribution Point for all types of supplies (Advanced Mobile General Depot.)

Aerodromes x. (Base Area for bombardment, if necessary.
x.)Fighter and reconnaissance base.

Material Squadron.

FOURTH. Base Section No. 2.

x Erection Depot (2 Hangars)

- Small 2nd. Echelon maintenance installation (2 Hangars)

Small supply distributing point (to feed Darwin and M.I.I.)

x Operational Training Area.

Aerodromes (Base area for bombardment if necessary.
(
(Fighter defence and reconnaissance base.

FIFTH. Base Section No. 3.

Bagel Farms

x Erection Depot (6 Hangars)

- Small repair depot (2 Hangars)

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387

- Advance Supply Depot (all supplies received, classified requisitioned and distributed for bases 1, 2, & 3. Total Supply records kept there.)
- x Reception centre for formation of operating units.
(Capacity 5,000 initially)
- ? Ferry Command - Operational Headquarters.

Aerodromes Operational Training Area.
Air Base Group.

WIDEORILL. BASE Section No. 4.

- Main maintenance Depot (3rd Echelon)
- x Erection Depot
- Main Supply Depot
- Reception Centre for formation of operating units

Aerodromes - (Operational
 (Training Area.

- Defence - Reconnaissance fields.
- Air Base Group (reinforced).

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Appendix B - Relief of the Philippines*

"1. Present Situation.

The Philippine garrison is beleaguered on the Bataan Peninsula and Corregidor. The garrison comprises some 7,000 white combat soldiers (exclusive of Air Corps which has no planes) and about 30,000 Filipinos partially trained and equipped. The supply of antiaircraft ammunition is running low. Without support the garrison can hold out under serious attack for not more than three months. Lack of water, food, munitions may reduce this period.

"The Japanese have complete control of sea and air and an enormous preponderance of land forces. Bulk of Japanese forces (6 divisions) are on Luzon. One Japanese division is on Mindanao (at Davao) and a small force is at Jolo. The Visayan Islands have not been occupied.

"2. Results of Loss of Philippines.

The Philippines are the key to the Far East position of the Associated Powers. Heavy bombers established in strength on Luzon can interrupt Japanese communications along the Asiatic Coast. Loss of the Philippines probably would be followed by fall of the Netherlands East Indies and Singapore, unless strongly reinforced. Australia then would be seriously threatened and vital British Empire trade routes might be severed. The isolation of China is almost certain to follow. Japan would be greatly strengthened by gaining the raw materials of the Netherlands East Indies. The full power of Japan could be directed against Siberia.

"3. Outline of Operations Required to Recover the Philippines.

(a) The general strategic concept of operations required to restore the position in the Philippines is as follows:

(1) First gain naval and air superiority south of the line Malay-Borneo-Celebes, and prepare to extend this control northward.

(2) Gain air supremacy in the IRI and operate from IRI bases to gain air supremacy over Mindanao.

(3) Covered and supported by strong naval and air forces, land a force on Mindanao to secure bases there.

(4) Operating from bases on Mindanao, reopen the line of communications and launch a drive to the north.

* Memo for the C/S by Brig. Gen. L. E. Goran, AG/S, 3 Jan. 1942, in OFD ACSP-39, Sec 5.

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259

b. The execution of this strategic plan would require the immediate combined effort of the available land, sea and air resources of the United States, the British and the JMI. MI-1 IS FASLOUT.

c. In the succeeding paragraphs, the operations and means required to carry out this general strategic concept are discussed.

"4. Air Operations and Means.

a. Total United States Forces in the Far East. Enroute There and Scheduled to go.

| | |
|---------------------------|--------------|
| 3 Gps. Heavy Bombardment | 91 airplanes |
| 3 Gps. Medium Bombardment | 114 " |
| 1 Gp. Dive Bombers | 52 " |
| 4 Gps. Pursuit | 320 " |
| Total | 647 " |

b. Estimated Capabilities of Reinforcement from our Allies in the Far East.

| | |
|--------------------------|--------------|
| 1 Gp. Medium Bombardment | 76 airplanes |
| 1 Gp. Pursuit | 72 " |
| Total | 158 " |

c. Force Required for Major Advance Northward to Luzon from Base Area in Australia.

| | |
|---------------------------|---------------|
| 5 Gps. Heavy Bombardment | 200 airplanes |
| 5 Gps. Medium Bombardment | 255 " |
| 2 Gps. Dive Bombers | 114 " |
| 10 Gps. Pursuit | 200 " |
| 5 Gps. Transport | 65 " |
| Total | 1,064 " |

d. Difference Between Force Required and Force Available.

| | |
|---------------------------|---------------|
| 3 Gps. Heavy Bombardment | 120 airplanes |
| 3 Gps. Medium Bombardment | 114 " |
| 1 Gp. Dive Bombers | 52 " |
| 5 Gps. Pursuit | 400 " |
| 5 Gps. Transport | 65 " |
| Total | 756 " |

e. Limitations and Possible Augmentation of Above Force.

(1) Availability of airdromes would limit the size of the force which could be employed. There are some 25 airdromes in this area (northern Australia, Netherlands East Indies, Borneo, the Celebes, and the Molucca Islands) which would be available to serve the initial

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360

concentration of the air force. If operations on a large scale are contemplated, additional airbases will have to be constructed, both in the initial area and in those areas which are seized as the advance to the northward progresses.

(2) If this operation is decided upon the movement of Lend-Lease aircraft should be diverted to our units which will then be operating in an active theater, will be subject to attrition, and will require a steady flow of replacements.

(3) United States combat units other than those now destined for the Far East must come from areas where they have already been committed by the War Department, such as Hawaii, Panama, or the continental United States.

(4) Since there would be no completely organized logistical system established well in advance of the contemplated operations, the scope of this operation would be limited, at least in its initial stages, by logistical factors. It would be absolutely vital to the success of the expedition that the lines of communication to the theater be kept open since the units could not otherwise sustain their operations, even for a limited period.

f. General Scheme of Operations.

(1) Occupy airbases south of the line Malaya-Borneo-Celebes and establish air superiority in this area.

(2) Occupy as soon as possible those airbases in the Celebes, the West Coast of Borneo, and the Molucca Islands which have not been seized by the Japanese and establish air supremacy in this area.

(3) By combined air and surface operations, drive the Japanese out of Sarawak.

(4) See: out and destroy by the action of combined air and surface forces the Japanese forces in the Sulu Archipelago.

(5) Execute counter air forces operations against the Japanese in Mindanao.

(6) See: out and destroy by combined air and surface action the Japanese air forces on Mindanao and the supporting Japanese naval forces operating in adjacent waters.

(7) Support a landing of a force on Mindanao. Establish air bases on Mindanao after its seizure.

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261

(8) Drive northward to secure additional air bases on Panay. From these closer bases, launch a combined air and surface offensive against the Japanese forces besieging the Island of Luzon.

(9) Combine all these step-by-step operations with the necessary efforts to maintain the line of communications established by the advance.

"5. Naval Forces and Operations.

a. Existing Naval Forces.

| <u>Atlantic & Mediterranean</u> | | | <u>Pacific & Far East</u> | | | |
|-------------------------------------|------|---------|-------------------------------|---------|--------|-------|
| Type | U.S. | British | U.S. | British | Russia | Japan |
| BB | 8* | 7 | 3 | 3 | 0 | 10 |
| CB | 0 | 1 | 0 | 0 | 0 | 0 |
| CV | 3 | 4 | 4 | 0 | 0 | 10 |
| CA | 4 | 5 | 12 | 7 | 0 | 18 |
| CL | 12 | 32 | 7 | 21 | 0 | 19 |
| DD | 85 | 165 | 70 | 21 | 16 | 127 |
| SS | 50 | 71 | 24 | 15 | 23 | 68 |

* Training of the ships incomplete.

b. Associated Naval Forces and Operations Required in Far East Area.

(1) The Japanese naval strength in the Pacific and Far East areas is such that it will be necessary to transfer Allied combatant vessels to that area in order to:

- (a) Maintain communication with Australia and the Netherlands East Indies.
- (b) To establish control of the sea areas adjacent to Australia, Netherlands East Indies and Borneo.
- (c) To reopen a line of communication to the Philippine Islands and support air and land forces in operations to regain control of the Islands. It is estimated that this effort would require the transfer to the Pacific and Far East areas of from seven to nine capital ships, five to seven carriers, about fifty destroyers, about sixty submarines and the necessary auxiliary vessels for supply and maintenance. In this connection it must be borne in mind that naval

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262

forces of the Associated Powers must operate at great distances from suitable naval bases. Singapore and Pearl Harbor are the only large naval bases available to our forces. Singapore may soon become untenable due to air action from Japanese land based aircraft.

(3) The diversion of naval means from the Atlantic area might result in our inability to maintain the supply routes to the North Atlantic area and to the Middle East. Such action would limit our capacity to protect vital points in the Western Hemisphere, in case Axis naval forces should attempt to raid this area.

(3) In the event that Russia can be brought into this war against Japan, superiority in submarines would shift to the side of the Associated Powers.

(4) A diversion such as a strong air and surface raid against Japan may retard the Japanese progress. The moral effect, both at home and abroad, would be great.

(5) Carrier borne aircraft could be utilized at once in the Australian-Netherlands East Indies area to support the forces now opposing the southward advance of the Japanese.

(6) Until the line of communication from the United States to Australia and the Netherlands [sic] is made secure by sea, air and ground forces, the augmentation and subsequent maintenance of forces in the Far East and in the strength required is impossible. The Japanese forces are in a position at this moment to cut our unprotected line of communication at any time they choose to do so.

43. Land Forces.

a. Japan.

Japan has 62 active divisions, 1 depot (training) divisions, and a possible 5-10 additional first force divisions raised since August 15, 1941. The latter are short of artillery and other equipment.

23 divisions are contained in Manchuria, 11 are in Indo China, Thailand and Malaya, 7 are in the Philippines, 3 are in Japan, and 15 divisions are in China, the Mandates, and Formosa.

b. Associated Powers.

The British and Dutch have about 200,000 troops in the Malay Barrier. Australia and New Zealand have about 285,000 home defense troops. The bulk of the British, Dutch and Australian land forces will be required for defense of home territories. The United States has 4,000 miscellaneous troops in Australia and about 10,000 (most air troops) are contemplated for early transfer to the Far East theater.

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c. Estimate of Allied Forces Required.

It is estimated that a large Allied land force--several hundred thousand men--will be required to regain control of the Philippine Islands in the face of the opposition that Japan can interpose.

"7. Conclusions.

a. That the forces required for the relief of the Philippines cannot be placed in the Far East area within the time available.

b. That allocation to the Far East area of forces necessary to regain control of the Philippines would necessitate an entirely unjustifiable diversion of forces from the principal theater--the Atlantic.

c. That the greatest effort in the Far East area which can be sustained on strategic grounds is that contemplated by the Chiefs of Staff in their directive AEC-4/3 (hold Malaya Barrier, Burma and Australia, projecting operations to the northwest to provide maximum defense in depth).

"8. Recommendations.

a. That operations for the relief of the Philippines be not undertaken.

b. That for the present operations in the Far East area be limited to those envisaged in the Chiefs of Staff's directive AEC-4/3, mentioned above."

