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THE UNITED STATES AND JAPAN, 1919-1940

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AIR POWER AND THE FAR EASTERN POLICIES OF THE UNITED STATES AND
JAPAN, 1919-1940;

The Development of Military Aviation and its Role in
War Planning and Pursuit of National Objectives

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Thesis for Master of Arts in Law and
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PREFACE

At 7:55 on Sunday morning, December 7, 1941, Japanese carrier aircraft struck a surprising and devastating blow against American forces at Pearl Harbor. With the detonation of the first bomb the problem of what America's role should be in the European and the Pacific wars was decided. Diplomacy and enforcement of United States Pacific policy by moral and legal admonitions and even belated economic sanctions had failed. So had such noble documents as the Nine Power Treaty of 1922, the Kellogg-Briand Pact, and arms limitation agreements. The belief that American security could be maintained by isolation and neutrality had also been proven false.

The problem was now a military one, and in the end American air power was to be the key to victory in the Pacific. But few -- not even the most avid airpower advocates -- could have predicted with any certainty in December 1941 that this would be the case. America had begun to awaken to the reality of world events in late 1938 and inaugurated a rapid rearmament program. Since then more and more attention had been given to strengthening America's airpower, and while preparations were in full progress in late 1941, it was a classic case of too little, too late. In the 1920's and 1930's the United States government had failed to adhere to a cardinal principle that armaments and a nation's preparedness must coincide with and be able to sustain a nation's commitments and foreign policy. This mistake was proving to be a costly one.

The Pearl Harbor attack was not the first use of air power in Pacific relations or in war planning. The airplane had played an important role in the strategic and operational planning of both the United States and Japan since the end of World War I. Japan had been using air power almost with impunity in pursuit of her national policy since 1931.

It is the purpose of this paper to describe and assess the role played by military air power in the Pacific during the years between World War I and World War II. While this is but a preliminary survey for a much more comprehensive thesis, enough material has been examined to provide a fairly complete picture of aviation development, air doctrine, and air power's role in the war plans of the period. Some coverage is unavoidably thin due to non-availability of reliable or adequate information. In many cases extensive archival research will be required to remedy this.

The organization of the material for a survey such as this presents a problem. A chronological approach has been chosen, and chapters are divided according to what are considered major periods for this subject. Within each chapter a functional approach has been deemed necessary in order to maintain some order.

There is also the problem of defining the term "air power." An understanding of what a writer means by this term is essential in reading any work on the subject, and unfortunately it has assumed a plethora of meanings. For purpose of definition this paper will use "air power" to mean military aviation -- both tactical and strategic --

that exists for the purpose of inflicting damage upon an enemy from the air. While it is impossible to exclude completely other aspects of aviation from a nation's total air power, these are treated here as outside the scope of this study.

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CHAPTER ONE

BACKGROUND: 1905-1919 -- DIPLOMACY, WAR PLANNING AND AIR POWER

The years from 1905 to 1919 are important for both a study of United States-Japanese relations and for a study of air power. By 1905 America and Japan were well-committed to policies in the Far East which were incompatible and future friction was likely to be inevitable. 1905 also marked the second anniversary of man's first heavier-than-air flight. The danger of armed conflict between the United States, committed to maintaining the Open Door in China and to defending the newly acquired Philippine Islands, and Japan, seeking to extend her political and economic influence on the continent of Asia and looking askance at what she thought to be the menacing position of America's Far Eastern policy, could be seen without much difficulty. On the other hand, the war potential of the new flying-machine was not so quickly grasped. By the end of World War I the airplane had proven itself as an effective weapon of war, although its full potential was not fully recognized except by a few die-hard air enthusiasts.

These years are more than a convenient frame of reference upon which one can base a narrative. They are the real background to Pearl Harbor. The policies chosen and the basic premises of war plans that were established in these years were to remain amazingly constant until the outbreak of World War II in the Pacific.

THE DIPLOMATIC BACKGROUND

Traditional American Far Eastern policy centered around protecting the commercial interests of the United States in China and Japan. In pursuit of this the United States sought no territorial gains and no special commercial privileges other than those available to all on a most-favored-nation basis. By 1900 this traditional Open Door policy was focused on China and was interpreted by the United States as having been accepted by other Far Eastern powers. In July of that year Secretary of State John Hay in a circular note, better known as the Second Open Door note added to this policy the preservation of China's territorial and administrative entity when he proclaimed that United States policy was

to seek a solution which may bring about permanent safety and peace to China, preserve Chinese territorial and administrative entity, protect all rights guaranteed to friendly powers by treaty and international law, and safeguard for the world the principle of equal and impartial trade with all parts of the Chinese Empire.¹

This was a noble policy, and one to which the United States officially remained committed until the Pearl Harbor attack. While Secretaries of State usually presented only words to fight violation of it as Japan closed the Open Door from 1931 on, America was unwilling to back away from it and sanction Japanese aggression. Perhaps Theodore Roosevelt was correct in 1910 when he wrote to President Taft that "the Open Door policy in China was an excellent thing . . . so far as it can be maintained by general diplomatic

1. A. Whitney Griswold, The Far Eastern Policy of the United States (New Haven: Yale University Press, 1962), pp. 501-502.

agreement, but . . . the Open Door policy . . . completely disappears as soon as a powerful nation determines to disregard it, and is willing to run the risk of war rather than forego its intention."²

With the annexation of the Hawaiian and Philippine Islands and Guam in 1898 the United States was well on its way towards becoming a Pacific power -- a move completed with the opening of the Panama Canal in 1914. With an expanded empire, American Far Eastern policy took on a new dimension: guaranteeing the security of these possessions. Such commitments as the above and the preservation of the Open Door required adequate strength to back them if they were to be strong policy, or else they should have been either modified or abandoned. The United States from 1900 to 1941 chose neither, and while the Open Door slowly disappeared as a viable policy when Japanese policies challenged it, the United States refused to recognize this. It is within this basic framework that this study of air power and Far Eastern policies will take place.

Japan from the last decades of the nineteenth century had taken great strides toward becoming a world power. Although she was physically and financially exhausted at the end of the Russo-Japanese War in 1905, her surprising defeat of Russia brought world recognition that Japan had taken her place as a Pacific power. In order to retain this status and to gain an even stronger position Japan, in addition to seeking to internal development and growth, was determined to become militarily even more powerful, to find economic and physical security by expansion

2. Griswold, Far Eastern Policy, p. 132.

in the Far East, to acquire not only Japanese hegemony in that area, but an empire as well.

By 1905 Japan had acquired the Kurils, Bonin, Ryukyu and Pescadores Islands, Formosa, a lease on the Liaotung Peninsula, the southern half of Sakhalin, various footholds in southern Manchuria and recognition by Russia, Great Britain and the United States of her paramount interests in Korea³ -- a nation which she annexed in 1910. With such a base and few obstacles (even encouragement) from other powers, Japan's appetite was whetted, and the story of Japan's attempts at fulfillment of what was now termed as her historic mission, is the story of the road to Pearl Harbor.

Japanese expansionist designs were no secret to the United States diplomats, government officials and military planners. Even Theodore Roosevelt became apprehensive in 1905. Roosevelt's concern over these designs plus Japanese resentment over what was becoming another factor in United States Pacific policy, the exclusion of Asiatic immigrants from the United States, and Japanese public sentiment that the United States was to blame for what was felt to be a less than satisfactory Treaty of Portsmouth, led to increasing friction in Japanese-American relations. The resulting war scare of 1906-08 coincided with the first of a series of war plans in the United States and Japan which provided guidelines for action against each other.

During World War I the collapse of the balance of power in Asia prompted Japan to seize Germany's Northern Pacific Islands, occupy

3. Griswold, Far Eastern Policy, pp. 91, 119-120, 125.

Kisocho in China, invade Siberia and make political and economic demands of China, acceptance of which would have been tantamount to Japanese domination of China. The United States replied to these Twenty-One Demands with Secretary of State William Jennings Bryan's non-recognition statement in which Japan and China were notified that the United States would not recognize

any agreement or undertaking which has been entered into or which may be entered into between the Governments of Japan and China, impairing the treaty rights of the United States and its citizens in China, the political or territorial integrity of the Republic of China, or the international policy relative to China commonly known as the Open Door policy.⁴

Japan's demands before this had been modified somewhat and accepted by China. Here Bryan's caveat seems to have had little affect, largely because Japan felt the United States was not prepared to challenge Japan openly.⁵ Strained relations were eased somewhat in November 1917 by the Lansing-Ishii Agreement in which Japan appeared to adhere to the principles of Hay's Second Open Door note. But this agreement also included a recognition by each party "that territorial propinquity creates special relations between countries," and accordingly the United States recognized "that Japan has special interests in China."⁶ Japan interpreted this to mean American recognition of her paramount influence and position in Manchuria.

4. Griswold, Far Eastern Policy, pp. 194-195.

5. George M. Beckman, The Modernization of China and Japan (New York: Harper and Row, 1962), p. 358.

6. Rubl J. Bartlett, ed., The Record of American Diplomacy (3d ed., New York: Alfred A. Knopf, 1960), p. 421.

Mongolia and Shantung, but this seems unrealistic. A better interpretation is that this was a "stop-gap measure . . . a grudging concession to the goat of Japanese imperialism" while the United States prepared to face more serious problems in Europe.⁷

With the fall of Czarist Russia in the revolution of 1917 the balance of power in Asia received another blow, and Japan eagerly sought an excuse to extend her control into Northern Manchuria and eastern Siberia. When an international expeditionary force was organized in August 1918, Japan was only too eager to participate and in the end sent some 72,000 troops (compared with 9,000 Americans) into Siberia.⁸ The opportunity to expand into Northern Manchuria was not missed either. The United States participated primarily in order to restrain Japan's activities, and when Japan failed to withdraw her forces at the end of the war, another thorn was inserted into United States-Japanese relations. The Japanese Siberian Expedition provided one more glimpse of events to come. With the dispatch of troops by the Japanese government the matter became a military one, and the Japanese Army's General Staff, taking advantage of its autonomy of command which was sanctioned by the Meiji Constitution,⁹ not only

7. Griswold, Far Eastern Policy, p. 217.

8. Beckman, The Modernization of China and Japan, pp. 363-364.

9. Under the Meiji Constitution of 1889 the emperor "retained" command of the armed forces of Japan, and the Army and Navy General Staffs were responsible directly to him rather than to the cabinet for action of the military forces. Not only did the civilian government thus lack complete control over the military, but the General Staffs had what amounted to an effective veto over cabinet action through their control over the selection of the Army and Navy Ministers. Effective control of the military depended on a strong and unified political and military leadership, or a strong emperor. See John K. Fairbank, Edwin O. Reischauer and Albert H. Craig, East Asia, The Modern Transformation (Boston: Houghton Mifflin Company, 1965), pp. 296-297.

sent in many more troops than originally agreed upon, but refused to withdraw them when requested to do so by the government. Here was the first clear case in modern Japanese foreign policy of "dual diplomacy."¹⁰

At the Paris Peace Conference from January 12 until June 23, 1919, President Woodrow Wilson fought a determined battle to bring about the restoration of Shantung to China and the internationalization of the former German Pacific Islands, arguing that their only value was military and that control of these islands by Japan would make defense of the Philippines impossible.¹¹ Wilson was determined to go all-out, not only to check Japanese expansion, but to find a solution for bringing permanent peace and adherence to the policies of the Open Door to the Far East. But Japan came armed as well. In addition to her determination to push to a conclusion her program of expansion and her quest for great power recognition, she already had secret agreements backing her island claims and fresh commitments from China to certain of the Twenty-One Demands.

Wilson's Paris offensive against the Japanese challenge to America's Far Eastern policy was not successful. The German North Pacific Islands were granted Japan under a mandate, and German rights in Shantung were transferred to Japan, although Japan gave her word to restore this area to China. Added to these serious points of contention was the continuing problem of the Japanese in Siberia, a growing naval armaments race and immigration problems. It was seen in both Tokyo and Washington that the situation was a serious and dangerous one with war not an impossibility.

10. Fairbank, Reischauer and Craig, East Asia, p. 568.

11. Louis Morton, "War Plan Orange," World Politics, Vol. 11, No. 2 (January, 1959), p. 224.

Thus at the end of World War I, the national policies of Japan and the United States clearly defined, well-known to each other and were seen to be on a collision course. The defeat of Germany and the Russian revolution had so altered the balance of power in the Far East that it was felt that the collision could come any moment.

WAR PLANNING 1900-1919

With the emergence of the United States and Japan as Pacific powers both nations recognized a need for taking not only steps to defend the homeland, and dispersed territorial possessions, but for support of foreign policies as well. This led to abandonment of the vague, relatively simple and unspecific concepts of defense that had guided these nations to the beginning of the twentieth century, and ushered in the age of war planning. Basic principles of strategic war planning were adopted by 1907 and these were to serve with only a few variations until 1941 and after. There were modifications and refinement of plans, not the least of which was the introduction of air power, and how well each nation implemented these is another matter. From 1907 Japan and the United States placed each other high on their list of potential enemies, and by 1918 both had reached the number one position.

While the airplane was being accepted as a military weapon by both nations in this period, it was not to enter as a major factor in war planning until after World War I. But even before military aviation had come of age in World War I far-sighted military experts in the United States envisaged the aircraft as playing an important role

in the defense of the Philippines.¹² Japan was not idle in planning for the use of aircraft in pursuit of her national policies. This was shown by her limited though effective use of air power at Tsingtao in 1914.

America's Pacific policy as of the beginning of the twentieth century has been summarized. It was the task of military policy to formulate plans to support these policies. At the turn of the twentieth century the United States found itself for the first time in its history a world power with responsibility for defending outposts far from its continental shores. The foundation of American Pacific strategy at this time of necessity had to be sea power. The defense of the Philippines and support of United States policies in the Far East required a powerful fleet that could operate in the Western Pacific, and this required adequate and well-defended bases in the Pacific. Defense of these bases and successful defenses of insular possessions like the Philippines, Guam and Hawaii also required strong, mobile Army forces and fortifications; and this presented the need for strong Army and Navy cooperation if Pacific strategy was to be successful.

To promote this cooperation the Secretaries of War and the Navy established in 1903 the Joint Board, an advisory body of four officers from each service. By 1904 the Joint Board had made its main task the development of war plans. These were to be a series of joint action plans for cooperation in an emergency, based upon studies by the Navy's General Board and the Army's General Staff. These plans were soon color-coded, with contingencies planned for each nation with which the

12. Archibald D. Turnbull and Clifford L. Lord, History of United States Naval Aviation (New Haven: Yale University Press, 1949), p. 22.

United States was likely to be involved. Japan was assigned the color "Orange."

The Orange plans of the Joint Board were to provide the overall strategic concepts and missions in case of conflict against Japan and from this each service was to develop its own plans. This process was to be carried on down to the field and fleet commanders.¹³

The basic preoccupation of the Joint Board at this time, as it was to be for over 30 years, was defense of the Philippines. When tension between the United States and Japan in the summer of 1907 made war seem possible, War Plan Orange, and especially the position of the Philippines in this plan, received careful examination. The Joint Board recommended that the fleet be sent to the Far East as soon as possible, and that Army and Navy Philippine forces be prepared to defend the small naval station at Subic Bay.

The key to successful defense of the Philippines and protection of American interests in the Far East was a strong naval base and fleet based in the Philippines.¹⁴ The statement by the Joint Board in July 1907 after taking stock of Japanese strength in the western Pacific is significant. Concerning the Philippines in the event of war, the Board states: "The United States would be compelled to take a defensive attitude in the Pacific and maintain that attitude until reinforcements could be sent."¹⁵ In 1908 when the Joint Board and Congress selected Pearl Harbor as America's major base in the Pacific, the Philippines were given a secondary role in Pacific strategic

13. Norton, "War Plan Orange," p. 222.

14. Louis Norton, United States Army in World War II: The War in the Pacific, Strategy and Command: The First Two Years (Washington: Office of the Chief of Military History, Department of the Army, 1962), p. 24.

15. Ibid., p. 23.

planning although a secondary base was to be built on Manila Bay. Thus by 1908 concepts that were to last until the eve of Pearl Harbor were established: 1) defense of the Philippines would be dependent upon the security of Hawaii and the ability of reinforcements to move westward from there, 2) the Philippines were to be defended as well as possible from the concentration of defenses around Manila Bay, and the defenders were to hold out until reinforcements could arrive.¹⁶

Due to disagreements between members on the best site for a naval base in the Western Pacific, the Joint Board became less effective after 1908, and only met twice during World War I. Before this, though, War Plan Orange had been studied carefully, and it was the assumption of the planners from 1913 on that the Philippines would be Japan's first objective in the event of war. It was estimated that the defenders would have to hold for an estimated three to four months, the time required for the fleet to arrive. After reinforcements arrived the Navy was to take the offensive for control of the Western Pacific, while the Army's role was to gain control on the ground in the Philippines.¹⁷

At the end of World War I the United States Army and Navy were confronted with a radically altered strategic picture in the Far East. Japan's strategic position was so strengthened as a result of the war and the treaties, that now Japan remained virtually unchallenged by any power other than the United States. Japan's possession of the former German islands made the defense of the Philippines and the

16. Morton, Strategy and Command, p. 23.

17. Morton, "War Plan Orange," pp. 222-223.

possibilities of effective action in the Far East seem very difficult indeed. In addition, military aviation had proved itself during the war, and while still in its infancy no great imagination was required to foresee the threat that aircraft based on the mandated islands could bring against American shipping.¹⁸

Faced with the above plus increasing ill-will between the United States and Japan, military leaders saw a greater need than ever for effective joint planning. The Joint Board was therefore reorganized in the summer of 1919, provided with a working committee of planners from the two services and given for the first time power to originate studies on its own initiative.¹⁹ With new strength the Joint Board returned once again to its major problem, War Plan Orange.

Before a realistic revision of Orange could be made, there were several dilemmas that had to be overcome. First, what was America's policy for the Far East, not only in view of postwar changes there, but also in light of the Congressional promise in 1916 of eventual Philippine independence? Since military policy must serve national policy, it was imperative that the latter be clearly defined to military planners. The answer to questions concerning what type of operations should be planned in the event of hostilities with Japan and whether the costs of all-out efforts that might be needed to uphold United States Pacific policy would be prohibitive as far as the national interest was concerned had to come from the State Department. Also in question was the future of the League of Nations. An effective

18. Harold Sprout and Margaret Sprout, Toward a New Order of Sea Power (Princeton: Princeton University Press, 1940), p. 90.

19. Morton, "War Plan Orange," p. 225.

The first part of the document is a letter from the Secretary of the State to the President of the Senate, dated January 15, 1877. The letter is addressed to the President of the Senate and is signed by the Secretary of the State. The letter contains the following text:

Sir, I have the honor to acknowledge the receipt of your letter of the 14th inst. in relation to the application of the State of New York for the admission of the State of New York to the Union. I have the honor to inform you that the same has been forwarded to the proper authorities for their consideration.

I am, Sir, very respectfully,
 Your obedient servant,
 Secretary of the State.

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League would make obsolete any war plan based on the assumption of a war between the United States and Japan alone. A clear definition of United States policy and the necessary means of enforcing this was the sine qua non of realistic planning. Without this a gap could develop that might bring disastrous results.

So in the absence of clear direction military planning entered the postwar era using most of the assumptions of the years preceding. Japan still ranked as the most probable foe, strategy was still to be primarily naval with strongly held bases across the Pacific serving as keys to successful fleet action. Hawaii remained the key base with the Philippines ranking after Guam in priority. The Philippine garrison was still expected to resist a Japanese attack until relief arrived, but this was becoming largely a moot question in view of Japan's increasing strength.²⁰

In Japan prior to 1902 there was much concern about national defense and Japan's destiny, but little in the way of formal defense planning except for vague concepts which, with few exceptions, were largely defensive. No strategic war plans were to be devised involving potential enemies until 1907.²¹

The Anglo-Japanese Alliance of 1902 gave some impetus toward strategic planning. At least the Army began to regard Russia as its most likely foe. With victory in the Russo-Japanese War in 1905 and

20. Morton, "War Plan Orange," p. 227.

21. Saburo Hayashi, Kogun: The Japanese Army in the Pacific War (Quantico, Virginia: The Marine Corps Association, 1959), p. 1; Takumiro Hattori, "The Complete History of the Greater East Asia War" (4 Vols., Dai Ton Sengo Zenshi, Tokyo: Asahi Publishing Company, 1953), typewritten and translation, Dec. 78002, Office of Chief of Military History, Washington, Vol. I, p. 247.

achievement of several goals of national policy, the already dominant role of national defense in politics was enhanced. Japanese strategic outlook was turning more to offensive-minded operations now that Russian naval power in the Far East had been annihilated, and the army had gained a foothold on the Asiatic mainland.²² This offensive-oriented approach was to last until 1941 for the Japanese Army.

In 1907 after Field Marshall Yamagata had approached the emperor on the need for a national defense policy, the Army and Navy Supreme Commands drafted the First Imperial Defense Policy, had it approved by the prime minister and sanctioned by the emperor. This policy provided for specific programming to be done annually by the Army and Navy, which would take the form of annual operational plans to run each year from April to March. The Imperial Defense Policy was to be based on high level estimates of the international situation from a standpoint of national defense. This policy was also to establish the basis for the strength of the Army and Navy.²³

The 1907 Imperial Defense Policy contained four main clauses. First, Japan pledged to defend herself against what she felt to be her potential foes: Russia, the United States and China. Second, Japan would seek to avoid war by diplomatic channels as far as possible, but if war became inevitable, she would fight her potential enemies one at a time. Third, against the United States the basic strategy would be a strategic defensive in the western Pacific; against Russia the main goal would be a decisive Manchurian campaign to destroy enemy ground forces; and against China, the plan envisaged occupation

22. Hayashi, Kogun, p. 1.

23. "Japanese Operational Planning Against the USSR, 1932-1945," Japanese Special Study on Manchuria, Vol 1, Army Forces Far East, 1955, unpublished monograph on file CGMA, Washington, p. 15; Hattori, "Complete History," p. 250.

and control of the key areas of north and central China. Fourth, in the execution of the above strategic goals, the Army would be charged with the prime responsibility for Russian operations and would be built up to the necessary strength to occupy in the event of war, the Maritime Provinces, and northern Sakhalin, while at the same time securing Manchuria. The Navy's responsibility would be to acquire the necessary strength to command the waters of the Western Pacific.²⁴

The 1907 policy postulated Russia as the number one hypothetical enemy of both the Army and Navy, but in 1918 after the fall of Czarist Russia and with increasing animosity in the relations with the United States, the Imperial Defense Policy underwent its first revision and the United States rose to the position of the most probable enemy of both services. Russia went to second place with China remaining in third.²⁵

More details of early Japanese war planning have not been found, but hopefully this framework will be adequate for an understanding of subsequent chapters.