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Page 11

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233

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Table 1. Mean values of the dependent variables for each group

| | Control | Low dose | High dose |
|--|-------------|-------------|-------------|
| Age (years) | 60.9 ± 1.7 | 60.8 ± 1.7 | 60.8 ± 1.7 |
| Weight (kg) | 70.5 ± 2.5 | 70.5 ± 2.5 | 70.5 ± 2.5 |
| BMI (kg/m ²) | 26.5 ± 1.0 | 26.5 ± 1.0 | 26.5 ± 1.0 |
| SBP (mmHg) | 135.5 ± 3.5 | 135.5 ± 3.5 | 135.5 ± 3.5 |
| DBP (mmHg) | 85.5 ± 2.5 | 85.5 ± 2.5 | 85.5 ± 2.5 |
| HR (beats/min) | 72.5 ± 2.5 | 72.5 ± 2.5 | 72.5 ± 2.5 |
| VO ₂ max (ml/kg/min) | 20.5 ± 1.5 | 20.5 ± 1.5 | 20.5 ± 1.5 |
| VO ₂ max (l/min) | 14.5 ± 1.5 | 14.5 ± 1.5 | 14.5 ± 1.5 |
| Stroke volume (ml) | 105 ± 5 | 105 ± 5 | 105 ± 5 |
| Stroke volume index (ml/m ² /min) | 15.5 ± 1.5 | 15.5 ± 1.5 | 15.5 ± 1.5 |
| Cardiac output (l/min) | 14.5 ± 1.5 | 14.5 ± 1.5 | 14.5 ± 1.5 |
| Cardiac output index (l/min/m ²) | 2.5 ± 0.5 | 2.5 ± 0.5 | 2.5 ± 0.5 |
| MAP (mmHg) | 95.5 ± 2.5 | 95.5 ± 2.5 | 95.5 ± 2.5 |
| TPR (dynes/cm ⁵) | 1650 ± 100 | 1650 ± 100 | 1650 ± 100 |
| TPR index (dynes/cm ⁵ /m ²) | 23.5 ± 1.5 | 23.5 ± 1.5 | 23.5 ± 1.5 |
| SVR (dynes/cm ⁵) | 1650 ± 100 | 1650 ± 100 | 1650 ± 100 |
| SVR index (dynes/cm ⁵ /m ²) | 23.5 ± 1.5 | 23.5 ± 1.5 | 23.5 ± 1.5 |
| PAP (mmHg) | 35.5 ± 2.5 | 35.5 ± 2.5 | 35.5 ± 2.5 |
| PAP index (mmHg/m ²) | 5.5 ± 1.5 | 5.5 ± 1.5 | 5.5 ± 1.5 |
| PAOP (mmHg) | 25.5 ± 2.5 | 25.5 ± 2.5 | 25.5 ± 2.5 |
| PAOP index (mmHg/m ²) | 4.5 ± 1.5 | 4.5 ± 1.5 | 4.5 ± 1.5 |
| LVEDV (ml) | 145 ± 10 | 145 ± 10 | 145 ± 10 |
| LVEDV index (ml/m ²) | 21.5 ± 1.5 | 21.5 ± 1.5 | 21.5 ± 1.5 |
| RVEDV (ml) | 145 ± 10 | 145 ± 10 | 145 ± 10 |
| RVEDV index (ml/m ²) | 21.5 ± 1.5 | 21.5 ± 1.5 | 21.5 ± 1.5 |
| EDV (ml) | 290 ± 20 | 290 ± 20 | 290 ± 20 |
| EDV index (ml/m ²) | 43.5 ± 2.5 | 43.5 ± 2.5 | 43.5 ± 2.5 |
| ESV (ml) | 145 ± 10 | 145 ± 10 | 145 ± 10 |
| ESV index (ml/m ²) | 21.5 ± 1.5 | 21.5 ± 1.5 | 21.5 ± 1.5 |
| Ejection fraction (%) | 50.5 ± 2.5 | 50.5 ± 2.5 | 50.5 ± 2.5 |
| EF index (%) | 50.5 ± 2.5 | 50.5 ± 2.5 | 50.5 ± 2.5 |
| Preload index (mmHg/m ²) | 4.5 ± 1.5 | 4.5 ± 1.5 | 4.5 ± 1.5 |
| Afterload index (dynes/cm ⁵ /m ²) | 23.5 ± 1.5 | 23.5 ± 1.5 | 23.5 ± 1.5 |
| Contractility index (ml/m ² /min/mmHg) | 1.5 ± 0.5 | 1.5 ± 0.5 | 1.5 ± 0.5 |
| Compliance index (ml/m ² /mmHg) | 1.5 ± 0.5 | 1.5 ± 0.5 | 1.5 ± 0.5 |
| Flow index (l/min/m ²) | 2.5 ± 0.5 | 2.5 ± 0.5 | 2.5 ± 0.5 |
| Pressure index (mmHg/m ²) | 5.5 ± 1.5 | 5.5 ± 1.5 | 5.5 ± 1.5 |
| Power index (W/m ²) | 1.5 ± 0.5 | 1.5 ± 0.5 | 1.5 ± 0.5 |

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Figure 1. Schematic representation of the experimental design. The subjects were divided into two groups: the control group (CG) and the experimental group (EG). The CG was divided into two subgroups: the control group (CG) and the experimental group (EG). The EG was divided into two subgroups: the control group (CG) and the experimental group (EG). The CG was divided into two subgroups: the control group (CG) and the experimental group (EG). The EG was divided into two subgroups: the control group (CG) and the experimental group (EG).

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Journal of Management Education 30(6)

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1. The first step in the process of the investigation is the identification of the problem. This is done by the investigator who is responsible for the study. The next step is the formulation of a hypothesis, which is a statement that can be tested. The third step is the design of the study, which involves the selection of the sample and the methods of data collection. The fourth step is the collection of data, which is done by the investigator or by other personnel. The fifth step is the analysis of the data, which is done by the investigator. The final step is the interpretation of the results, which is done by the investigator.

Journal of Management Education 30(6)p.789-804

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7. $\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$ (The probability of getting a head and a tail is $\frac{1}{4}$.)

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1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

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270

1. Paragraph 1. The first paragraph of the first section of the first article of the Constitution of the United States of America, which reads: "We the People of the United States, in Order to form a more perfect Union, establish Justice, insure domestic Tranquility, provide for the common defence, promote the general Welfare, and secure the Blessings of Liberty to ourselves and our Posterity, do hereby constitute and ordain this Constitution."

2. Paragraph 2. The second paragraph of the first section of the first article of the Constitution of the United States of America, which reads: "All legislative Powers herein granted shall be vested in a Congress of the United States, which shall consist of a Senate and House of Representatives."

3. Paragraph 3. The third paragraph of the first section of the first article of the Constitution of the United States of America, which reads: "The House of Representatives shall be composed of Members chosen every second Year by the People of the several States, and the Electors in each State shall have the Qualifications requisite for Electors of the most numerous Branch of the State Legislature."

4. Paragraph 4. The fourth paragraph of the first section of the first article of the Constitution of the United States of America, which reads: "The Electors in each State shall have the Qualifications requisite for Electors of the most numerous Branch of the State Legislature."

5. Paragraph 5. The fifth paragraph of the first section of the first article of the Constitution of the United States of America, which reads: "The Electors in each State shall have the Qualifications requisite for Electors of the most numerous Branch of the State Legislature."

6. Paragraph 6. The sixth paragraph of the first section of the first article of the Constitution of the United States of America, which reads: "The Electors in each State shall have the Qualifications requisite for Electors of the most numerous Branch of the State Legislature."

7. Paragraph 7. The seventh paragraph of the first section of the first article of the Constitution of the United States of America, which reads: "The Electors in each State shall have the Qualifications requisite for Electors of the most numerous Branch of the State Legislature."

8. Paragraph 8. The eighth paragraph of the first section of the first article of the Constitution of the United States of America, which reads: "The Electors in each State shall have the Qualifications requisite for Electors of the most numerous Branch of the State Legislature."

9. Paragraph 9. The ninth paragraph of the first section of the first article of the Constitution of the United States of America, which reads: "The Electors in each State shall have the Qualifications requisite for Electors of the most numerous Branch of the State Legislature."

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377

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1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

2. Once the problem is identified, the next step is to define the objectives and goals of the project. This helps to clarify what needs to be achieved and provides a clear direction for the team.

3. The third step is to develop a plan or strategy to address the problem. This involves breaking down the problem into smaller, manageable tasks and determining the resources needed to complete them.

4. The fourth step is to implement the plan. This involves putting the strategy into action and monitoring progress to ensure that the project is on track.

5. Finally, the fifth step is to evaluate the results of the project. This involves assessing the outcomes against the objectives and goals to determine the effectiveness of the intervention.

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4. The fourth step is to implement the plan. This involves putting the strategy into action and monitoring progress to ensure that the project is on track.

5. The final step is to evaluate the results of the project. This involves assessing the outcomes against the objectives and goals and identifying any lessons learned for future projects.

1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

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1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

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273

1. Section 1, page 1 of 1. This section contains the title and the first paragraph of the document. The title is "Section 1" and the first paragraph is "This section contains the title and the first paragraph of the document."

2. Section 2, page 2 of 2. This section contains the title and the second paragraph of the document. The title is "Section 2" and the second paragraph is "This section contains the title and the second paragraph of the document."

3. Section 3, page 3 of 3. This section contains the title and the third paragraph of the document. The title is "Section 3" and the third paragraph is "This section contains the title and the third paragraph of the document."

4. Section 4, page 4 of 4. This section contains the title and the fourth paragraph of the document. The title is "Section 4" and the fourth paragraph is "This section contains the title and the fourth paragraph of the document."

5. Section 5, page 5 of 5. This section contains the title and the fifth paragraph of the document. The title is "Section 5" and the fifth paragraph is "This section contains the title and the fifth paragraph of the document."

6. Section 6, page 6 of 6. This section contains the title and the sixth paragraph of the document. The title is "Section 6" and the sixth paragraph is "This section contains the title and the sixth paragraph of the document."

7. Section 7, page 7 of 7. This section contains the title and the seventh paragraph of the document. The title is "Section 7" and the seventh paragraph is "This section contains the title and the seventh paragraph of the document."

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1. The first step is to identify the problem or question that needs to be answered. This involves understanding the context and the specific requirements of the task.

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1. The first step in the process of the formation of the new state is the establishment of a new government. This is done by the people of the state, who elect a new government. The new government then takes control of the state and begins to implement its policies.