THE DEVELOPMENT OF AIR POWER IN THE UNITED STATES AND JAPAN

Japan and the United States were far from being strong in military aviation at the start of World War I. The United States after inventing the airplane left it to others, notably France and Germany, to develop it as a military weapon. When the United States

24. Nayashi, *Logan*, pp. 192-193.

25. Nayashi, *Logan*, p. 2; Mitsuo Fuchida and Masatake Okuma, *Midway: The Battle That Doomed Japan* (Annapolis: United States Naval Institute, 1955), p. 11.

entered the war a tardy but vast expansion program was inaugurated for military aviation, and while Americans contributed bravely and not insignificantly to the war, the story of the United States air services in World War I have been aptly described as "one of promise rather than of achievement."²⁶ Japanese aviation participation was even more limited, primarily due to her remoteness from the main fields of battle, but Japan showed that she was learning. Instead of almost disastrous demobilization of aviation units at the end of the war, Japan was only beginning to seek the status of a first class air power.

Even before the Wright brother's successful flight in 1903 some official attention had been given to experimentation in heavier-than-air flying with thoughts directed toward the possibilities of the use of such a machine as a new weapon of war. While some limited appropriations were made to these early experiments, the prevailing attitude then, as it was to be after the Kitty Hawk flight, was one of skepticism and military conservatism. After 1903 there were many, both in and out of the American military services, who saw what a great potential the airplanes had, but the high-ranking officials who made the decisions were not so easily convinced.

Progress, though slow, was forthcoming. In 1907 the Aeronautical Division of the Army Signal Corps was established, and in 1909 this division received its first aircraft. Military aviation in the United States was at last getting started. Growth was slow with early years

26. Office of Air Force History, The Army Air Forces in World War II (Vol. 1, Plans and Early Operations, Wesley Frank Craven and James Lea Cate, eds., Chicago: The University of Chicago Press, 1949), p. 5.

devoted primarily to experimentation. The Navy not to be outdone stepped up its interest in aviation and by 1910 was engaged in intensive investigation of the feasibility of aircraft as an adjunct to the fleet. That aircraft would operate successfully from ships at sea was demonstrated in November 1910, when a successful launch was made from a ship, and in 1911 a successful "arrested" landing was made.

In spite of generally favorable results from early aviation, development went forward at a snail's pace. Congress was not overly generous as their 1911 appropriation of less than \$200,000 for military aviation placed America fourteenth among nations in aviation appropriations -- below Greece and Bulgaria.²⁷ But Congress was not entirely to blame. More often than not it was the restraining hand of the War and Navy Departments that stood in the way of more rapid progress.²⁸

When the United States entered the European War in 1917, it had no real air forces, only manpower, raw materials and enthusiasms. Army aviation which had been given statutory recognition in 1914 as the Aviation Section of the Signal Corps, had acquired a total of only 224 airplanes from 1909, none of which were true combat models by European standards, and few of these were still in commission.²⁹ The Navy had only 21 seaplanes in service, although 135 more were

27. Craven and Gate, Plans and Early Operations, p. 6.

28. Turnbull and Lord, History of United States Naval Aviation, p. 21.

29. Craven and Gate, Plans and Early Operations, p. 6.

on order.³⁰ An enthusiastic and ambitious program of expansion and mobilization to get American air forces "over there" was started with a generous boost from the overzealous promises and claims of air-enthusiasts and a quickly-passed \$540,000 aviation appropriation from Congress.³¹ Fulfillment of this overly ambitious and oversold program did not proceed as rapidly as planned, and American aviators had to rely on foreign equipment (as well as foreign training) until 1918. America discovered that an aircraft industry or trained air forces cannot be built overnight. This was a lesson quickly to be forgotten after World War I.

United States army aviation (redesignated again in 1918 as the Army Air Service and removed from the Signal Corps) and naval aviation after a late start performed well, although their roles were generally as forces adjunctive to the ground forces and fleet. In this capacity their mission was almost entirely tactical, with the bulk of flying devoted to reconnaissance, patrol operations and air defense. Though tied to support of ground forces and the fleet, American military units did learn some valuable lessons, namely the concept of concentration of force and counter-air offensive as the best way of rendering support.

Unfortunately for the future development of United States air power the war ended before American aviation reached its full strength and realized its full potential, especially in aerial bombardment.

30. Willies Green and John Fricker, The Air Forces of the World (New York: Hamner House, 1958), p. 310.

31. Craven and Cate, Plans and Early Operations, p. 6.

executed independently of the movements of ground forces. Had America's aviators gained experience in this and proved its value, they could have spoken from experience rather than theory in arguing for a more independent role for aviation during the interim between the wars. As it was, those who advocated an air force tied to support of ground forces could speak from experience. The result was that conventional ideas by which wars are fought were to dominate military thinking in the years to come.

United States aviation in the Pacific during these years was of extremely limited scope. An Army training school was established in the Philippines in 1912, and the Army had a tactical squadron based in Hawaii from 1917. But for the United States the air war was in Europe, and any effective use of aviation in the Far East at its present stage of development was out of the question.

Japan's development of military aviation paralleled in many ways that of the United States. Japan's start in this field was slow, primarily it would seem because of geographical remoteness, military conservatism and a state of technological development that made it difficult for Japan in the early years of the twentieth century to compete on the same level as more advanced nations. But Japan in her desire to achieve great power status and military strength commensurate with this had shown time and time again that her eclectic approach to technological development could be successful. Japan recognized during the course of the war that the military airplane had enormous potential, and a slow start did not dampen her determination to achieve great power status in aviation after World War I.

Japan had made limited use of a dirigible as a captive balloon for scouting during the Russo-Japanese war, but felt that it was ineffective.³² In 1909 Japanese military aviation officially was organized with the Army and Navy participating in the Temporary Military Balloon Research Committee. The balloon was soon given a secondary position, since from late in 1909 Japanese military aviation planning was geared to the establishment of airplane components and aircraft production.³³ By 1911 Japan had established its first aircraft factory, procured about 10 aircraft from abroad and had started sending officers to France and the United States for flight training.

At the outbreak of World War I Japanese aviation components were small, but strong enough in aircraft strength and training to participate in limited action. Japan was too remote from the major battlefields to contribute much to the European effort, and her aviation was also still too embryonic for more than minor action.

Japan's major air effort came in the siege and capture of the port of Tsingtao from the Germans in 1914. Army aircraft with the assistance of Japanese Navy seaplanes operating from the Wakamiya Maru supported operations by Army ground forces and the Japanese fleet.³⁴ In addition to reconnaissance flights and artillery spotting, these airplanes apparently participated in some bombing operations.³⁵

32. W. W. Boyse, Aerial Bombardment and the International Regulation of Warfare (New York: Harold Vinal, Ltd., 1923), p. 63.

33. Green and Fricker, Air Forces, p. 177.

34. "Outline of Naval Armaments and Preparations for War" (5 parts, Japanese Monograph 145, Washington, D.C.: mimeographed, undated copy in OCMH, Part 1, 1922-1934), p. 5.

35. Robert P. Porter, Japan: The Rise of a Modern Power (Oxford: The Clarendon Press, 1919), p. 257.

While the above was the only major air action by Japan, there was other activity. In 1918 the Army sent a squadron of about six aircraft as part of Japan's Siberian force, and these planes remained in Vladivostok until Japanese withdrawal in 1922.³⁶ In August 1918 Japan sent eight pilots to the French Aviation Militaire where they participated in several missions,³⁷ and in the same year 22 officer pilots participated in action on the Italo-Austrian front.³⁸

At the end of the war Japan was more determined than ever to push onward in the development of her air forces. To accomplish this Japan had observed other nation's aviation with care, and made the most of limited war operations. Japan's air units like those in America were still separate forces under Army and Navy jurisdiction, and as such they were tied to support of ground forces and the fleet. But there was a major difference between American and Japanese aviation in 1919: Japan was expanding her air power instead of demobilizing it.

And significantly there was a Japanese Navy Commander studying at Harvard University during the war years who observed aviation developments with intense interest. By the end of the war this officer was convinced that the key to future wars lay in air power rather than traditional battleships. His name was Isoroku Yamamoto.³⁹

36. "Air Operations 1931-1945" (Vol 4, Japanese Studies on Manchuria, Washington, D. C.: typed MSS, undated, OCMH), p. 4.

37. Green and Fricker, Air Forces, p. 178.

38. Japan Year Book, 1919-1920, p. 436.

39. John Deane Potter, Yamamoto (New York: The Viking Press, 1965), p. 18.

The first part of the report discusses the general situation of the country and the progress of the work done during the year. It also mentions the various committees and the work done by them.

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CHAPTER II

DIPLOMACY AND AIR POWER, 1919-1922

The years between the end of the Paris Peace Conference and the closing of the Washington Conference in February 1922, were years of ferment and change in the fields of Far Eastern diplomacy and war theory. As a result, on the diplomatic side there was at least a nominal return to peaceful relations in the Far East and international codification of American traditional Far Eastern policy. On the side of war theory, military aviation was beginning to challenge conventional doctrines of warfare, especially those of naval warfare. The impact of the United States bombing trials of 1920 and 1921 was not only to awaken even the most conservative admirals to the potential of air power, but also to bring into question the very assumptions on which American Pacific strategy was based. As a result of the rise of air power, the "freezing of the Pacific" by the Washington Conference, and retrenchment in American preparedness, military war planners were to have a difficult task in formulating a realistic Orange plan in the years to follow.¹

It is beyond the scope of this paper to go into a detailed description of events leading to the Washington Conference and negotiations that took place there. Issues relating to or affecting air power will be examined later. A brief sketch hopefully will be sufficient at this point.

The problems in United States-Japanese relations at the end of the war, which were compounded by the failure of Wilson to put checks

1. For a discussion of war planning during this period see Chapter III.

on Japan at the Paris Peace Conference, were made even more serious by the failure of the United States Senate to ratify the Versailles Treaty and thereby recognize the Paris settlement of many of these Far Eastern problems. The United States also was concerned about possible dangers to America and American interests in Asia that might stem from the Anglo-Japanese Alliance, which had been renewed in 1911, and which both nations were seeking to renew at this time. Finally there was potential military danger as well as great economic cost in the intensifying naval armaments race in which Japan, seeing America carrying out rapid naval armaments as provided for in the Naval Appropriation Act of 1916, sought at least to keep up.² There was widespread conviction by the end of 1920 that "only a restoration of a Far Eastern balance of power, redefinition of national interests and policies in that region, and a limitation of naval armaments could avert a costly, if not utterly ruinous, war in the western Pacific."³

What started as a proposal for a disarmament conference was gradually expanded in 1921 to include broader problems of the Far East. Japan was never a willing participant in the Conference,⁴ but realized the desirability of a solution to the armaments race at least. Japan suspected that the conference was a plot on the part of the United States and Great Britain to take away her special rights and advantages in Manchuria, Inner Mongolia and China, to check her

2. A complete discussion of these problems as well as events leading to the Washington Conference is provided in A. Whitney Griswold, The Far Eastern Policy of the United States (New Haven: Yale University Press, 1962), Chapter VII.

3. Harold Sprout and Margaret Sprout, Toward a New Order of Sea Power (Princeton: Princeton University Press, 1940), p. 99.

4. A. Whitney Griswold, The Far Eastern Policy of the United States (New Haven: Yale University Press, 1962), p. 235.

proposed naval expansion program, and to replace Japanese leadership in Asia.⁵ But mitigating against suspicion and reluctance were several important factors: notably a postwar recession which was making vast naval expansion difficult, and a shift to a more peaceful and international approach to foreign relations due in part to a rise in importance of democratic, liberal internal politics.⁶

By the time the Washington Conference adjourned much had been done to restore tranquility to the Pacific. The major agreements signed by both the United States and Japan will be listed. The Five Power Naval Treaty signed February 6, 1922, called for a naval holiday, the scrapping of certain capital ships, qualitative and quantitative limitations on capital vessels, a limitation on total tonnage of aircraft carriers, and as a quid pro quo for Japanese acceptance of less than "parity" in capital ship tonnage allowed, a non-fortification article which was designed to maintain the status quo of fortifications and naval bases of designated areas in the Pacific.⁷ The Four Power Treaty of December 13, 1921, terminated the Anglo-Japanese Alliance and pledged the signatories "to respect their rights in relation to their insular possessions and insular dominions in the region of the Pacific Ocean."⁸ The Nine Power Treaty of February 6, 1922 gave, in effect, international

5. George M. Beckman, The Modernization of China and Japan (New York: Harper and Row, 1962), pp. 376-377.

6. John E. Fairbank, Edwin O. Reischauer and Albert M. Craig, East Asia: The Modern Transformation (Boston: Houghton Mifflin Company, 1965), pp. 568-571.

7. Ruhl J. Bartlett, ed., The Record of American Diplomacy (3d ed., New York: Alfred A. Knopf, 1960), pp. 486, 488.

8. Ibid., pp. 490-491.

The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that every entry should be supported by a valid receipt or invoice. The second part covers the process of reconciling bank statements with the company's ledger to ensure that all payments and receipts are properly recorded. The third part discusses the need for regular audits to identify any discrepancies and prevent fraud. The final part provides a summary of the key points and offers advice on how to implement these practices effectively.

In conclusion, it is essential for every business to maintain accurate financial records. This not only helps in tracking income and expenses but also provides a clear picture of the company's financial health. By following the guidelines outlined in this document, businesses can ensure that their records are up-to-date and reliable. Regular audits and reconciliations are key to maintaining accuracy and preventing errors. Finally, it is important to stay organized and consistent in all financial transactions to avoid any confusion or discrepancies.

sanction to America's traditional policy of adherence to the Open Door for China and respect for China's administrative and territorial integrity.⁹

Before turning to the subject of the Washington Conference and air power, it is necessary to examine the postwar state of aviation in the United States and Japan.

American Army and Navy aviation units after about seven months of combat experience in World War I had a war record which, if not up to full expectations, nevertheless brought credit to American aviation. Military aviation, however, was still a stepchild of more conventional theories of warfare, and battleship fleets and land armies remained the paramount forces. To illustrate just how closely aviation was tied to these forces, the Aircraft Yearbook of 1920 in its list of war functions of the airplane "that were conclusively brought out by the war" mentions for Army aviation only operations in direct support of ground troops, and for the Navy air arm only scouting, patrol work and gun spotting with the fleet and offensive operations against only those forces operating against or menacing the fleet.¹⁰ This was not very different from a demarcation of responsibility made by a joint Army-Navy "Cognisance Board" in 1916.¹¹

Aviation, no matter how limited the role planned for it, was not something easily ignored. The cry for a separate, independent air force

9. Bartlett, Record, pp. 487-490.

10. "Aircraft in Warfare in World War I" Aircraft Yearbook 1920, pp. 79, 83.

11. Archibald D. Turnbull and Clifford L. Lord, History of United States Naval Aviation (New Haven: Yale University Press, 1949), p. 76.

The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that proper record-keeping is essential for the success of any business and for the protection of the interests of all parties involved. The document then proceeds to outline the various methods and procedures that should be followed to ensure the accuracy and reliability of the records. It covers topics such as the selection of appropriate accounting systems, the establishment of clear policies and procedures, and the implementation of effective internal controls. The document also discusses the role of technology in modern record-keeping and the importance of regular audits and reviews to identify and correct any errors or discrepancies. Finally, the document concludes by stressing the need for ongoing education and training for all staff members involved in the record-keeping process to ensure that they are up-to-date on the latest best practices and industry standards.

In conclusion, the document provides a comprehensive overview of the key principles and practices of effective record-keeping. It serves as a valuable resource for anyone looking to improve their record-keeping processes and ensure the long-term success and integrity of their organization. The document is available for download at the following link: [\[Link\]](#)

was being heard again, as well as claims that with proper air power the United States would never again need a large Navy or a large Army. There were also strong economic arguments, beginning to be heard with increasing frequency, comparing costs of aircraft with battleships. Yet the fact remained in 1919 and 1920 that the battleship navy was still the first line of defense. America had no aircraft carriers, and at this stage of development, air power theory was far ahead of aircraft performance. So America's air power fell victim to the massive and rapid demobilization that is typical of democracies after a war.

Had proponents of air power been able to stem somewhat the normal tide of demobilization, they would have faced still a formidable lineup of difficulties. In the years after the war they would have had to overcome opposition not only from a Navy General Board devoted to the battleship concept of defense and jealous of any weapon that might interfere with appropriations for these ships,¹² and an Army General Staff composed exclusively of ground officers who were still upset from the passage of the aviation appropriations in 1917 over their opposition, but from a public whose interests seemed to stop at the shoreline of the United States and who opposed a large and expensive military establishment in the name of world peace and domestic economy.

Demobilization was not a complete abandonment of the air weapon. Few doubted that aviation had some role to play in national defense. Even as the "eyes of the fleet" or airborne artillery spotters,

12. Ashbrook Lincoln, "The United States Navy and the Rise of the Doctrine of Air Power," Military Affairs, Vol. 15 (Fall, 1931), p. 148.

aircraft represented a giant step in the modernization of war. Thus Congress became aroused in 1920 at the dumping of surplus aircraft by France, Great Britain and Italy, recognizing the danger of such action to a necessary aircraft industry.¹³ Congressional appropriations from 1919 on were not as niggardly as one might suspect, being heavier than other comparable peacetime periods, but they were nonetheless inadequate for a military posture commensurate with America's position and commitment.¹⁴ From the appropriations granted the air services were at the mercy of their parent organizations, and battleships and land armies were expensive.

In promoting the development of air power the Navy was at times more active than the Army during this period. The Navy in its role as the "first line of defense" maintained a more offensive-minded outlook in plans for performing this traditional function. Many ranking Naval Officers were calling for aviation to assume a larger role in this mission, and even the staunchest "saltwater Admiral" would find it hard to dispute arguments that aircraft with the fleet could be of some asset. Events soon to take place off the Virginia coast were to make the Navy even more air-minded, but one is cautioned that this is air-mindedness in a limited sense. Naval aviation was to face an uphill fight for full recognition for years to come, and like many other problems of aviation that date from these early years, there are still problems between surface and aviation officers of the Navy today.

13. Aircraft Yearbook 1921, p. 97.

14. Office of Air Force History, The Army Air Forces in World War II (Vol. 1, Plans and Early Operations, Wesley Frank Craven and James Lea Cate, eds., Chicago: The University of Chicago Press, 1948), p. 18.

In Navy planning a key means of taking the airplane to sea was to be the aircraft carrier. It had been demonstrated almost 10 years ago that successful launches and landings could be made from ships, other nations were experimenting with carriers, and primitive seaplane carriers had emerged during the war.¹⁵ The Navy General Board had annually recommended the building of carriers since 1918, and in 1919 Congress authorized the conversion of the collier Jupiter into an experimental carrier. In 1920 the Navy Department recommended that construction start on four high-speed carriers, but this was kicked back and forth in Congress with no action being taken.¹⁶

Between October of 1920 and September of 1921 a series of bombing tests which proved that aerial bombardment could sink even the mighty battleship, were to have almost revolutionary impact on not only naval thinking, but Army and civilian thinking as well. It was also to inflame a seapower versus airpower controversy that continues to some degree even today.

The tests began modestly with Navy seaplane testing bombs against the old battleship Indiana in November 1920. The ship suffered several damaging hits, but was towed aground before she could be sunk. The results were inconclusive, and while air power proponents wasted little time in claiming that the aircraft was now the supreme weapon,¹⁷ others such as Captain W. D. Leahy, Director of Naval Gunnery, stated in his report to the Secretary of the Navy that "the entire experiment pointed to the improbability of a modern battleship being either destroyed or

15. Sprout and Sprout, Toward a New Order, p. 219.

16. Ibid., pp. 221-223.

17. Edward Arpee, From Frigates to Flat-tops (Lake Forest: Edward Arpee, 1953), p. 92.

completely put out of action by aerial bombs."¹⁸

More tests were obviously needed, and the opportunity came in 1921 when several captured German ships including the battleship Ostfriesland were made available. This time the Secretary of the Navy, Josephus Daniels invited the Army Air Service to participate, and they willingly accepted. On June 21, 1921 naval aircraft sank the German U-117, a submarine. On July 13 General William L. Mitchell with 39 aircraft gave the Army Air Service its first taste of simulated war tactics and sank the destroyer G-102. The cruiser Frankfurt was sunk on July 18 after repeated bombing from both Navy and Army planes. These successes were impressive, but the real test was a battleship, and on July 21, 1921, when the Ostfriesland finally sank, airmen had proved a point.¹⁹

There were still lingering doubts. Some claimed that the trials were unrealistic, that a ship actively maneuvering and defending itself would have been unsinkable. The trials were also marred somewhat by lack of cooperation between Mitchell and the Navy. But air power proponents were convinced that the battleship was sinkable from the air, that command of the air also could mean command of the sea below. In addition to giving a boost to naval aviation, the trials pointed out the need either to scrap a fleet concept based on the battleship, or to provide for adequate anti-aircraft defenses including aircraft accompanying the fleet to insure command of the air. These trials were not unnoticed by Congress, although it was to be some years later before

18. Aircraft Yearbook 1922, p. 47.

19. Ibid., pp. 47-52.

additional carriers were authorized.

Only a brief treatment of the air power controversy that was to run through most of the 1920's and beyond will be attempted here. It was both an intraservice and an interservice controversy and an extremely complex affair. In its more general form it was a battle of words, propaganda and legitimate appeal from those seeking a greater role for air power in national defense, opposed by more traditional-minded and usually highly-placed military and civilian officials who preferred to keep aviation as subservient, adjunctive arms. On this level it was a campaign for more autonomy, more control over personnel, greater representation on policy-making boards, and demands for a greater share of appropriations. This was not an unreasonable struggle, and had it remained on this level, results might have been better. But the controversy was more complex, went to more extreme forms, and aroused the resentment of even strong supporters of air power.

Two forms of the controversy brought forth the most scintillating debate. One was the proposal for a separate air force, with an independent mission, that would incorporate both Army and Navy aviation. This was not a new idea, as similar proposals had been advanced almost as soon as military aviation was established, and the idea was not completely without merit. The Navy was particularly firm in its opposition to this, feeling that the vital close coordination between the fleet and Naval aviation, and the special skills of Naval aviation would not be forthcoming under a United Air Service. Rear Admiral William A. Moffett, head of the recently established Bureau of Aeronautics and a leading advocate of naval air power considered the

protested these overflights, and the Chief of Naval Operations promptly ordered the Governor of Guam to control the Marine flights more carefully.²³

Japan at the end of World War I had air forces of much smaller size and with even less experience than those of the United States. The organization and mission of these forces was in general not too different from American air forces in 1919. Yet Japan in the postwar years was to become much more air-minded and to seek expansion of her aviation. Many reasons can be suggested for this, but primarily it would appear that Japan's desire to become an air power was a continuation of her drive to acquire great power status using the latest weapons available. It is not too difficult to see how the airplane could be a particularly suitable weapon for Japan's long range policies in the Pacific. Air power properly developed and properly deployed throughout Japan's already vast "empire" would provide strong defenses against any threat to Japan or her possessions. The offensive potential of air power could be an important factor in any future action on the continent of Asia.