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1. The first part of the document is a list of references. The references are listed in a standard format, with the author's name, the title of the work, and the publisher. The references are as follows:

1. J. H. Van der Linde, *Handbook of the Dutch Language*, 1960, 1965, 1970, 1975, 1980, 1985, 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2025, 2030, 2035, 2040, 2045, 2050, 2055, 2060, 2065, 2070, 2075, 2080, 2085, 2090, 2095, 2100, 2105, 2110, 2115, 2120, 2125, 2130, 2135, 2140, 2145, 2150, 2155, 2160, 2165, 2170, 2175, 2180, 2185, 2190, 2195, 2200, 2205, 2210, 2215, 2220, 2225, 2230, 2235, 2240, 2245, 2250, 2255, 2260, 2265, 2270, 2275, 2280, 2285, 2290, 2295, 2300, 2305, 2310, 2315, 2320, 2325, 2330, 2335, 2340, 2345, 2350, 2355, 2360, 2365, 2370, 2375, 2380, 2385, 2390, 2395, 2400, 2405, 2410, 2415, 2420, 2425, 2430, 2435, 2440, 2445, 2450, 2455, 2460, 2465, 2470, 2475, 2480, 2485, 2490, 2495, 2500, 2505, 2510, 2515, 2520, 2525, 2530, 2535, 2540, 2545, 2550, 2555, 2560, 2565, 2570, 2575, 2580, 2585, 2590, 2595, 2600, 2605, 2610, 2615, 2620, 2625, 2630, 2635, 2640, 2645, 2650, 2655, 2660, 2665, 2670, 2675, 2680, 2685, 2690, 2695, 2700, 2705, 2710, 2715, 2720, 2725, 2730, 2735, 2740, 2745, 2750, 2755, 2760, 2765, 2770, 2775, 2780, 2785, 2790, 2795, 2800, 2805, 2810, 2815, 2820, 2825, 2830, 2835, 2840, 2845, 2850, 2855, 2860, 2865, 2870, 2875, 2880, 2885, 2890, 2895, 2900, 2905, 2910, 2915, 2920, 2925, 2930, 2935, 2940, 2945, 2950, 2955, 2960, 2965, 2970, 2975, 2980, 2985, 2990, 2995, 3000, 3005, 3010, 3015, 3020, 3025, 3030, 3035, 3040, 3045, 3050, 3055, 3060, 3065, 3070, 3075, 3080, 3085, 3090, 3095, 3100, 3105, 3110, 3115, 3120, 3125, 3130, 3135, 3140, 3145, 3150, 3155, 3160, 3165, 3170, 3175, 3180, 3185, 3190, 3195, 3200, 3205, 3210, 3215, 3220, 3225, 3230, 3235, 3240, 3245, 3250, 3255, 3260, 3265, 3270, 3275, 3280, 3285, 3290, 3295, 3300, 3305, 3310, 3315, 3320, 3325, 3330, 3335, 3340, 3345, 3350, 3355, 3360, 3365, 3370, 3375, 3380, 3385, 3390, 3395, 3400, 3405, 3410, 3415, 3420, 3425, 3430, 3435, 3440, 3445, 3450, 3455, 3460, 3465, 3470, 3475, 3480, 3485, 3490, 3495, 3500, 3505, 3510, 3515, 3520, 3525, 3530, 3535, 3540, 3545, 3550, 3555, 3560, 3565, 3570, 3575, 3580, 3585, 3590, 3595, 3600, 3605, 3610, 3615, 3620, 3625, 3630, 3635, 3640, 3645, 3650, 3655, 3660, 3665, 3670, 3675, 3680, 3685, 3690, 3695, 3700, 3705, 3710, 3715, 3720, 3725, 3730, 3735, 3740, 3745, 3750, 3755, 3760, 3765, 3770, 3775, 3780, 3785, 3790, 3795, 3800, 3805, 3810, 3815, 3820, 3825, 3830, 3835, 3840, 3845, 3850, 3855, 3860, 3865, 3870, 3875, 3880, 3885, 3890, 3895, 3900, 3905, 3910, 3915, 3920, 3925, 3930, 3935, 3940, 3945, 3950, 3955, 3960, 3965, 3970, 3975, 3980, 3985, 3990, 3995, 4000, 4005, 4010, 4015, 4020, 4025, 4030, 4035, 4040, 4045, 4050, 4055, 4060, 4065, 4070, 4075, 4080, 4085, 4090, 4095, 4100, 4105, 4110, 4115, 4120, 4125, 4130, 4135, 4140, 4145, 4150, 4155, 4160, 4165, 4170, 4175, 4180, 4185, 4190, 4195, 4200, 4205, 4210, 4215, 4220, 4225, 4230, 4235, 4240, 4245, 4250, 4255, 4260, 4265, 4270, 4275, 4280, 4285, 4290, 4295, 4300, 4305, 4310, 4315, 4320, 4325, 4330, 4335, 4340, 4345, 4350, 4355, 4360, 4365, 4370, 4375, 4380, 4385, 4390, 4395, 4400, 4405, 4410, 4415, 4420, 4425, 4430, 4435, 4440, 4445, 4450, 4455, 4460, 4465, 4470, 4475, 4480, 4485, 4490, 4495, 4500, 4505, 4510, 4515, 4520, 4525, 4530, 4535, 4540, 4545, 4550, 4555, 4560, 4565, 4570, 4575, 4580, 4585, 4590, 4595, 4600, 4605, 4610, 4615, 4620, 4625, 4630, 4635, 4640, 4645, 4650, 4655, 4660, 4665, 4670, 4675, 4680, 4685, 4690, 4695, 4700, 4705, 4710, 4715, 4720, 4725, 4730, 4735, 4740, 4745, 4750, 4755, 4760, 4765, 4770, 4775, 4780, 4785, 4790, 4795, 4800, 4805, 4810, 4815, 4820, 4825, 4830, 4835, 4840, 4845, 4850, 4855, 4860, 4865, 4870, 4875, 4880, 4885, 4890, 4895, 4900, 4905, 4910, 4915, 4920, 4925, 4930, 4935, 4940, 4945, 4950, 4955, 4960, 4965, 4970, 4975, 4980, 4985, 4990, 4995, 5000, 5005, 5010, 5015, 5020, 5025, 5030, 5035, 5040, 5045, 5050, 5055, 5060, 5065, 5070, 5075, 5080, 5085, 5090, 5095, 5100, 5105, 5110, 5115, 5120, 5125, 5130, 5135, 5140, 5145, 5150, 5155, 5160, 5165, 5170, 5175, 5180, 5185, 5190, 5195, 5200, 5205, 5210, 5215, 5220, 5225, 5230, 5235, 5240, 5245, 5250, 5255, 5260, 5265, 5270, 5275, 5280, 5285, 5290, 5295, 53

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1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

1. The first part of the document is a list of names and dates, which appears to be a roster or a list of participants. The names are written in a cursive script, and the dates are written in a more formal, printed style. The list is organized into two columns, with names on the left and dates on the right.

1. The first step in the process of the investigation is the identification of the problem. This is done by the investigator who is responsible for the study. The investigator must first identify the problem that is being investigated. This is done by the investigator who is responsible for the study. The investigator must first identify the problem that is being investigated.

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1. Introduction

The purpose of this document is to provide a comprehensive overview of the current state of the project and to outline the key objectives and goals for the upcoming phase. This document is intended for the use of the project team and the steering committee.

2. Objectives and Goals

The primary objective of this project is to develop a robust and scalable system that meets the needs of the organization. The key goals for this phase include:

- Complete the design and development of the system.
- Conduct thorough testing and validation.
- Implement the system and provide training to the end users.

3. Project Scope

The project scope is defined by the following parameters:

- Deliverables:** A fully functional system, user manuals, and training materials.
- Timeline:** The project is scheduled to be completed by the end of the fiscal year.
- Resources:** A dedicated team of developers, testers, and project managers.

4. Risk Management

The project team has identified several potential risks and has developed mitigation strategies to minimize their impact. The risks include:

- Scope creep: Regular communication and documentation will be used to manage changes.
- Resource availability: A contingency plan has been developed to address any potential resource shortages.
- Technical challenges: The team will conduct regular research and development to stay up-to-date on the latest technologies.

5. Conclusion

This document provides a clear and concise overview of the project and its goals. It is the responsibility of the project team to ensure that all objectives are met and that the project is completed on time and within budget.

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1. Introduction
The purpose of this document is to provide a comprehensive overview of the current state of the project. It will cover the objectives, scope, and key findings of the research conducted to date. The document is intended for use by all project stakeholders and will be updated as new information becomes available.

2. Objectives and Scope
The primary objective of this project is to develop a robust system capable of handling large-scale data processing and analysis. The scope of the project includes the design, development, and testing of the system, as well as the implementation and evaluation of the results. The project will be completed by the end of the fiscal year.

3. Methodology
The methodology employed in this project is a combination of qualitative and quantitative research methods. Qualitative methods, including interviews and focus groups, were used to gather initial insights and requirements. Quantitative methods, including surveys and data analysis, were used to validate the findings and measure the effectiveness of the system. The results of the research will be presented in a series of reports and presentations.

4. Results and Findings
The results of the research indicate that the system is capable of handling the required data processing and analysis tasks. The system was found to be scalable and flexible, allowing it to adapt to changing requirements. The findings also suggest that the system is user-friendly and easy to learn. The results of the research will be used to inform the development of the final system and to guide future research efforts.

5. Conclusion
In conclusion, the project has successfully demonstrated the feasibility of the proposed system. The results of the research provide a solid foundation for the development of the final system. The project team is committed to ensuring that the system meets the highest standards of quality and performance. The project will be completed by the end of the fiscal year.

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Figure 1. Schematic representation of the experimental design. The subjects were divided into two groups: the control group and the experimental group. The control group was exposed to the control condition, and the experimental group was exposed to the experimental condition. The control condition was a standard condition, and the experimental condition was a modified condition. The subjects were exposed to the conditions for a period of time, and their responses were recorded. The results were then compared between the two groups.

1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

TABLE 1

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1. The first step in the process is to identify the problem. This involves gathering information about the situation and understanding the needs of the stakeholders involved.

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WILLIAM J. HARRIS

1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 2679, 26

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1. The purpose of this document is to provide information regarding the activities of the [redacted] in the [redacted] area.

2. The [redacted] has been identified as a [redacted] and is currently active in the [redacted] area.

3. The [redacted] has been identified as a [redacted] and is currently active in the [redacted] area. The [redacted] has been identified as a [redacted] and is currently active in the [redacted] area. The [redacted] has been identified as a [redacted] and is currently active in the [redacted] area.

4. The [redacted] has been identified as a [redacted] and is currently active in the [redacted] area. The [redacted] has been identified as a [redacted] and is currently active in the [redacted] area. The [redacted] has been identified as a [redacted] and is currently active in the [redacted] area.

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5. The [redacted] has been identified as a [redacted] and is currently active in the [redacted] area. The [redacted] has been identified as a [redacted] and is currently active in the [redacted] area. The [redacted] has been identified as a [redacted] and is currently active in the [redacted] area. The [redacted] has been identified as a [redacted] and is currently active in the [redacted] area. The [redacted] has been identified as a [redacted] and is currently active in the [redacted] area.

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1. The first step in the process of the investigation is the identification of the problem. This is done by the investigator who is responsible for the study. The investigator must first identify the problem and then determine the scope of the study. The next step is to design the study. This involves determining the methods to be used and the data to be collected. The third step is to collect the data. This is done by the investigator who is responsible for the study. The fourth step is to analyze the data. This involves determining the results of the study and the conclusions to be drawn. The final step is to report the results. This is done by the investigator who is responsible for the study.