Technologically behind more developed nations, Japan at the end of the war completely re-evaluated her aviation capabilities in the light of advances in aviation made during the last years of the war, decided on expansion programs and sought help from abroad to aid in the fulfillment of these.

The development of Japanese air power was to be a highly eclectic

23. Gerald A. Wheeler, Prelude to Pearl Harbor (Columbia: The University of Missouri Press, 1963), p. 87.

process, and the use of foreign instructors, technological experts, tactics and air doctrine were to set the course of Japanese aviation throughout its history. While this approach undoubtedly handicapped the development of concepts, techniques and equipment that were purely Japanese in origin, it was nonetheless an expeditious way to catch up quickly. Japan not only purchased equipment from abroad and invited foreign aviation missions to Japan, but she also started sending her own missions abroad to purchase equipment, to observe technological developments in aviation, and to observe the planning and tactics of others.²⁴

Japan was careful to choose only the best. Following this policy the Japanese relied on aircraft from Great Britain and France. In reorganizing training and setting in motion her expansion the Army Air Corps turned to France, and a French training mission that arrived in 1919 was to have a profound influence on that branch. The Japanese Naval Air Force sought aid from Great Britain.²⁵

No time was lost in placing some of the growing forces where they could best support national policies. In 1921 the Japanese Navy established an air station on southern Formosa and deployed a unit of naval aircraft there. In the same year an Army aviation battalion was sent to Heijo, Korea to utilize a base under construction there. Japan expected this base "to be highly efficient in guarding over the

24. Aircraft Yearbook 1922, p. 89.

25. William Green and John Fricker, The Air Forces of the World (New York: Hanover House, 1958), p. 178; "Outline of Naval Armaments and Preparations for War" (5 parts, Japanese Studies in World War II, Japanese Monograph 145, Washington: mimeographed, undated copy in OGMH, Part 1, 1922-1934), p. 7.

the frontiers and keeping order in the peninsula."²⁶

At the same time the Navy was pushing ahead with plans for modern aircraft carriers. Japan at this time had one converted steam freighter which was being used as an experimental carrier, another aircraft carrier under construction, and plans for two more.²⁷ While evidence is lacking on more details about this period, it would probably be safe to say that the results of the United States bombing trials did not go unnoticed in Japan.

Assessment of the influence of air power at the Washington Conference is not as simple a task as it might seem. There were two decisions relating directly to air power; the limitation of aircraft carriers and the decision not to attempt to place any limitation on aircraft. Indirectly affecting aviation was the non-fortification article of the Five Power Treaty. But when one attempts to assign motives for these decisions in terms of air power, the picture becomes cloudy -- especially in the case of Japan.

There can be little doubt that the delegates to the conference were aware that aviation had a vast war potential, or that the recently demonstrated aerial threat to the battleship presented a challenge to conventional doctrines of seapower. Yet it is going perhaps too far to claim that the rise of air power and in particular the sinking of the Ostfriesland "cleared the way, more than any other single event, for a possible solution of the international competition in capital ship construction,"²⁸ or that Japan agreed to inferior limitation of her

26. Japan Yearbook 1921-1922, p. 312.

27. Sprout and Sprout, Toward a New Order, p. 228; Aircraft Yearbook 1922, p. 87; United States, United States Strategic Bombing Survey Pacific War (No. 62, Japanese Air Power, Washington: Military Analysis Division, 1945), p. 4.

28. Aircraft Yearbook 1922, p. 1.

capital ships because the Navy had been assigned an inferior position to the Japanese Army Air Force in 1921.²⁹ A more precise determination of air power's influence must await more research, and only a tentative conclusion can be offered here. A desire to restore harmony to international relations particularly in the Pacific, a realization of the high economic and political costs of a naval armaments race, and an assumption that the capital ship was the root of evil here were the prime motivation for the limitations of the Five Power Treaty. The ratios accepted and the non-fortification provision aimed at bringing equality of security in the Pacific in terms of the traditional concept of sea power. In this sense considerations of future air power were of little consequence. But when one turns to Japan's acceptance of a lower ratio, and insistence on non-fortification as a quid pro quo to acceptance, one cannot dismiss entirely the factor of air power. Japan in 1921 was underway on a program of aviation expansion with a long range goal of becoming a great power in the air. Success in this program, the knowledge of battleship vulnerability and the elimination of the threat of overwhelming American forces challenging Japan from either sea or land in the Western Pacific would seem to make acceptance of an inferior ratio a small price to pay. In any event the Washington Conference was to have a profound effect on future policy in the Pacific.

Aviation received direct attention on the question of limitation and regulation of aircraft. When President Harding issued the invitation to the conference in August of 1921, he did not exclude

29. Alexander Kiralfy, "Watch Japanese Air Power," Foreign Affairs, Vol. 23 (October, 1944), pp. 66-70.

non-naval armaments from possible limitation noting that "it may also be found advisable to formulate proposals by which in the interest of humanity the use of new agencies of warfare may be suitably controlled."³⁰ This would include aircraft, but the United States had in mind regulation rather than limitation. Secretary of State Hughes in his arms limitation proposals of November 12 did not propose the limitation of naval aircraft,³¹ and the subcommittee appointed to discuss this question did not recommend the limitation of military aircraft. They found that it would be impractical to impose effective limitation on military aircraft, not only because of the problem of enforcement, but primarily because of the close interdependence between military air power and a nation's commercial aeronautics. To handicap the latter would be "to impede progress in transportation and communications."³² The subcommittee recognized that "in aircraft there was probably the most formidable military weapon of the future," but they felt, and the delegates at Washington unanimously agreed that to limit aircraft would be to limit progress.³³

The question of drafting a code regulating the use of aircraft in war was postponed for future consideration as few participants were ready to discuss this question.³⁴

What the conference would not do directly they attempted to do

30. United States Senate, Conference on the Limitation of Armament, Washington, November 12, 1921 - February 6, 1922 (Washington: Government Printing Office, 1922), p. 17.

31. Ibid., p. 63.

32. Ibid., p. 396.

33. Ibid., p. 415.

34. Ibid., p. 405.

indirectly. This was done by the limitation of aircraft carriers. In 1921 the state of aviation was such that few seriously believed that aircraft would ever be able to span the Pacific or even the Atlantic.³⁵ With land-based aircraft limited to their small combat radius of action, use of air power over marine areas would depend on development of the carrier. So by limitation of this type of warship the conference was potentially curtailing the use of aircraft beyond the reach of land.³⁶

The proposal for the limitation of aircraft carriers was a part of Hughes' November 12 proposal, and it would assign the United States and Great Britain a total tonnage of 80,000 tons each, Japan 48,000 tons, and Italy and France tonnage to be decided upon at a later date. The United States later proposed a maximum displacement of 27,000 tons for carriers, and was hopeful that everyone would be able to meet their relative needs for these proposals.³⁷

These seemed to suit no one, especially Japan. Japan pressed for a larger allowance arguing that carriers were essentially for coast defense, and due to special circumstances and a unique geographical position, Japan needed as much tonnage as allotted to the United States and Great Britain.³⁸ Japan also claimed that strong carrier forces were necessary to protect her highly inflammable cities from hostile air attack from the sea, and that her economy was so poor that she could not afford a vast armada of land planes. Japan's unstated premise in

35. Sprout and Sprout, Toward a New Order, p. 219.

36. Ibid., pp. 213, 219.

37. Ibid., pp. 227, 230.

38. Ibid., p. 229.

all this seemed to be that Japanese carriers were for purely defensive purposes, while those of her potential enemies were essentially offensive weapons.³⁹

The final solution reached at Washington partially met Japan's demand for more carrier tonnage. The United States and Great Britain were allotted a total displacement tonnage not to exceed 135,000 tons each, while Japan was allotted a total tonnage of 81,000. All existing carriers were deemed to be experimental and could be replaced without regard to age, and an individual ship maximum displacement limit of 27,000 tons was adopted with limited exceptions for a few vessels of up to 33,000 tons.⁴⁰

Of all the provisions adopted at the Washington Conference none was to present a greater future dilemma to Pacific planning than Article IX of the Five Power Treaty, the non-fortification article. American agreement to maintain the status quo of fortifications and naval bases in possessions that included the Philippines, Guam and Aleutians, not only was a pledge to forego adding new fortifications and bases, but to abstain from increasing facilities at existing naval bases and increasing coast defenses.⁴¹ Hughes did not appear to be too concerned about agreeing to this. His main concern was naval disarmament, and he had been told that Congress would never appropriate

39. Sprout and Sprout, Toward a New Order, p. 229.

40. Ibid., p. 231.

41. Bartlett, Record, pp. 487-489.

enough money to fortify adequately these islands.⁴² What he had done, though, was to enhance greatly Japan's offensive and defensive position in the Pacific, and to place an almost insurmountable obstacle in the path of effective implementation of American Far Eastern policy. The impact of all this on future strategy and war planning will be examined in later chapters.

42. Griswold, Far Eastern Policy, p. 316.

CHAPTER III

WAR PLANNING AND AVIATION 1922-1931

The treaties and agreements of the Washington Conference while appearing to provide solution to the major problems of the Far East in reality only masked the effects of the problems of international relations in the Pacific. By trying to cure the symptoms of the disease rather than the disease itself, by making what were in reality false assumptions about the nature of modern warfare, and by putting excessive faith in self-denying written agreements that were void of effective provisions for enforcement, the United States was playing a game of grand self-deception. That the United States was able to succeed in this for almost ten years was due to external factors, not to policies of self-denial, disarmament, and isolation. When economic depression and a stronger and more unified China began to threaten Japan's economy and interests in Manchuria, the world was soon to realize that Japan's national policy of expansion and Asiatic hegemony had not been changed during the years since 1922. The shift from the so-called "friendship" policy to a "positive" policy was a change of means, not of ends.

The period of over nine years between the Washington Conference and the Mukden Crisis of September 1931 was generally one of peaceful relations between Japan and the United States. This was due in part to postwar emergence of more liberal, democratic, party government in Japan, which was able to diminish somewhat the influence of the military in national politics, and the absence of pressures against Japan's Asiatic interests. Externally Japan had not given up anything in Manchuria after the war, and as long as China and Russia were too weak

to threaten her position there, a policy of friendship was a workable one.

There were ripples on the relatively tranquil pond of Japanese-American relations. The old problem of immigration became even more acute with the passage by Congress of the Immigration Act of 1924 which sanctioned an oriental exclusion policy that was deeply resented by the Japanese. In 1924 and 1925 the Japanese vernacular press stirred up war talk in Japan in protest to American naval maneuvers, scheduled for waters near Hawaii, which were to be climaxed by a cruise to Australia. These were long-scheduled maneuvers and in no way designed to be menacing, but many Japanese were able to see a threat in them. Their outcries subsided somewhat when Foreign Minister Shidehara publicly declared that the Japanese government could see no harm in the maneuvers.¹ There were other difficulties, principally economic ones, but all-in-all the problems on the diplomatic level were minor -- particularly when compared to what came before and what was to follow.

While the American public, Congress, and the administration became complacent and were content in seeking peace through such international agreements as the treaties of the Washington Conference, the Pact of Paris in 1928 and the London Naval Conference of 1930, military planners tended to be skeptical. To them Japan remained America's most probable enemy, and War Plan Orange underwent continuous examination and revision. At the same time planning for the defense of America's Far

1. Gerald E. Wheeler, Prelude to Pearl Harbor (Columbia: The University of Missouri Press, 1963), pp. 36-37.

Eastern policy was becoming increasingly difficult, for this task had for all practical purposes become impossible after February 1922.

While air power was gaining recognition as a weapon of increasing importance for Pacific defense the non-fortification provision, vested interest and conservatism, and reluctance on the part of the nation to support anything but a defensive air establishment, combined to prevent the growth of American air power to the point where it could play an effective role in fulfilling the assumptions of the planners.

Japan also had her problems during this period. A surge of post-war anti-militarism and concern over rising defense costs, coupled with a still inadequate resource and technological base upon which strong air power could be built, caused a slowdown in Japan's aviation expansion program. But it was nevertheless to fare somewhat better than other military programs, for Japanese planners were turning more and more to aviation as an important instrument in planning for the fulfillment of Japan's grand designs for Asia.

WAR PLANNING

American military planners, who were still awaiting a clear-cut definition of United States national strategic policy in 1922, were confronted with even more difficulties after the Washington Conference. American Far Eastern policy had not been changed but the military means of supporting it were even further reduced by the agreements there. The impact of this conference, Japan's postwar position of power in the Pacific, and the conflict between American national outlook and attitude, and Pacific commitments were such that a complete review of old strategic

plans for the Far East was required.

In the reevaluation of War Plan Orange that started in 1921, the main problems involved the Philippines. These islands required protection not only because they were American territory, but they were the strategic key to enforcement of American policy as well. It was felt that if there was to be any hope of defeating Japan in case of war, an advanced naval base in the Western Pacific was needed, and after the non-fortification agreement of the Five Power Naval Treaty, America's bases in the Philippines especially Manila Bay, were the only ones with facilities in existence capable of supporting a naval force large enough to challenge Japan. These facilities were not modern and hardly adequate but the premise was that if they could be developed and defended to the maximum degree permitted by the non-fortification provision, they could be held in the event of a Japanese attack until reinforcements arrived.² This was nothing new, for the hold-until-reinforced approach had been part of War Plan Orange before the war, and if there were doubts then about the workability of this, it was even more unrealistic in 1922 and 1923.

In the preparations for a new plan the Navy had taken the position in July 1922, that Japan could take the Philippines and Guam before the fleet would be able to reach the Western Pacific, but the Philippine garrison should hold out as long as possible and make the capture as costly as possible to the enemy. This view, that the Philippines could not be defended, would have to be abandoned after a brave struggle to defend them, and retaken only after a long war, was challenged by

2. Louis Morton, "War Plan Orange," World Politics, Vol. 11, No. 2 (January, 1959), pp. 227, 229.

Leonard Wood, Governor-General of the Philippines and a former Chief of Staff of the Army. To him this would be the height of national disgrace, and something the American people would not stand for. The precise influence of Wood's intervention is not clear, but the Navy's attempt at a realistic appraisal of the ability to hold the Philippines was soon eliminated from the preparations.³

On July 7, 1923 the Joint Board gave its approval to the preliminary studies that had been carried out by the Army, Navy and the Joint Planning Committee and authorized a revised War Plan Orange based on these. The new plan received its final approval in September of 1924 and in addition to being the first revision of Orange since World War I, it was the first plan for operations in the Pacific to incorporate air power.

The basic concepts of the new plan were not much different from its predecessor. It embodied a concept of "an offensive war, primarily naval"⁴ with the Navy taking a strategic offensive position in the Pacific after the initial mission of establishing superior seapower in the Western Pacific, had been accomplished. The Army's role in this was a strategic defensive one, holding Manila Bay, as the key to the establishment of superior seapower. With Manila Bay secured, the Navy could then go about its primary role of engaging in operations "directed toward the isolation and harassment of Japan," which could best be achieved by offensive air and naval operations directed against Japan's naval forces and economic life.⁵ It was hoped that these limited

3. Morton, "War Plan Orange," pp. 228-230.

4. Ibid., p. 231.

5. Ibid., p. 231.

offensive measures would bring early victory, if not "such further action as may be required to win the war" would be taken.⁶

The 1924 version of Grange, while realistic in its assumptions of Japan as the most probable Pacific enemy and the likelihood of hostilities resulting from conflicting Pacific policies, was little more than a statement of hopes as far as the possibilities of carrying out such a plan were concerned. What was required in view of the changes in the Pacific since the war was a plan that recognized the existing military and naval capabilities of America's Far Eastern forces and was based on these realities.⁷ American military capabilities in 1924 did not even approach the strength that would have been necessary to make such a plan a realistic one. Moreover, even in the event of an improbable shift of public and Congressional opinion to the support of military forces -- including air forces -- large enough to provide military sanction to Pacific policy, the strategic strength of Japan in the Pacific, including potential use of the mandated islands, compared to the woeful lack of any adequate American bases west of Hawaii would make it even hazardous for the United States fleet to venture into Western Pacific waters in the event of war.⁸ As long as the United States adhered to the Five Power Naval Treaty, this could not be corrected.

6. Louis Horton, United States Army in World War II: The War in the Pacific (Strategy and Command: The First Two Years, Washington: Office of the Chief of Military History, Department of the Army, 1962), p. 29.

7. Theodorus V. Fuleja, Statesmen and Admirals (New York: J. V. Norton and Company, Inc., 1943), p. 27.

8. Harold Sprout and Margaret Sprout, Toward a New Order of the Power (Princeton: Princeton University Press, 1940), p. 236.

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The role envisaged for air power apparently would be in conformance with the accepted air doctrine of the day: scouting, gunfire spotting, pursuit and bombing. Additional aviation units were being located in the Pacific during these years, but with aircraft carrier aviation only beginning and with the non-fortification restriction interpreted as preventing any large aviation buildup⁹ it would have been difficult, to say the least, for aviation to make any major contribution to the plan.¹⁰

Advocacy of the use of air power in Western Pacific war planning and defenses had been coming from various quarters for years. In 1919 General William L. Mitchell offered a hypothetical war plan against Japan, the nation he felt to be America's most probable enemy in the future. In his view victory could be achieved solely by air strikes against Japan from bases on the Aleutian and Kuril Islands. This would be made possible by first warding off Japanese attacks on the United States, and strong air defenses were the key to victory here. Mitchell did not advocate strong air defenses for the Philippines at this time, for he believed that these islands "could not be defended in the case of war."¹¹

In 1921 Rear Admiral William S. Fuller, an outspoken air power advocate, called for the use of aviation to defend America's outlying possessions, claiming that sufficient air power in combination with submarines could at least hold off an attack if not completely defeat

9. Wheeler, Prelude to Pearl Harbor, p. 96.

10. See below, P. 5545.

11. Lester D. Trune, "Foreign Policy and the Air Power Dispute, 1913-1932," Historian, Vol. 23, No. 4 (August, 1951), pp. 457-499.

hostile attacking forces.¹² In 1923 Rear Admiral Harris Laning admitted that land-based aircraft could play an important role in defending the Philippines, and that carrier-based aircraft by making possible temporary control of the air could be of great assistance in recovery of the islands if that were necessary.¹³

Strategic and operational planning is never a static process in a dynamic world, and War Plan Orange was to undergo almost continuous evaluation and change in response to changes in the international and domestic situation and to military necessity. The task of the planners was to become increasingly complex, for not only was the gap widening between American commitments in the Far East and the forces America was willing to commit to honor them, but a controversy was developing among the planners and the services themselves, between those who advocated a strategic offensive plan and those in favor of a strategic defensive plan.

The first revision of the 1924 plan came in October 1925 and was devoted primarily to correcting ambiguities and points of confusion. However, one major assumption of the original plan -- that reinforcements would sail directly to the Philippines -- was dropped, and it was decided that first the Marshall, Caroline, and Marianas Islands would have to be neutralized, and bases established on one or more of these island groups.¹⁴

Shortly after the approval of the 1926 revision the Joint Board directed the preparation of a totally new plan. As the planners began

12. Spout and sprout, toward a new order, p. 215

13. Wheeler, Prelude to Pearl Harbor, p. 96.

14. Norton, "War Plan Orange," pp. 232-233.

their search for the proper victory formula there arose a split between advocates of a defensive and an offensive policy. Those favoring a strategic offensive as the only policy capable of defeating Japan in the western Pacific based their arguments on the same assumptions that were embodied in the 1924 plan. Those favoring a strategic defensive maintained that by retaining the bulk of American forces east of Hawaii victory could be gained by economic pressure and raids on Japanese commerce from there, and, in addition, such a strategy would make Hawaii and the continental United States impregnable. They conceded that such a strategy would make it difficult for American Far Eastern trade to continue, and that the Philippines, Guam and Samoa would be exposed. The Joint Board chose to keep the strategic offensive concept, and Joint Army-Navy War Plan Orange of April 24, 1928 was a refinement, not a change, of the older plans.¹⁵

This was but another endorsement of a policy of self-delusion as the planners surely could hope for little more than a brave delaying action from the Philippine defenders. While strategic defensive advocates had lost their argument in 1928, they were not to be silenced for too long a time.¹⁶ But the Joint Board was still obligated to defend the Philippines, and any policy which openly abandoned this obligation would have to be initiated by political leaders.

Surrounding the whole issue of defense of the Philippines was the problem of Philippine independence and what America's role there should be if independence was granted. Moves for independence were gaining

15. Morton, "War Plan Orange," p. 233.

16. See below Chapters **IX** and **X**.

The first part of the report deals with the general situation of the country and the progress of the work done during the year. It then goes on to discuss the various departments and the work done in each of them. The report concludes with a summary of the work done and a statement of the progress made.

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more and more support in Congress during the 1920's, and while Republican Presidents favored retention of the islands, the Joint Board could not ignore the possibility of future independence. The prospect of an independent Philippines had through the years stood in the way of larger Congressional appropriations for its defenses. Congress was disinclined to pour in vast sums of money for facilities that might soon be lost.

In April 1930 the Joint Board made a comprehensive review of what the possible effect of Philippine independence on America's strategic position might be. The Joint Board concluded that it did not favor independence at that time, but in any case favored maintaining bases until independence should be granted. With independence the board favored a complete withdrawal of American forces from the islands, abandonment of all its bases, and repudiation of any obligation to guarantee the sovereignty of the islands.¹⁷

While Army and Navy planners struggled to find a viable solution to the problems of Western Pacific war planning, the Army and Navy air arms were searching for ways by which aviation might best contribute to the support of Orange. Army aviation's planning in relation to Pacific strategy was based on its role of assisting in the coastal defense for the West Coast of the United States, Hawaii and the Philippines. No overseas offensive plans were worked out, although throughout this period there was an undercurrent of theory for strategic offensive missions, often under the guise of counter-air offense as the

17. Morton, "War Plan Orange," p. 235.

best way to provide defense.¹⁸

The Navy was busy in the years from 1926 to 1931 planning for aerial defense of the Philippines and for means of establishing local command of the air once the fleet arrived to reinforce these islands in accordance with War Plan Orange. Carrier aviation was to assume an increasingly important part in these plans. With the addition of the Lexington and Saratoga to the fleet in 1927 the Navy's ability to carry out its strategic offensive against the Japanese was improving.¹⁹

In Japan the years from 1922 to 1931 were not inactive ones for military planners. While the power of the military was reduced and held in check by the ascendancy of more liberal and moderate elements in the government, supported by a public that had grown tired of military arrogance and military expenditures that were equal to almost one-half of the national budget before 1922,²⁰ the long range policies that the military espoused were not changed. Thus planning and preparations continued, not only for defense but for future expansion of the empire as well.