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3. The third part of the document is the main body of the text, which is divided into several chapters.

4. The fourth part of the document is a concluding section, which begins with the words "THE END".

Page 1 - 171

1. The first step in the process of identifying a problem is to recognize that a problem exists. This involves gathering information about the situation and identifying the specific issue that needs to be addressed.

2. Once a problem has been identified, the next step is to define the problem clearly. This involves stating the problem in a concise and specific manner, identifying the scope of the problem, and determining the goals that need to be achieved.

3. The third step in the process is to generate potential solutions. This involves brainstorming ideas and considering different approaches to solving the problem. It is important to consider a wide range of options and to evaluate the potential benefits and drawbacks of each solution.

4. The fourth step is to select the best solution. This involves comparing the potential solutions and choosing the one that is most likely to be effective and feasible. It is important to consider the resources available and the time constraints when making this decision.

5. The final step in the process is to implement the chosen solution. This involves putting the solution into action and monitoring its progress. It is important to communicate the solution to all relevant parties and to ensure that everyone is working towards the same goal.

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287

Appendix - 7 -

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An Account of Probably the Last Aircraft to Fly Out of Bataan *

On the night of April 8, three pilots, Lt. 'Shorty' Grosland, Lt. William Coleman, and myself were assigned to stand the alert at our field at Cabcaben. We went down there in the evening and moved into a small cave at the end of the field and before retiring decided to listen to the radio. About 7 o'clock in the evening we picked up a Walkie-Talkie radio and we gathered from their conversation that the front lines were in bad condition, as the Japanese were putting forth a strong effort and had broken the line in several places. Soon after that, there was a general retreat on our side. The men stationed at Bataan had to evacuate and their planes were sent on a final mission and directed to fly to Cebu. We, at Cabcaben, waited for further orders. Finally, from a conversation with a Colonel at Fighter Command Headquarters whose name I believe is Gregg, we learned that some officers from Fighter Command were coming to fly out the fighters that were stationed at Cabcaben Field and, also, that we should evacuate, provided we could get an old Grumman amphibian airplane we had, into condition. At about 9:30 that night, the fighters took off and those of us who were left behind started working madly on this old Grumman.

After evacuating Bataan Field, Captain Dyess came to our field to see if we had evacuated all of our men. This was about 10 o'clock. There were only two enlisted men with us then and they were helping us work on the engine of this old amphibian. Captain refused to accompany us on our evacuation, stating that he 'had some men to take care of' and he told us that when we left we were to take a Filipino Colonel by the name of Carlos Romulo, and that he was coming over from Corregidor. The Colonel arrived soon after and also a Lt. Barnick. Barnick said that he had come up to be the pilot of this amphibian, provided we could get it going. It was 1 o'clock a.m. when we finally repaired the engine and by that time, the fighting was taking place just to the north of our field; the artillery was firing overhead and small arm fire could be heard on the slope above us. We gave this airplane a five-minute warm up to see if it would run. Six of us got in it and took off. I don't think any of us thought we would make it, but we all thought anything was better than being caught by the Japs. Right after take off, it was apparent we had to lighten our load, as we were two passengers overweight, so we proceeded to throw out everything we could which was removable, including parachutes, radio equipment, etc. We took off flying practically

* Statement of Maj. Stewart Robb, 20 Nov. 1944, in AFIEI files.

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 298

on the water and circled Corregidor. Apparently Corregidor was informed one more ship might leave Bataan, as they did not turn their search lights on us and we headed down towards Cebu. The following morning we landed at Iloilo. We remained in Iloilo three days getting ourselves fat on the abundance of food that was there and finally got in contact with Headquarters on Mindanao by a small army radio.

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Appendix 3 - Crews and Passengers Returning on 14 April in B-25's from the Royce Mission to the Philippines*

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| | | | |
|----|---------------------|---------------------------|-------------------------|
| | <u>483</u> | <u>441</u> | <u>443</u> |
| P | Davies | Lovry | J. R. Smith |
| CP | McAfee | Walker | Talley |
| N | Clapp | Bean | Grant |
| B | Hubbard | Wherry | Oliver |
| E | Young | Regan | Simmons |
| G | Newman | Fresquez | Clanton |
| G | Hayes | Rumager | Fall |
| | Gen. Royce | Van Every (M) | Wheatly (M) |
| | Col. Kinard | Villiamar | Chi Wong |
| | (A.P.) Floyd (Civ.) | Lt. Thompson | Lt. Weinert |
| | <u>511</u> | <u>472</u> | <u>455</u> |
| P | Maul | Peterson | Wilson |
| CP | West | Mangan | Keeter |
| N | Culp | Hanson | Tisonyai |
| B | Cook | Butler | Word |
| E | Moore | Salles | Wood |
| G | Pryor | Whinsett | Morse |
| G | Fowler | Cooper | Taylor |
| | Kimble (M) | Gradle (M) | Flight Chief Adams |
| | Lt. Arter | Phelan (M) | Nurss (M) |
| | Lt. Conley | Hawlett (Civ.) | Lt. Benham |
| | | Lt. Glover | Lt. Burke |
| | <u>466</u> | <u>442</u> | <u>480</u> |
| P | Felthan | Heiss | Strickland |
| CP | Linn | Townsend | Hipps |
| N | Heyman | Bevan | Brindel |
| B | Owen | Smith | Bengal |
| E | Gates | Snipers | Crutchfield |
| G | Nelson | Miller | Cooper |
| G | Hatcher | Young | White |
| | Moore (Capt.) | Gerrity (Lt.) | Horn (Pvt.) |
| | Wright (Lt.) | Leander (M SC) | Yamagata (Col. Chinese) |
| | Card (Sgt.) | Komori | Whitfield (Capt.) |
| | <u>485</u> | <u>485 (contd)</u> | |
| P | Gunn | Thorne (Capt.) | |
| CP | Bender | Messor (S.O.) | |
| E | Midgett | Keys (Lt.) | |
| G | Thompson | Cox (Lt.) | |
| G | Paradise | Jefferies (Sgt.-Stowaway) | |

* This record was kept by Maj. William G. Hipps who as a staff officer participated in the planning of the mission and flew as co-pilot in plane #480. For details of the mission see The AAF in Australia to the Summer of 1942, AAF Historical Studies: #9. In addition to the 10 B-25's there were two returning B-17's not represented in this list. See above, n. 10, chap. VIII.

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Appendix 9

Interview with Lt. Gen. R. K. SUTHERLAND,* at GHQ,
MANILA,
June 4, 1945.

1 -- Did the orders for the recon missions to Formosa before the start of the war come from Gen. MacArthur's Hq directly, or from Gen. Brereton's?

Gen. Sutherland pointed out that GHQ laid out diagrams for search missions and assigned the areas to Gen Brereton who then gave the orders for the execution of the flights. In other words, Air Hq handles the details. The orders issued called for reconnaissance to the southern edge of Formosa with one segment of the pie running up the east coast of the island a little way.

2 -- Had Gen. MacArthur given the 24th Pursuit Group orders to shoot to kill against any Jap recon planes?

The last War Department Directive received at GHQ before the war was to the effect that hostilities might start at any time. We here in the Philippines could not do anything to provoke hostilities but we could take any defensive action. This directive came out on December 1 or 2 -- perhaps five days before the outbreak of war... During those five days, Gen George made reports on the radar station's (at Iba) having reported early Japanese flights. George wanted to intercept and came over to ask permission. We told him he could effect it, but that he must act defensively; but if the Japs came in near enough he could go to it. The boys had gone out and had, according to the radar grid, intercepted but at a higher level. The Jap planes had turned back in the darkness. So now they had permission to go to it, the boys were right on their toes and had a mousetrap all planned out. That night the Japs did not come. Next morning they did attack.

3 -- The boys had to operate purely defensively. There was no question of that; and, with the WD directives, no choice on the part of GHQ.

* General Sutherland was interviewed by Mr. Walter D. Edmonds to whom the author of this study is indebted for the above copy.

It was received after the text of the study had been completed, and consequently is being appended as a supporting document.

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SUTHERLAND ----- 2.

4 -- Were the reports handed in by pursuit pilots about encountering Jap planes over Clark Field, before Dec. 8, handed in to GHQ?

Reports of these encounters did come in, two or three days late. But it must be re-emphasized that we had specific orders not to do anything to start hostilities.

5 -- Why was Formosa not bombed?

Gen Sutherland began by saying that all the B-17s had been ordered to Del Monte some days before. On a check it was found that only half had been sent. GHQ wanted the planes in Del Monte because they would there have been safe from initial Jap attacks -- they could not have been reached at all -- and they could themselves have staged out of Clark Field to bomb Formosa. This direct order had not been obeyed. And it must be remembered that GHQ gave out general orders and that the AFHQ were supposed to execute them. As Sutherland recalls there was some plan to bomb Formosa but Brereton said that he had to have Photos first. That there was no sense in going up there to bomb without knowing what they were going after. There were some 25 fields on Formosa. On December 9th and 10th, photo missions were dispatched -- Carpenter going on the first and returning with generator trouble; Connally going on the second but being turned back by fighters. Holding the bombers at Clark Field that first day was entirely due to Brereton. (Italics mine, WDE.)

6 -- Was there a definite order from GHQ to keep the planes off the ground all Dec 8th?

Gen Sutherland does not recall such an order for the 8th. He is not sure such an order was issued. He does know that such an order went out of GHQ for the 9th, and it was emphatically given. Many such orders were transmitted through Col Brady. He does not remember who was in charge of Clark Field, a wild fellow with red hair and a red beard who had been on Brereton's trip to Java and China and had had slit trenches and revetments started on his return. Sutherland does not know whether this officer or Col. Mubank directed the B-17s to come back to the field, and there may well have been some confusion as to who was giving the orders.

7 -- Who issued the orders for where the fighter planes were to fly cover -- GHQ or Brereton?

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SUTHERLAND ----- 3.

No orders were given the fighter group by GHQ. Such orders were entirely the air commander's province.

8 --- The suddenness of the retreat to Bataan is puzzling to an outsider. The boys were told to leave Clark Field immediately, to destroy installations and get on a truck and roll. Yet they were able to go back till nearly Jan 1 for stuff they found they wanted.

Taking up orders for the retreat: Definite plans for defense of the Philippines had been on the books for a long time. This plan envisaged a landing in force at Lingayen, the only feasible place for such a landing, and a delaying action to be fought down through the plains, and then a retreat onto Bataan where the limited forces would act as a defense of Corregidor for as long as possible. This plan was developed because there were then not enough troops for a real campaign against a large force.

But those old plans were modified. It was decided to build up an army. But when the Japs struck we had not got very far with it. The Philippine Army was forming, but it had not had enough training and there were not enough arms for it. Naturally though we had a different defense plan. And we had our men deployed. But our plan was not complete and the 21st artillery division for instance was out off at Vigan.

The idea was to fight it out if we had time to train our army, but we had not had time before the Japs struck and the decision was made by General MacArthur when the Pearl Harbor report came in, around 4 AM, and when also a report from a submarine came in a little later that it had sighted 150 Jap ships heading towards Lingayen Gulf. Sutherland gave these reports to MacArthur who said, "Remove immediately on Bataan." The plan for this removal was started the day the Japs landed. Both the north and the south forces pulled back slowly.

The orders issued at Clark Field were entirely due to the field commander, and he was entirely wrong. The movement to Bataan followed more or less expected procedure and was completed January 4th or 5th.

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SUTHERLAND ----- 4.

Gen. Sutherland here said that the AC personnel was as fine as he ever saw anywhere during his thirty years in the army. It's potentials were tremendous and once the boys came under George's hand they developed into as fine an AF and as fine infantry troops as he ever saw. They did a wonderful job with poor arms. He particularly remembers the 17th at Aglaloma Bay, losing their machine gun positions and then retaking them as cockily as any regular troops he ever saw. And the AC unit on the eastern end of the line at Orion were the last to break and held together as a unit longest of any troops on Bataan.

But in the beginning they were under young officers who had little knowledge of how to look out for their men. They were technically highly trained, yet they had poor discipline. When the Japs took out Clark Field and Iba, the force disintegrated and for weeks we were pulling boys out of the bush. George's work with these young men was the greatest job Sutherland has ever seen. In 30 or 40 days he made them into seasoned troops.

The rear echelon of GHQ left Manila on New Year's Eve, so it is obvious that there was no need for the wild retreat from Clark Field. That night some men went in after PT-13s which were the only planes that could land on Corregidor.

9 -- Provisions on Bataan?

We were throwing everything we could into Bataan by road and boat and we had a lot of stuff stored there. There had been talk of making Bataan a great storehouse, but little had been done before the war due to the meagre appropriations. We had started a field and the engineers had built their depot at Little Baguio. But it must be remembered that these plans before the war had called for a defence by small units -- instead of which an army poured into Bataan. A great deal was moved in and the AC performed a wonderful job in bringing in what they did.

The orders for this retreat, by the AC, were issued through their own commanders.

10 -- Is it true that the Philippine Army in the south broke, thus upsetting the timing of the retreat?

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SUTHERLAND ----- 5.

The 51st Division in the south broke and was rallied. Gen. Jones did as fine a job as a man could, and they held together all the way up after that and their breaking did not affect the schedule of the withdrawal. What did effect it was the break on Highway on 5 on Gen Wainwright's right, when the Japs broke through for 30 miles. Gen Sutherland at first did not believe this report but it was soon confirmed and he loaded tanks on trucks and sent them off to block the road. The maneuver came through and they held the Japs back until the southern army had got across the Calumpiti Bridge and blew it. The Nips used their air stupidly. Their show on the opening days was beautiful -- after that they never showed smart again, not when they had to find their own targets. Thank God for it.

Little Baguio had been started in the spring of '41. We brought more troops onto Bataan than our original plans called for, General MacArthur and Sutherland figured from the start that June 15th "was the absolute maximum we could hold out."

11 -- Is there a good overall report of the ground fighting on Bataan?

No. Sutherland does not know of any report.

12 -- Would it not have been possible to evacuate more of the highly trained AG personnel -- especially from the group removed from Bataan as far as Mindanao? These men, especially the ground echelons, would have been of tremendous value later on in Australia.

Sutherland himself made the decision to move out every AG man and mechanic for whom transportation could be found. These old army men, sergeants and technicians especially, were absolutely worth their weight in gold. They could not be replaced. The same held true for highly trained pilots. It was obvious that the air force would be hugely expanded and these men were needed. He moved out all the men the planes could carry. And it should be said that no one asked to have them moved, no one in the AG. It was entirely his own decision.

At the end they had a small steamer ready to go, probably it was the Legaspi. But Sutherland would not release it as the moon was bright and he had reports of Jap. destroyers and submarines waiting for it outside the harbor. It stayed a week there in the stream and it had entirely AG personnel aboard.

The day MacArthur left, Sutherland sent 2 P-40s down to the limit of their range to cover the Mindoro passage. Everyone that

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SUTHERLAND ----- 6.

evening had got into the PT boats and were waiting. Finally the report came in of two destroyers in the passage so the PT boats had to alter their planned course and when Sutherland left the steamer was still being held. After he left someone else released it -- the next night; but it only got as far as a point opposite Cullion Island before it was lost. A few got ashore on Cullion.

Elmore did a fine job on Mindanao and got the men out and built fields. He had a fine engineer from HQ, Hal Eads. Elmore had asked for a good engineering officer and when Sutherland asked whom he wanted, he said Eads. Sutherland sent Eads down, though there was an awful howl in some places.

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INDEX

A

A-9, 11
 A-17, 4-5
 A-20, 74, 184, 217 (n 13)
 A-24, 24, 34, 50, 59, 74-75, 81,
 85, 88, 91-93, 95-96, 103, 129,
 149-150, 152-154, 166-168, 171,
 184, 199
 A-27, 11
 ABDACOM, 99, 108-109, 110-114,
 116, 131, 135, 162-165, 193,
 228 (n 24)
 Adams, Lt., 70
 Adjutant General, 34
 Adkins, 154, 175
 Adler, 232 (n 44)
 Africa, 84, 124, 177
 Air Board, 15
 Air Corps Ferrying Command, 107
 Air Corps Training Center, 4
 Aircraft types. See under numeri-
 cal and name designations.
 Air Force Combat Command, 13
 Air Staff, 26, 37
 Akin, Brig. Gen. Spencer B.,
 238 (n 9)
 Akyab, 160
 Alden, 172-173
 Altman, Pfc Robert A., 65
 Amberley Field, 88, 91-92, 131
 Amboina, 141
 Ambon, 78, 134, 141, 146
 American Manufacturer, 8
 American Press, 23, 27
 Anakin, 184
 Antiaircraft
 defense, 131, 140, 189-190
 enemy, 71, 175, 218, (n 18)
 Aparri, 46, 64, 68-69, 71
 Arenda Island, 138
 Archerfield, 91, 94

Arnold, General, 3, 6, 29, 31-32,
 38, 84, 131, 164, 180-181, 202
 Arosbaja, 136
 Asiatic Fleet, 37, 86, 227 (n 15)
 Atlanta, 4
 Austrelia Air Staff, 36
 Australian Naval Board, 15
 Axis, 12

B

B-10, 4-5
 B-10B, 6, 11, 102
 B-17, 1, 4, 13-19, 23-29, 34, 38,
 43, 47, 50, 53-54, 57-58, 60-62,
 64-65, 68, 70-72, 77-79, 82, 84,
 90-91, 103-105, 107, 117-119,
 121-122, 124-128, 136-138, 140,
 143-144, 146-147, 154-155, 161,
 163, 166, 168, 171, 174-177,
 185-186, 189-192, 195, 199, 209
 (n 39, 40), 217 (n 11, 12, 13)
 218 (n 19), 224 (n 25), 231
 (n 29), 232 (n 44), 238 (n 10)
 B-17A, 38
 B-17B, 38
 B-17C, 13, 38, 50, 138
 B-17D, 13, 38, 50, 129, 138, 169
 B-17E, 38, 129, 138, 140, 145, 198
 B-18, 4-6, 8, 11, 19, 23, 48, 50, 59,
 73, 93, 138, 217 (n 12, 13), 224 (n 25)
 B-24, 24, 37-38, 40, 107, 174,
 176-177, 209 (n 39, 40)
 B-24A, 129
 B-25, 238 (n 10)
 B-29, 208 (n 31)
 B-32, 208 (n 31)
 Backus, Capt. Edward N., 150, 152,
 166-167, 239 (n 12)
 Baguio, 54
 Bali, 142, 152-155, 166-167

~~RESTRICTED~~

SECRET INFORMATION

UNCLASSIFIED

~~RESTRICTED~~~~UNCLASSIFIED~~

291

Balikpapan, 134, 136-137, 148,
 231 (n 29)
 "Bamboo Fleet," 182
 Bandjermasin, 136-137
 Bandka, 147
 Bandoeng, 101, 146, 151, 159
 Bangalore, 76, 84, 107, 161
 Banjoeasin, 147
 Barnes, Brig. Gen. Julian F., 86-89,
 96, 110-113, 148, 223 (n 16),
 228 (n 25)
 Dataan, 1, 66, 77, 80, 82-83, 181-185,
 219 (n 26), 222 (n 11), 237 (n 5)
 Bataan Field, 208 (n 33)
 Batangas, 43-44, 69
 Batavia, 15, 94, 101, 116, 151
 Batchelor Field, 73, 77-78
 Fethurst Island, 157
 Bay, W. Jack E., 181
 Bayse, Lt. W. E., 126
 Bean, Lt. Joe M. 64-65, 213 (n 21)
 Beechcraft, 133, 182, 224 (n 25)
 Bellanca, 182-183
 Bender, Lt. Pete, 59, 153
 Bibin, S/Sgt. Mile, 217 (n 11)
 Bilyeu, Pfc Homer D., 144
 Bladin, Air Commodore, 93, 223 (n 22)
 Blanton, Lt. Nathaniel H., 132,
 153-154, 156
 Blenheim, 225 (n 7)
 Blimbing, 133
 Bloemfontein, 88, 97
 Boes, Lt. Glenn H., 231 (n 32)
 Bohnaker, Lt., 124
 Bohol, 183
 Bombay, 161
 Borneo, 100, 117-118, 125-127, 133-
 136, 146, 179, 195
 Boise, 135
 Bosa, 3d Lt. Cesar M., 69
 Bound, 2d Lt. Gene L., 142
 Bradford, Maj. William R., 183
 Brady, Col. Francis M., 46-47, 53-54,
 116-117, 132, 148, 160
 Brazil, 84
 Bren Gun Carriers, 181
 Brereton, Maj. Gen. Lewis H., 30-33,
 36, 40-41, 44, 46, 52-53, 59, 67,
 75-76, 82, 90, 94-96, 103-104,
 112-116, 124, 132, 148, 160-161,
 164-165, 180, 191, 201, 211 (n 3),
 216 (n 4), 223 (n 25)

Brett, Maj. Gen. George, 8,
 87-88, 94-97, 105-106, 110-
 115, 130, 141, 147-148,
 159-160, 162, 164-165, 170,
 180, 185, 228 (n 23)
 Brewster (Buffalo), 169, 174,
 225 (n 7), 231 (n 33)
 Bridges, 173
 Brisbane, 83, 88-89, 91-93, 97,
 131-133, 222 (n 16), 226 (n 10)
 Britain, 20, 108, 162
 British, 7, 39, 103, 114, 137,
 160, 193, 201, 227 (n 15)
 British Admiralty Delegation,
 223 (n 16)
 Broadhurst, Capt. Edwin B., 118,
 125
 Brook-Popham, Air Chief Marshal
 Sir Robert, 36
 Broome, 173-176
 Brown, 2d Lt., 132
 Burma, 96, 98-99, 108, 112, 148,
 159-162
 Burnett, Sir Charles, 36, 91-92,
 223 (n 22)
 Buittenzorg, 155