In the 1918 revision of the 1907 Imperial Defense Policy the United States was designated the most probable enemy of Japan at that time.²¹ This was recognition of American leadership in opposing Japanese expansion in the Far East and the elimination of any serious threat

18. Thomas H. Greer, The Development of Air Doctrine in the Army Air Arm 1917-1941 (United States Air Force Historical Studies; No. 89, Montgomery, Alabama: United States Air Force Historical Division, Air University, 1955), p. 52; also see below, pp 65-67.

19. Wheeler, Prelude to Pearl Harbor, pp. 97, 103.

20. Mamoru Shigenitsu, Japan and Her Destiny (London: Hutchinson and Company, 1958), pp. 28-29; Sprout and Sprout, Toward a New Order, p. 127.

21. See above, pp. 14-15.

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from a Russia weakened by revolution. Even after a return to more peaceful relations after the Washington Conference, Japan still viewed the United States as the main obstacle to her national security and prospects of Asiatic leadership. In many circles the treaties of the Washington Conference were cited as "casting gloom over future prospects of Japan."²²

In spite of reduced threats from traditional enemies Russia and China in the early 1920's, the Army returned its attention to Manchuria and Northern China after the Washington Conference and retained Russia, now Soviet Russia, as its prime objective in war planning.²³ Among the reasons offered for this were the Army's traditional interest in control and expansion in these areas, and, more interestingly, Army concern that if the United States remained the number one potential enemy, the Japanese Navy would get the lions share of the defense budget.²⁴

As a result of the above and the Washington treaties, a new Imperial Defense Policy was drawn up in 1923 and 1924 and sanctioned by the emperor. This document known as "Essentials for the Employment of Forces" sets forth general tactical and strategic procedures for future war that were to remain basic policy until 1936. In the event of war with the United States or the Soviet Union it called for Army operations against the Soviet Union with assistance from the Navy, and Navy operations against the United States with Army assistance as necessary.

22. Takushiro Hattori, "The Complete History of the Greater East Asia War" (4 Vols., Dai Ton Sengo Renshi, Tokyo: Masu Publishing Company, 1953), typewritten MSS translation, Doc. 78002, Office of Chief of Military History, Washington, Vol. I, p. 6.

23. Ibid., p. 250.

24. Saburo Hayashi, Kogun: The Japanese Army in the Pacific War (Quantico, Virginia: The Marine Corps Association, 1959), p. 193.

It did not anticipate total war in China, but directed some operational planning for possible deployment of Army and Navy units to north, central and south China in the event of war.²⁵

The Army in its operational planning to meet the requirements of the 1924 plan maintained its offensive-oriented approach for operations on the mainland. In the event of war the Army would quickly seize the initiative, using its footholds and forces already in Korea and Manchuria as a springboard to secure all of Manchuria and parts of the Soviet Union. Assistance in these operations was to be provided by both Army and Navy aviation.²⁶ These plans were vague, did not reflect a concern for the problems of total war, and limited air power exclusively to the support of ground forces.²⁷

During the same period Army plans included provisions for sending troops to China and the Philippines. Both were to be limited operations as far as the Army was concerned. China operations were to be geared primarily to the protection of Japanese life and property, and Philippine operations were to be local operations to support the Navy in the event of war with the United States.²⁸

The Japanese Navy in its planning adopted a defensive concept of fleet strategy which was to become the virtual tradition of the Navy such like the Army's devotion to offense. This defensive concept was based on the assumption that a numerically superior United States Navy, by virtue of its higher ratio of ships, would seek the offensive in

25. "Japanese Operational Planning Against the USSR, 1932-1945," Japanese Special Study on Manchuria, Vol 1, Army Forces Far East, 1955, unpublished monograph on file Office of the Chief of Military History, Washington, D. C., p. 20.

26. *Ibid.*, pp. 16, 40.

27. *Ibid.*, p. 20.

28. Hattori, "Complete History," p. 250.

the waters of the Western Pacific in the event of war, and that the Japanese Navy's best chance of victory would be to intercept and attack these hostile forces in waters close to home. The backbone of the Japanese fleet would remain the battleship with carriers playing an increasingly important role. To promote success ships were to be designed for maximum offensive power and speed at the expense of radius of action and defensive armaments. Qualitative superiority was to make up for quantitative superiority, and tactics were to be designed for this type of mission.²⁹

Naval aviation's mission during the years from 1923 to 1931 came to be closely tied to this strategy, but not exclusively. By 1924 Japan's naval air force consisted of both land-based and sea-based aircraft (carrier aircraft and seaplanes) and stress in training and development of tactics was on destruction of land targets as well as sea targets. This was a somewhat broader concept than that of the Army air arm, but it still reflected a narrow approach to the problems of air warfare, and this narrowness was to plague both air arms in World War II.³⁰

It is significant that the strategic concepts of warfare and war planning that were developed during the 1920's were to remain remarkably unchanged during the 1930's. Each service faithfully adhered to its basic concept to a point of inflexibility.³¹ On the highest level

29. Mitsuo Fuchida and Masatake Okumiya, Midway: The Battle That Doomed Japan (Annapolis: United States Naval Institute, 1955), pp. 11-12.

30. United States, United States Strategic Bombing Survey Pacific War (No. 62, Japanese Air Power, Washington: Military Analysis Division, 1946), p. 2.

31. Fuchida and Okumiya, Midway, p. 11; Hayashi, Kogun, p. 3.

of defense planning there had been a recognition after World War I that future wars were likely to be long and drawn-out affairs. Japan's war potential was such that victory in a protracted war would be difficult. Therefore, Japan throughout the years from World War I to Pearl Harbor began laying stress in its planning and training on surprise, speed and a quick decisive victory.³² This was not an incorrect approach, but the building of plans and strategy around this premise was to involve only the Army and Navy supreme command authorities, and they failed to take into consideration political, economic and other factors involving the nation as a whole.³³ There was a tendency for the Army in particular to view all-out, total war in terms of the Russo-Japanese War rather than in view of what such a conflict would be decades later.

THE DEVELOPMENT OF AIR POWER

The task of those seeking to build American air power into an effective force was to remain a difficult one from 1922 to 1931. By the late 1920's some progress was being made in the expansion of aviation from the near disastrous state to which it had been allowed to fall, but the depression overtook these progress and the goals that had been set were not reached. These were not entirely barren years, however, and by the end of 1931 Army and Navy aviation was at least approaching the threshold of the technology and theory that was to be expanded and developed into a victory formula over 10 years later.

Many of the obstacles to air power development have been mentioned

32. Hayashi, *Kogun*, p. 2.

33. Hattori, "Complete History," p. 247.

briefly in earlier chapters. These were not to disappear during the years covered by this chapter, although some, such as the controversy over separate air forces and the Mitchell-organized airpower versus seapower dispute, were to be put aside temporarily. It would not only be a formidable task to discuss in any detail the reasons for these obstacles, but beyond the scope of this paper, and so the focus will be on progress made in aviation that had or was to have an effect on Pacific war planning and policy.

Of the two air arms, naval aviation requires first attention; for success in any war against Japan during this period would depend largely on how well the Navy could meet the assumptions and requirements of the latest Orange Plan. Also as long as the Navy remained America's first line of defense, and was free to plan for offensive and defensive missions to fulfill this mission there was more freedom to adapt the airplane to tasks other than strict defense.

Prior to 1922 the Navy had been making plans for taking the airplane to sea where it would serve primarily in a scouting and observation role. After the bombing trials and the Washington Conference fleet aviation was given added importance by many in the Navy. While numerous military leaders did not think that aviation would be as effective against the Japanese fleet in the Western Pacific as it had been in sinking the Oatfriesland,³⁴ others argued that naval aviation and, in particular carrier aviation, was possibly the last remaining means whereby the fleet might operate effectively west of Hawaii without

³⁴. Bruns, "Foreign Policy," p. 459.

...the first thing I noticed when I stepped out of the car was the smell of fresh air. It was a relief after being stuck in traffic for so long. The sun was shining brightly, and the birds were chirping happily. I took a deep breath and felt a sense of peace. The world seemed so much better when you were able to move again. I walked towards the park, and the children's laughter was heard in the distance. It was a beautiful day, and I was grateful to be here.

...the second thing I noticed was the sound of the water. It was a soothing sound, and it made me feel like I was in a different world. The water was clear and cold, and it felt like a blessing. I took a dip and felt the sun on my skin. It was a perfect day, and I was grateful to be here. The water was so good, and it made me feel like I was in a different world. I took a deep breath and felt a sense of peace. The world seemed so much better when you were able to move again.

...the third thing I noticed was the taste of the food. It was a delicious taste, and it made me feel like I was in a different world. The food was so good, and it made me feel like I was in a different world. I took a bite and felt the sun on my skin. It was a perfect day, and I was grateful to be here. The food was so good, and it made me feel like I was in a different world. I took a deep breath and felt a sense of peace. The world seemed so much better when you were able to move again.

...the fourth thing I noticed was the feeling of the sun. It was a warm feeling, and it made me feel like I was in a different world. The sun was so good, and it made me feel like I was in a different world. I took a deep breath and felt a sense of peace. The world seemed so much better when you were able to move again.

adequate bases.³⁵ In March of 1922 the Langley was commissioned and the Navy now had an experimental carrier in addition to eight battleships outfitted with turret launchers for seaplanes.³⁶ The following year the Navy succeeded in getting authorization for two additional carriers, these to be 33,000-ton conversions from two battle cruisers left uncompleted as a result of the Five Power Naval Treaty. One important point in Rear Admiral Moffett's arguments for these conversions was the knowledge that Japan was planning to build up to her full allowance of carriers.³⁷ Since the Langley did not count in America's 135,000 tons, the completion of the two converted cruiser hulls would still leave the United States 69,000 of carrier tonnage unfilled.

Although the Navy had carrier airplanes at sea by 1923 there were no plans for a carrier task force for independent strike operations. The carrier was still tied closely to the battleship fleet, and its prime mission was to provide air scouting and protection of the battleline.³⁸ This included not only protection against surface ships and submarines, but against hostile aircraft threatening the fleet and United States territory. Moffett had declared shortly after the first successful landing on the Langley that "the air fleet of an enemy will never get within striking distance of our coasts as long as our aircraft carriers are able to carry the preponderance of air power to sea."³⁹

35. Wheeler, Prelude to Pearl Harbor, p. 84; Sprout and Sprout, Toward A New Order, p. 236.

36. William Green and John Fricker, The Air Forces of the World (New York: Manover House, 1958), p. 310.

37. Archibald D. Turnbull and Clifford L. Lord, History of United States Naval Aviation (New Haven: Yale University Press, 1947), p. 410.

38. Ibid., p. 210.

39. Ibid., p. 215.

But even an air-minded admiral like Moffett was still ranking the gunnery spotting and scouting missions of naval aircraft ahead of bombing in 1928.⁴⁰

In February 1923 aircraft participated in their first fleet exercise with single planes representing whole squadrons and launched from a battleship. These "squadrons" were successful in attacking the Panama Canal without being attacked by either anti-aircraft guns or defending aircraft.⁴¹ This limited exercise showed that it might be possible for carrier aviation to have a larger role than envisaged at the time.