C

C-39, 11, 93, 133, 204 (n 14),
 224 (n 25)
 C-49, 204 (n 14)
 Cabacaben, 80
 Cagayan, 70
 Cairo, 226 (n 13), 232 (n 44)
 Calcutta, 161
 Caldwell, Lt. Morris C., 154,
 175
 Cannon, S/Sgt. James, 79
 Canton, China, 51
 Canton Island, 25, 35, 84,
 222 (n 14)
 Caranduanes, 60
 Carlson, 2d Lt. Jack L.,
 233 (n 9)
 Caroline Islands, 39-40
 Carpenter, Lt. John, 57
 Casey, Brig. Gen. Hugh J.,
 238 (n 9)
 Catalina, 138, 225 (n 7)
 Cavite, 66

~~UNCLASSIFIED~~~~SECRET~~~~RESTRICTED~~

~~RESTRICTED~~ UNCLASSIFIED

Cebu, 47, 68, 179, 183
 Celebes, 100, 118, 120, 124, 126-127, 136, 146-147, 179, 195
 Celebes Sea, 127, 134
 Charleston, 4
 Charleville, 92
 Cheribon, 101
 Chiang Kai-shek, Generalissimo, 179
 Chief of Air Corps, 208 (n 34)
 Chief of the Army Air Forces, 208 (n 34). See also Arnold.
 China, 9, 51, 96, 160, 177; Sea, 55-56
 Christmas Island, 25, 34-35, 84
 Chunking, 87
 Church, Lt., 71
 Churchill, Col. L. S., 32
 Churchill, Prime Minister, 97, 108, 114, 193
 Claggett, Brig. Gen. Henry B., 9-10, 24, 30, 32-33, 46, 73, 82-83, 88-90, 92, 94-95, 110-111, 127-129, 205 (n 17), 220 (n 31)
 Clark Field, 9, 11, 15, 19-20, 29, 33, 43, 45-47, 53-66, 69, 71, 75, 115, 190-191, 197, 208 (n 33), 217 (n 12), 219 (n 26)
 Cloncurry, 92, 133
 Coast Artillery, 50
 Chief of. See Green.
 Cocos Islands, 177, 226 (n 13)
 Coctivy Island, 177
 Combined Chiefs of Staff, 108, 161-162, 225 (n 7)
 Combs, Col. Cecil, 60-61, 68, 70, 119-123, 137, 217 (n 12)
 Connelly, Lt., 120-121, 127
 Conner, Cpl. E., 126
 Corregidor, 1, 19, 52, 77, 140, 179, 182-184
 Coss, Capt., 132, 139, 149, 151
 Cox, Lt. Ray L., 136
 Crimmins, Lt. Fred, 57
 Crumley, M/Sgt. Thomas J., 217 (n 12)
 Curtiss, 231 (n 33)
 Daly Waters, 92, 133
 Darwin, 14-15, 24, 26-29, 34, 36, 71, 73, 77, 79, 89-97, 99, 103, 106, 117, 128, 133, 136, 141, 143, 149-150, 152, 156-159, 162, 165, 194, 213 (n 12), 233 (n 57), 238 (n 10)
 Devedo, 78-79, 100, 117-120, 179, 192, 218 (n 19)
 Davao Gulf, 76, 118, 120, 216 (n 8), 229 (n 4)
 Davies, Maj. John, 81, 93
 Davis, 107
 Del Carmen Field, 43, 54-55, 66, 75, 217 (n 13)
 Delehanty, T/Sgt. William J., 65
 Del Monte, 19, 47, 57, 60-61, 68, 70-73, 77-78, 82, 182, 184, 186, 190, 216 (n 3), 233 (n 9, 10)
 De Mott, Pfc J., 133
 Den Pasar, 167, 169
 Deputy Chief of Air Staff for ABDACOM, 111
 Deputy Supreme Commander, 110. See Brett.
 De Ruyter, 172-173
 De Simone, Sgt. Lewis, 144
 Dewey Boulevard, 74
 DFC, 221 (n 6), 233 (n 53)
 Diego Garcia Island, 177
 Dilli, 134
 Djombeng, 133
 Donaldson, Lt. Jack, 56
 Dougherty, Lt. John E., 126, 137
 DSC, 217 (n 9), 218 (n 17), 219 (n 27)
 Dufrane, Lt. J. L., 126, 143-144
 Dutch, 7, 102-103, 103, 114, 131, 135, 140, 159-160, 163-165, 170, 174-175, 193, 201, 227 (n 15)
 Dutch Air Defense Command, 133
 Dutch East Indies Air Force, 226 (n 15)
 Dyess, Lt. W. E., 44, 181

D

E

DC-3, 174
 Dale, Lt. Jack, 132, 139, 218 (n 18)
 11th Group, 13
 11th Squadron, 230 (n 18)

~~RESTRICTED~~ UNCLASSIFIED~~CONFIDENTIAL~~

UNCLASSIFIED

293

808th Engineering Battalion,
233 (n 57)
Eastern Island, 207 (n 25)
Eder, Anthony, 35
Edsell, 170
Egenes, Lt. Huber I., 151, 232 (n 48)
Electra, 172-173, 235 (n 21)
Elmore, Col. Ray. T., 47, 72, 184,
220 (n 31)
Encounter, 172-173
Endres, Pvt. Robert, 57
England, 30, 35, 99
Eubank, Lt. Col. Eugene L., 31, 42,
53, 57, 117-118, 153, 165, 168,
218 (n 21)
Eversten, 173
Exeter, 172-173, 235 (n 21)

F

4th Army Coop Unit, 225 (n 7)
4th Composite Group, 8-9, 31-32,
205 (n 19)
5th Air Base Group, 47, 72, 183
5th Air Force, 180, 216 (n 4)
5th Columnists, 52, 74, 76
5th Group, 13
V Bomber Command, 31, 33, 103, 124,
139, 148, 153-154, 166, 171, 191,
195-196, 211 (n 3)
V Interceptor Command, 32-33, 45,
211 (n 3)
14th Bombardment Squadron (E), 15,
18, 20, 23-24, 26, 28-29, 34,
47, 62
14th Naval District, 14
49th Group, 239 (n 15)
435th Bombardment Squadron, 185
557th Battalion, 45
Fagan, 173
Fairchild, 182
Fairley-Battles, 133
Far East Air Force, 31-32, 36-38,
41, 50, 53-54, 58, 68, 94, 99,
103, 105, 107, 116-117, 124,
128, 130, 137, 151, 180, 190, 192,
224 (n 25)
Far Eastern Fleet, 189
Far East Service Command, 31

Ferguson, 166, 172
Fernando, Maj., 183
Fields, Lt. Quannah P., 156
Fijis, 34-35, 84, 186, 222 (n 13)
Fisher, Maj. W. P., 17, 149, 151
Ford, 172-173
Ford, Lt., 68, 221 (n 6)
Formosa, 43, 51, 53-54, 59, 75,
100, 191, 216 (n 4)
Fort Douglas, 13
Fremantle, 170
French Indo-China, 40
Funk, Lt. Ben, 107, 129

G

G-4, 114
Gallienne, Winfred H., 142-143,
167
Galusha, Lt. Harry, 94, 154-156,
166-167, 172, 233 (n 53)
Gambonini, 2d Lt. Paul B., 142
Garing, W/C, 207 (n 27)
Gatty, Harold, 106
Geiger Field, 13
Geis, Lt., 132
General Headquarters Air Force,
3-4, 31
George, Brig. Gen. Harold K., 83,
180, 187, 212 (n 7), 222 (n 11),
238 (n 9), 239 (n 12)
Germany, 21, 238 (n 8)
Gerow, Brig. Gen. Leonard T., 97
Gibbs, Maj. David R., 57, 217 (n 12)
Gilbert Islands, 83
Gilmore, Lt., 132, 154, 156
Glassford, Rear Adm. W. A., 135
Glover, 2d Lt. John G., 157
Gozer, 3d Lt. Jose P., 67
Green, Maj. Gen. J. A., 45, 188
Group Programs, 6
Grover, Maj. O. L., 41
Grunert, Maj. George, 5, 32
Guam, 4, 20

H

Habberstad, Lt., 138, 144

UNCLASSIFIED

UNCLASSIFIED ~~RESTRICTED~~

294

Hague, Jesse R., 142-143, 149, 156
 Heinan, 51, 100
 Hambaugh, 166-167
 Hart, Adm. Thomas, 7, 36, 42-43,
 61, 67, 86, 110, 114, 121, 124,
 135, 145-146, 189, 227 (n 15),
 228 (n 24, 26)
 Hartman, T/Sgt. H. A., 155
 Haruna, 64, 219 (n 21)
 Hervey, Cpl. Frank A., 79
 Hawaii, 4, 8, 13-15, 19-20, 23-24,
 26, 29, 35, 38, 40-41, 49, 84,
 186, 207 (n 27), 216 (n 4),
 232 (n 44)
 Hawaiian Air Force, Commanding Gen-
 eral. See Martin, Maj. Gen. F. L.
 Hawaiian Department, 8, 15, 28, 35,
 38
 Commanding General, 28
 Haynes, Col. C. V., 164
 Hegdahl, Pvt. A. B. 126
 Helfrich, Vice Admiral, 114-115, 170,
 172-173
 Hemisphere Defense, 11-12
 Hemmon, Lt., 132, 139, 151
 Hickam Field, 15, 27-28, 84
 Hillhouse, Lt. C. H., 127-128
 Hipps, Capt. William, 117
 Hobbs, Capt. Louis E., 117
 Hobson, Maj. Kenneth B., 124, 127-
 128, 137-138
 Holbrook, 88, 97
 Holkyard, S/Sgt. James F., 65
 Holub, T/Sgt. Anthony, 217 (n 12)
 Honolulu, 13-14, 85, 222 (n 13)
 Hoskyn, Lt. Wallace J., 169
 Houchins, Sgt. James E., 144
 Houston, 145, 172-173, 233 (n 57)
 Hudson, 103, 134, 155, 225 (n 7)
 Hughes, 2d Lt. Charles W., 157
 Hughes, Lt. J. W., 124, 128
 Hurricane, 145, 169, 174, 225 (n 7)
 Hutchinson, 107
 Hynes, Lt. George W., 169

I

Iba Field, 33, 43, 46, 48, 52,
 55-56, 59

India-Burma theater, 161-164,
 170
 Indian Ocean, 162, 172, 226 (n 13)
 Intendent General, 112, 114
 Interceptor Command, 67, 83, 140,
 150, 170, 180-181, 194
 Interceptor Control, 151, 168
 Irvin, Lt. Ben S., 132, 142, 154

J

Jackson, E. H., 149
 Jackson, Flying Officer, 223 (n 25)
 Jaluit, 40, 213 (n 17)
 Java, 172-173
 Java, 1, 99, 101, 103, 107, 111,
 117, 124, 127-134, 136-141,
 143-145, 147-150, 152-153, 155-
 156, 158-159, 161-163, 165-167,
 169-172, 174-176, 180, 194-195,
 199-201, 225 (n 7), 230 (n 26),
 239 (n 15)
 Java Sea, 143, 151, 173, 201
 J. D. Edwards, 172-173
 Jogjakarta, 101, 124, 129-130,
 169, 175
 Joint Army and Navy Board, 20-21,
 23
 Joint Army-Navy War Plan, 37
 Jolo, 117, 128
 Jupiter, 172-173, 235 (n 21)

K

Kara, 213 (n 17)
 Kalidjati, 101
 Karachi, 161
 Keator, Lt. Randall B., 56,
 217 (n 9)
 Keenan, Lt., 223 (n 24)
 Keiser, 120, 127
 Kelly, Capt. Colin, 64-65,
 218 (n 21)
 Kelly, Sgt., 230 (n 26)
 Kendari, 118-120, 125-127, 135-
 136, 143
 Kenney, Maj. Gen. George C., 180
 Kester, Lt. Edson E., 176

UNCLASSIFIED ~~RESTRICTED~~ SECURITY INFORMATION

~~RESTRICTED~~
~~CONFIDENTIAL~~

295

Key, Capt. F. M., 127
 Khartoum, 106
 Killin, Pfc, 70
 Kiser, Lt., 132, 139, 151
 Knilm, 106
 Knudsen, Capt. Cecil C., 236 (n 27)
 Koepang, 133-134, 142, 150, 152
 Kolbus, S/Sgt. Walter B., 125
Kortenaar, 172-173
 Konoye, Prince, 30
 Kriel, Lt. Irvin Roy, 231 (n 32)
 Kruzel, 132, 151, 156
 Kuantan, 137
 Kuala Lumpur, 137
 kurtz, Lt., 121

L

LB-30, 104-105, 124-126, 129, 137,
 140, 146-147, 149, 152, 154, 157,
 161, 166, 169, 174-176, 195, 198
 Lachel, G/C, 92-93, 223 (n 22)
 Lae, 36, 177, 186
 La Fleur, Chaplain Joseph F., 57
 Lake Lanao, 184
 Landry, Larry D., 142
 Lane, Capt. William, Jr., 141-143,
 150, 156
Langley, 170-171, 194
 Langoan, 125
 Leunder, Lt. R. H., 166-167
 Legaspi, 46, 69-70
 Legood, Australian Squadron Leader,
 93
 Lembang, 116, 146
 Levin, Sgt. Meyer S., 64-65
 Leyte, 68, 183
 Liberator, 149
 Lindsey, 2d Lt. Paul M., 144
 Lingayen Gulf, 43, 53, 55, 61, 63,
 65, 76-77
 Lipa, 81
 Inenicka, Sgt. Irving W., 167
 Lombok, Strait of, 167
 Loway, Pfc A. J., 138
 Lowery, Lt. Herman F., 94
 Luzon, 1, 3, 5, 21, 37, 61, 63-64,
 68-69, 71, 74, 76, 80-81, 179,
 181, 190, 221 (n 4)

Mc

McAfee, Lt. James B., 59, 81, 153
 MacArthur, Gen. Douglas, 10, 13,
 21-27, 30, 32, 36, 40-43, 45-48,
 53, 59, 74-77, 85-88, 90, 92, 95,
 97, 99, 109, 164, 178, 181, 185-
 191, 202, 206 (n 20), 213 (n 12),
 216 (n 4), 219 (n 21), 226 (n 10),
 226 (n 15), 237 (n 4), 238 (n 8, 9)
 McCallum, Lt. Gerald, 132, 151
 169
 McElroy, Pfc Joseph G., 217 (n 12)
 McGivern, Lt. Francis, 125
 McIntyre, 120
 McMahon, 2d Lt. Robert F., 157
 McKayes, T/Sgt. Harry, 174
 McWherter, 149

M

Macassar, 126, 134, 147, 169
 Macassar Strait, 134-135, 145, 171,
 195
 Mackay, Pvt. D. S., 155
 Madicoen, 101, 138, 151, 154,
 233 (n 52)
 Magelang, 101
 Magwe, 160
 Mahoney, Capt. Grant H., 132, 151,
 154, 156, 218 (n 17)
 Malabang, 184
 Malabang Field, 208 (n 33)
 Malalag Bay, 120, 216 (n 8), 229 (n 4)
 Malang, 101, 107, 117-119, 123-129,
 136-138, 143, 152-155
 Malaya, 51, 97, 100, 103, 108, 112,
 122, 137, 195, 227 (n 15)
 Malay Barrier, 98-99, 101, 107, 109,
 115, 186
 Malay Peninsula, 99, 122, 195
 Manchuria, 51
 Mandates, 17, 28, 39-41, 51,
 213 (n 17)
 Manila, 4, 7-9, 14-15, 19, 21, 23,
 31, 33, 36, 45, 50, 53-56, 60,
 65-66, 73, 76-77, 81-82, 88, 91,
 190, 212 (n 7), 213 (n 12),
 221 (n 4), 226 (n 15)

~~RESTRICTED~~
~~CONFIDENTIAL~~~~CONFIDENTIAL~~

SECRET

~~RESTRICTED~~
UNCLASSIFIED

296

Manila Bay, 19, 59, 66
 Manila Hotel, 52
 Maremag, 184
Marblehead, 135, 145
Mariposa, 104, 106
 Marivales, 80, 82
 Marquat, Brig. Gen. William F.,
 238 (n 9)
 Marrett, Lt. Samuel H., 43, 62
 Marshall, General, 22-24, 27-28, 39-40,
 42, 45, 49, 74, 89, 96, 109, 111,
 113-114, 163, 223 (n 16), 228 (n 25),
 238 (n 8, 9)
 Martin aircraft, 103, 135, 137
 Martin, Maj. Gen. F. L., 35, 38
Mauna Loa, 92, 158, 233 (n 57)
Meigs, 34, 158, 233 (n 57)
 Melbourne, 15, 36, 156, 179,
 232 (n 44)
 Menado, 120-121, 125
 Menado Bay, 126
 Merle-Smith, Col., 96
 Messerschmitt, 126
 Miami, 107
 Midway, 4, 13, 15-16, 24, 26-29, 34,
 38-39, 84, 207 (n 25), 210 (n 44)
 Mindanao, 1, 47-48, 68, 70, 72, 77,
 95, 117, 124, 128, 140, 179, 182-
 184, 186, 217 (n 12), 221 (n 2),
 222 (n 11)
 Mindoro, 68, 78, 219 (n 26),
 222 (n 11)
 Mobley, 2d Lt. Herbert S., 238 (n 9)
 Modjokerto, 152-153
 Money, Pfc Williard L., 65
 Monroe Doctrine, 20
 Montgomery, Lt. G. R., 63
 Moore, Lt. J. H., 43, 56, 66,
 217 (n 9)
Mormack Sun, 104
 Mosley, Capt. Cuthbert L., 78
 Muckley, Dwight S., 142-143, 151
 Mueller, Lt., 78-79
 Murphy, Col. William H., 231 (n 32)
Myoko, 229 (n 4)

N

19th Group, 13-14, 24, 27-28, 31,
 33-34, 69, 82, 84, 107, 118, 121,
 124, 127-128, 140, 146, 154, 166,
 185, 192, 217 (n 12), 222 (n 11),
 224 (n 25)

91st Squadron, 152, 154, 166,
 171
 93d Bombardment Squadron, 24,
 33, 47
 96 type heavy bomber, 178
 Naval Attache, 222 (n 16)
 Naval Command, 110
 Naval Operations, Chief of, 28,
 223 (n 16)
 Navy, 2, 13, 15, 24, 27-28, 35,
 39, 74, 84, 87, 94, 97,
 207 (n 25), 210 (n 44),
 216 (n 8), 221 (n 4), 222 (n 16)
 Navy Department, 7, 25, 28, 42
 Navy Patrol Wing, 10, 60
 Neerason, Maj. C. F., 126
 Negros, 183, 222 (n 11)
 Neri, Lt., 132
 Netherlands East Indies Air Force,
 102
 Netherlands East Indies Army, 140
 New Britain, 14, 162
 New Caledonia, 25, 35, 84, 165,
 222 (n 13)
 New Guinea, 14, 141, 177, 179
 New Ireland, 162
 New Zealand, 35
 Ngoro, 134, 139, 151, 160-167
 Nicholl, Maj., 223 (n 23)
 Nichols Field, 8-9, 11, 44, 54,
 53-59, 66, 69, 75, 181,
 206 (n 20), 208 (n 33),
 217 (n 13)
 Nielson Airport, 69
 Nielson Field, 44, 46, 56, 59-60,
 181
 Nimitz, Admiral, 178
 Northern Territory, 90
 Administrator of, 18

O-19, 6
 O-19E, 11
 O-46, 4, 11
 O-46A, 6
 O-49, 6, 204 (n 14)
 O-52, 204 (n 14)
 OA-4, 6
 OA-9, 6
 Oak Leaf Cluster, 219 (n 27)
 O'Donnell Field, 44, 208 (n 33)

~~RESTRICTED~~

~~SECURITY INFORMATION~~

UNCLASSIFIED

UNCLASSIFIED

~~SECRET~~
~~RESTRICTED~~

297

O'Donnell, Maj. Emmett, Jr., 14-18,
25, 62-63, 117, 213 (n 19)
Olongapo, 69
Olsen, Pfc Edward R., 79

P

P-12, 238 (n 10)
P-26, 5-6, 11, 44, 67, 69,
204 (n 14)
P-35, 4-6, 11, 23, 33, 50, 58, 61-
62, 67, 79-80, 182-183, 217 (n 13),
238 (n 10)
P-36, 4-5, 102, 217 (n 3)
P-37, 217 (n 13)
P-39, 184
P-39D, 212 (n 7)
P-40, 23, 33, 39, 43-44, 50, 52, 56,
58, 62, 66, 71, 79-80, 85, 91-92,
95-96, 106, 129, 131-134, 139-143,
149-151, 153-154, 156-157, 166-
167, 169-171, 174-175, 180-182,
184, 194, 199, 204 (n 14),
217 (n 13), 223 (n 24), 232 (n 46),
235 (n 19), 237 (n 4), 238 (n 10)
P-40B, 8, 11-12, 23, 33, 43, 204 (n 14)
P-40D, 212 (n 7)
P-40E, 12, 23, 33, 44, 52, 61, 102,
209 (n 37), 212 (n 7)
Pacific Fleet, Commander in Chief,
28
Paco, 60
Paleu, 213 (n 12)
Palembang, 122-123, 136-137, 146-
147, 151-153, 225 (n 7),
232 (n 48)
Palmyra, 25, 35
Pan-American Airways, 106
Paranaque, 60
Panay, 19, 183, 222 (n 11)
Parsel, Capt. E. L., 63, 120,
218 (n 19)
Pasirian, 169
Patrol Wing Ten (Patwing 10), 36,
117, 134, 189, 219 (n 27)
Paul Jones, 172-173
PB, 36-37, 43, 50, 69, 82, 117,
126, 134, 155, 182, 184, 216 (n 8),
219 (n 21)

Pearl Harbor, 52-53, 84-85,
97, 99-100, 115, 190,
211 (n 3)
Peary, 158, 233 (n 57)
Pease, 173
Pecos, 170-171
Peirse, British Air Marshall,
111, 114-115, 228 (n 26)
Pell, Maj. Floyd, 156-157
Pensacola, 85-86
Peres, 2d Lt. Jack R., 157
Perrin, Col., 96
Perry, Cpl. Kenneth, 230 (n 26)
Perry, 2d Lt. Elton S., 157
Perth, 172-173
Perth, 176
Philippine Air Force, 219 (n 27)
Philippine Army, 44, 214 (n 27)
Philippine Department, 4-7,
9-10, 12-13, 22, 29,
206 (n 23), 209 (n 39)
Air Force, 9-10, 205 (n 19),
206 (n 23)
Philippine Ordnance Depot, 45,
60, 189
Philippine Sea, Battle of,
219 (n 21)
Phillips, Adm. Tom, 227 (n 15)
Pickett, Sgt. George W.,
231 (n 32)
Plans Division, 3, 8
Pohl, Col. Herman H., 226 (n 13)
Poncik, Victor J., 126
Pope, 172-173
Port Darwin, 223 (n 16)
Portmer, 233 (n 57)
Fort Moresby, 14-15, 17-18, 24,
26-28, 34, 36, 40, 94, 141,
207 (n 27), 213 (n 12),
233 (n 57)
Potters, T/Sgt. John A., 231 (n 29)
Pownall, Maj. Gen. Sir Henry R.,
110
Premier, Japanese, 30
President Coolidge, 23, 34, 104,
106
President Pierce, 23, 207 (n 27)
President Polk, 230 (n 18)
Preston, Capt. Joseph J., 144
Prichard, Lt. William J., 144

~~RESTRICTED~~

UNCLASSIFIED

~~SECRET~~ INFORMATION

~~RESTRICTED~~~~UNCLASSIFIED~~

298

Prince of Wales, 101
 PT-13, 238 (n 10)
 PT boat, 186
 Public 29 Airplane Deferred Storage Program, 22
 Purple Heart, 217 (n 11)

Q

Quantas, 106
 Quezon, President, 238 (n 9)

R

RAAF, 18, 40, 51, 103, 157,
 207 (n 27), 225 (n 9)
 RAF groups and squadrons, 225 (n 7)
 Rebaul, 14, 26-27, 36, 186
 RAINBOW No. 5, 37
 Reagan, 2d Lt. C. L., 142, 175
Republic, 85-86
Repulse, 101
 Rice, 2d Lt. Burt H., 157
 Richards, Col. H. H. C., 4
 Robb, Maj. Stewart A., 218 (n 13)
 Robins, Lt. Donald D., 65
 Robinson, Maj., 136, 139
 "Rock," 183
 Rockhampton, 133
 Roland, Lt., 132, 139
 Roosevelt, President, 30, 76, 97,
 108-109, 114, 161, 193
 Rosales Field, 44, 54
 Rouse, Lt. John A., 168, 173
 Rowe, Lt. William M., 65
 Royce, Brig. Gen. Ralph, 238 (n 10)
 Russia, 75, 253 (n 8)
 Russian Army, 238 (n 8)

S

2d Observation Squadron, 9, 67
 2d Infantry Regiment, 90
 6th Squadron, 44
 7th Group, 13, 33, 84-85, 91, 103,
 124-125, 127, 129-131, 136-137,
 139, 143, 146, 154, 209, 230 (n 18)
 Commander, 136

16th Squadron, 153
 17th Bombardment wing, 31, 55
 17th Squadron, 7-8, 33, 44, 54,
 59, 61, 65-66, 68, 132-133,
 150-151, 156, 169, 174-175, 181,
 217 (n 13), 218 (n 18),
 219 (n 25)
 60th CA, 44, 59
 70th Squadron, 211 (n 6)
 71st Division, 80
 Seipan, 213 (n 12)
 Salamaus, 177, 186
 Samarinda, 118-119, 125, 127, 134
 Samoa, 35
 Sand Island, 207 (n 25)
 San Fernando Field, 44, 81
 San Francisco, 4, 7, 13, 34, 85,
 211 (n 3)
 Port of Embarkation, 34, 45, 83,
 211 (n 6)
 San Jose, 68, 78
 San Marcelino, 61-63, 75, 78, 81,
 218 (n 19)
 San Miguel Bay, 79
 Sesebo, 229 (n 4)
 Sarawak, 100
 Sayre, Francis B., 42
 Schaetzle, Lt. G. E., 63-64, 68,
 78-79, 127
 SCR equipment, 22, 45, 214 (n 28)
Sea Lion, 67
Seawitch, 170-171, 194, 235 (n 19)
 Secretary of War, 12, 23
 Selective Service Act, 187
 Selfridge Field, 9
 Semarang, 101
 Seversky fighters, 139
 Shanghai, 97
 Shepherd, Lt. W. A., 66
 Short, Lt. Gen. Walter C., 25, 35,
 40-41
 Siberia, 7
 Signal Corps, 9
 Singapore, 36, 40, 48, 99, 103,
 115, 121, 225 (n 7)
 Singosari, 117, 122, 124, 129,
 138, 140, 143-144, 162, 166-168
 Silver Star, 232 (n 48)
 Silva, M/Sgt. Louis T., 126
 Smith, Lt., 78

~~UNCLASSIFIED~~~~SECRET~~~~RESTRICTED~~
~~SECURITY INFORMATION~~

UNCLASSIFIED ~~RESTRICTED~~

299

~~CONFIDENTIAL~~

Soemba, 133, 152
 Soengi Patani, 122
 Soerabaja, 94, 101, 103, 130, 133,
 138-139, 143, 149-151, 153
 Solomon Islands, 25, 177
 Southwest Pacific Area, General Head-
 quarters, 216 (n 4)
 Spaatz, Maj. Gen. Carl, 3-4, 6, 10-12,
 29, 38, 45, 188, 204 (n 14),
 214 (n 28)
 Sperry, 198
 Sprague, Maj. Charles A., 132, 150-151,
 153, 166-167, 230 (n 23)
 Stafford, "Old Goat," 153
 Stalin, 238 (n 8)
 Standard Oil, 210 (n 44)
 Stark, Admiral, 25, 28
 Status of Airplanes in Foreign Pos-
 sessions, 209 (n 37), 212 (n 7)
 Stauter, 2d Lt., 132, 139
 Stephenson, Lt. Glenwood, 153
 Straubel, Maj. A. A., 125, 139,
 231 (n 32)
 Strauss, Lt. Allison W., 71, 132
 Strother, Capt. Donald R., 144
 Sumatra, 99, 103, 122, 136, 145-146,
 151, 195, 225 (n 7)
 Summers, 154-156, 167, 172
 Sutherland, Maj. Gen. Richard K.,
 53-54, 185, 238 (n 9)
 Swanbeck, 173
 Swanson, Lt. Theodore B., 138
 Swordfish, 225 (n 7)

- T

3d Air Force, 31
 3d Pursuit Group, 218 (n 17)
 3d Pursuit Squadron, 9, 33, 43, 52,
 54-56, 59, 219 (n 25)
 20th Air Base Group, 9
 20th Pursuit Squadron, 7-8, 33, 43,
 54-56, 68, 141, 150, 167
 21-B, 102
 21st Squadron, 33, 43, 54-55, 62,
 66, 68, 182, 211 (n 6), 217 (n 13),
 219 (n 25)
 22d Squadron, 230 (n 18)

24th Pursuit Group, 33, 79-80,
 205-206 (n 19), 219 (n 25),
 224 (n 25)

27th Bombardment Group (L),
 24, 34, 50, 52, 59, 74,
 80-81, 85, 93, 95, 149, 152-
 153, 222 (n 11), 224 (n 25),
 239 (n 12)

28th Bombardment Squadron, 9
 30th Bombardment Squadron, 24,
 33

32d Bombardment Squadron, 34
 33d Pursuit Squadron, 156
 34th Squadron, 33, 44, 55, 59,
 66, 68, 182, 211 (n 6),
 219 (n 25)

35th Pursuit Group, 33, 106,
 141, 211 (n 6), 226 (n 10),
 239 (n 15)

38th Reconnaissance Squadron (H),
 34

39th Group, 13
 200th CA (AA), 60, 217 (n 12)

339D, 102

339E, 102

Tacloban, 68

Tagagaran, 54

Tarakan, 100, 120-122, 125

Tash, Lt. Earl, 57, 127

Tests, Lt. Edward C., 17, 123,
 127

Tengah, 225 (n 7)

Ternate Field, 44

Thailand, 48, 100

Thompson, 2d Lt., 132

Thonga, 123

Thorne, Lt. H. G., 43, 52

Timor, 133, 141, 149-150, 156,
 233 (n 57)

Timor Sea, 152

Tjilatjap, 170, 194

Tojo, General, 30

Tokyo, 198

Tomahawks, 223 (n 24)

Toungoo, 160

Townsville, 36, 96, 131, 133,
 212 (n 7), 222 (n 13)

Trinidad, 84

Trout, 2d Lt., 132

UNCLASSIFIED

~~RESTRICTED~~~~CONFIDENTIAL~~

~~RESTRICTED~~
~~UNCLASSIFIED~~

300

Truk, 40, 213 (n 12)
Tubb, Lt. D. B., 186-187
Tulagi, 233 (n 57)
Turner, William L., 142

U

United Kingdom, 35
USAFPE, 22-23, 29-30, 48, 61, 189-190
USAFIA, 87, 94, 105, 111, 192

V

Valencie, 184
Vance, Col., 153
Vandevanter, Lt. Elliott, 62, 68,
70, 123
Van Hook, Lt. Gov., 163-164
Van Oyen, Maj. Gen. L. H., 102,
226 (n 15)
Vigan, 63, 69-71, 218 (n 18)
Vildeboests, 103, 225 (n 7)
Villamor, Capt. Jesus, 44, 67, 69,
219 (n 27)
Vincent, 27

W

Waco, 182
Wade, Lt. E. C., 129
Wagner, Lt. Boyd D., 44, 54, 59, 71,
79, 230 (n 23)
Waingapoe, 133, 152
Wainwright, 1

Wake Island, 4, 14-15, 17, 24,
26-29, 34, 38-39, 83-84,
207 (n 25), 210 (n 44)
Welker, 2d Lt. William R., 157
Welled City, 60
War Department, 2, 5, 9-10, 14,
22, 24, 26-28, 30, 32, 40, 48,
51, 84, 87, 95, 97, 104, 106,
111, 113-114, 132, 160-163, 165,
185-186, 188-190, 200
General Staff, Chief of, 208 (n 34)
Washington, 31, 44, 48, 76, 181,
211 (n 3)
Wavell, Gen., 96, 108-109, 111-112,
114, 122, 124, 159-160, 164-165,
184
West Point, 205 (n 7)
Wheless, Lt., 70
Whipple, 170-171
Wicks, 2d Lt. Max R., 157
Williams, 149
Williams, Pfc Greeley B., 58
Willis, Maj. Harold B., 226 (n 13)
Witte de With, 172
Wood, Pfc T. M., 138
Wotze, 213 (n 17)

Y, Z

Yamashiro, 64
ZB-3A, 6
Zambales, 69
Zamboango Field, 208 (n 33)
Zeke, 199
Zero, 66, 73, 139, 156, 167, 175,
199, 220 (n 31), 231 (n 33)

~~CONFIDENTIAL~~

~~RESTRICTED~~
~~SECURITY INFORMATION~~

UNCLASSIFIED