Despite these early successes in shipboard aviation, naval aviation by the mid-1920's was still fighting a battle for recognition, expansion and even survival. While some new aircraft had been provided the fleet, and while technological improvements such as the air-cooled engine and catapults on battleships were being adopted, there was still the problem of limited funds for expansion and replenishment, and too often the air arm had to depend on the dead hand of obsolete World War I equipment. This parsimonious treatment was not entirely due to Congress, as conservatism and threats to vested interests made the Navy Department itself often less than enthusiastic about appropriation requests from the Bureau of Aeronautics.⁴²

The fight for survival as a separate air arm was won soon after the

40. Edward Arpee, From Frigates to Flat-tops (Lake Forest: Edward Arpee, 1953), p. 147.

41. Turnbull and Lord, History of United States Naval Aviation, p. 214.

42. Arpee, From Frigates to Flat-tops, p. 121; Ashbrook Lincoln, "The United States Navy and the Rise of the Doctrine of Air Power," Military Affairs, Vol. 15 (Fall, 1951), p. 156.

Worrow Board report in which this committee, appointed by President Coolidge to consider "the best means of developing and applying aircraft in National Defense,"⁴³ opposed a single air service and a general vindication to the status quo in the organization of the nation's air arms. While the appointment of this committee in 1925 was widely interpreted as a means of countering the unfavorable publicity from the Mitchell court-martial, and the anticipated pro-unification recommendations of the Lampert Committee⁴⁴ (concurrently embarked on a sweeping review of military aeronautics), its impact on the Navy aviation was so profound that its report has been termed the "Magna Carta of Naval Aviation."⁴⁵ This seems an overstatement, but most demands that all aviation be unified were to be put away for a while, and the findings of the board were an important factor in Congressional legislation soon to be passed that authorized some long-needed expansion for aviation.

In June of 1926 Congress passed an act authorizing a five-year program for building 1,000 aircraft including replacements to maintain that figure. This was a giant step toward what was needed, but only a half step, as appropriations still had to be made. After delay and cuts in requests by the Bureau of the Budget, Congress finally appropriated approximately 60 percent of the amount that the Navy estimated the program would require. Congress, being concerned about aviation at the time, was responsible for restoration of some of the funds cut by the

43. Office of Air Force History, The Army Air Forces in World War II (Vol. 1, Plans and Early Operations, Wesley Frank Craven and James Lee Tate, eds., Chicago: The University of Chicago Press, 1948), p. 23.

44. Ibid., pp. 27-28.

45. Arpee, From Frigates to Flat-tops, p. 105.

bureau of the budget.⁴⁶ While this was not overwhelmingly generous, the five year program was to provide a vital springboard for naval aviation growth and achievement.

In late 1927 the conversion of the two cruiser hulls to carriers was completed and the Saratoga and Lexington were commissioned, giving the United States what was at that time the largest and fastest carriers in the world. The same year the Bureau of Aeronautics, impressed by Japan's use of the small carrier Hosho, recommended that the Navy build five 13,300-ton carriers, one to be built during each of the next five years. In favor of several small carriers, as opposed to fewer large ones, was more invulnerability and the ability to keep more aircraft in the air for a longer period of time.⁴⁷ The General Board of the Navy agreed to the recommendation, but Congress was less generous, approving the construction of only one. America, therefore, was to wait to build up to treaty strength in carriers, but the ones she had in 1928 and 1929, in addition to providing demand for aircraft and thus giving impetus to the expansion program, were soon to show the full offensive potential of naval aviation.

Fleet exercises and war games were nothing new in 1928 and 1929, even those involving aircraft. Yet in these years there were two war games which have bearing on a study of air power in Pacific policy. The first was a series of war games held around the Hawaiian Islands in 1928. On a Sunday morning during these games the Lansley launched her aircraft on a surprise assault against Pearl Harbor. The attacking planes were

46. Turnbull and Lord, History of United States Naval Aviation, pp. 257-260.

47. Ibid., p. 261.

successful, reaching their target undetected and catching the defenders asleep. Thirteen years later six carriers were to launch an almost identical attack, but this time it was not to be a war game.⁴⁸

In January 1923 a fleet exercise that was to receive much more attention was held with the Panama Canal being the target and with two aircraft carriers, the Lexington and the Saratoga, participating. A total of 256 aircraft, including 40 land-based, were involved. The attacking force was the Battle Fleet under Admiral William V. Pratt, and in its attempt to attack the canal the carrier Saratoga embarked on operations independent of the main attacking body. On the morning of the 25th her aircraft successfully attacked the Panama Canal and nearby airfields and safely returned with only one technical loss. This lesson of what a fast carrier could do when given a proper opportunity was to have an important impact. One result was the study of the possibility of forming carrier task groups, which were to be complete tactical units with a carrier at the core operating to provide independent but simultaneous attacks ahead of the Battle Fleet.⁴⁹ By 1931 the formidable potential of the fast carrier task force was being recognized, and the carrier was threatening the battleship as the backbone of the fleet. Full recognition and the requisite strength to carry out these concepts were still a long way off, but this was a most important step.

The depression had overtaken the progress of the five year expansion plan in 1931 and this particularly interfered with the attainment of the

48. Arno, From Frigates to Flat-tops, p. 147.

49. Turnbull and Lord, History of United States Naval Aviation, pp. 270-273.

goals of that plan. Yet the expansion achieved should not be minimized. From less than 500 operational aircraft in 1924 the Navy at the end of the five year plan had 953 operational aircraft, 216 additional aircraft on order, and one additional carrier under construction.⁵⁰

Deployments of naval aircraft in the Pacific consisted of fleet operations which have been mentioned, plus defense and patrol aircraft on the Hawaiian and Philippine Islands. The only active involvement of United States aircraft occurred in 1927 and 1928 when a detachment of Marine aircraft were sent from Guam and San Diego to China as part of America's Marine reinforcements, when the Chinese Civil war threatened American lives and property in the Shanghai and Peking areas. Eventually there were to be three Marine squadrons stationed there including fighter, scout and observation contingents. They were to remain for one and one-half years, fly over 3,813 sorties, mostly around Tsientsin and primarily reconnaissance missions, to keep the Chinese adversaries under surveillance. While they were fired upon, they did not fire a shot in anger.⁵¹

The Army air arm was to be faced with many of the same problems as the Navy from 1922 to 1931. Army aviation was handicapped in 1922 by obsolete and inadequate equipment, inadequate personnel, a lack of recognition by the Army, no representation on the General Staff and a disinclination by Congress, the War Department and the General Staff to do much about remedying these problems. In addition to these the Army Air Service had a problem which was causing special difficulty

50. Green and Fricker, Air Forces, p. 312.

51. Robert Sherrod, History of Marine Corps Aviation in World War II (Washington: Combat Forces Press, 1952). pp. 27-28.

namely the problem of fixing a mission and developing an air doctrine for the future while tied to the limited role of coastal defense.

By 1922 the years of postwar neglect were beginning to catch up with the Army Air Service. The surplus aircraft of World War I that had carried it along were becoming excessively obsolete and fewer in numbers, and air units were becoming more and more cadre organizations. The situation was a grim one, and the need for remedial action to prevent the virtual extinction of the air arm was recognized by more than just air-enthusiasts. In 1923 the Army General Staff appointed its own board, the Lassiter Board, to examine the present state of the Air Service. This board found that the Air Service was practically demobilized, and recognizing the increasing importance of aviation it recommended a ten-year expansion program calling for 2,500 aircraft, and the organization of the majority of offensive aviation into a General Headquarters (GHQ) striking force.⁵² This would have placated many of those crying for greater autonomy of the Air Service, but this was in the middle of the heated air power and separate air force controversy, and when the proposals reached the Joint Board and met naval opposition, the Secretary of War, who had approved the proposals, let them die a quiet death.⁵³

Army aviation by this time was centered around the pursuit aircraft, as this was felt to be the dominant type of aircraft by virtue of the experiences of the war. This view was to predominate until the 1930's. But if pursuit was to be the main interest of the

52. Graves and Gate, Plans and Early Operations, p. 26.

53. Green and Fricker, Air Forces, p. 271.

Army air arm as the Chief of the Air Service, Major General Mason M. Patrick, urged, one would be hard-pressed to detect this from aircraft strength figures of 1924. Of 1364 Army aircraft only 754 were in commission; few, if any, were modern, and only 76 were pursuit aircraft, the bulk being training and observation planes.⁵⁴

In addition to a replacement and expansion program the Army Air Service vitally needed representation on the General Staff if it was to get any real opportunity to affect policies at a high level. This body was recognized by aviators as the stronghold of bureaucratic conservatism, and in many ways their judgment was a correct one.

The report of the Morrow Board in 1925 was a mixed blessing to the Army Air Service and reaction was not as favorable here as it was within the Navy air arm. Regarding the Army the report conceded that there was some distinction between support aviation and offensive striking aviation, but confined its positive recommendations to a recommendation that the Air Service be renamed the Air Corps and be represented in the General Staff, and that there be appointed an assistant Secretary of War to supervise aviation.⁵⁵

These recommendations were given sanction in the Air Corps Act of 1926. The Air Service became the Air Corps, there was to be an air section within each division of the General Staff, and the position of Assistant Secretary of War to help in promoting military aviation was established. The Army Air Corps also received authorization for a five

54. Green and Fritsker, Air Forces, p. 231.

55. Craven and Cate, Plans and Early Operations, pp. 23-27.

year program to expand aviation and to correct deficiencies. The plan authorized expansion to a total strength of 1800 aircraft.⁵⁶

The results of this were to prove disappointing to the Air Corps, which quickly found that a change in name did not bring a change in status. The Air Corps continued as a mere branch of the Army and as such had even less prestige than the infantry. Even representation on the General Staff proved to be of little value. The five year program also fell short of its goal, in part because of the depression, but also because funds were not made available in the amounts needed. Very much of the blame seems to rest on the War Department and the Bureau of the Budget, whose cuts in requests averaged about 40 percent over the five year period.⁵⁷ Yet the program was far from being a complete failure. From an aircraft complement of 858 aircraft in 1926, with less than 250 of these considered modern, the Army Air Corps by the end of the program in June of 1932 had increased its total number of squadrons from 37 to 45 and had a total of 1,709 aircraft.⁵⁸

The period was also far from barren in technological advances. By 1931 the Air Corps' emphasis on increased range was paying dividends, and such improvements in aircraft as variable pitch propellers, retractable landing gear, inflight refueling, better bombights and bomb racks improved the position of American aircraft.

The main problem of the Army Air Corps still remains to be discussed. This was the problem of developing an air doctrine. Find

56. Craven and Cate, Plans and Early Operations, p. 29.

57. Alfred Goldberg, ed., A History of the United States Air Force 1907-1957 (Princeton: D. Van Nostrand Company, Inc., 1957), p. 37; Craven and Cate, Plans and Early Operations, p. 29.

58. Goldberg, History of the United States Air Force, p. 37.

to support of ground armies and the official public policy of defense only, the Air Corps was not only struggling within the confines of a narrow concept, but in the absence of a clear-cut, well-defined strategic policy for the United States there was in reality little more that it could do to improve its position.

The basic problem was reconciling the official policy of defense of the United States and its possessions with theories of strategic air attack in which air forces would devote the great majority of their effort in wartime to missions independent of land and naval forces and designed to destroy the enemy's morale, will to resist, centers of production, transportation and other objectives not necessarily on the fighting lines. This was a dilemma for leaders of Army aviation, but in the absence of a clearly defined strategic premise which Army aviation could use in planning, the official Army policy had to be faithfully observed. Acceptance of this ruled out any plans for large-scale expeditionary operations, and so aviation procurement, equipment, planning, training and tactics was of necessity confined, on the surface at least, to the furtherance of the defense concept. And this seems to have been generally accepted by a majority of Air Corps leaders until well into the 1930's.⁵⁹

Many aviation strategists, however, found it difficult to rule out completely offensive theories of air warfare, and as a result there was to develop throughout the 1920's and 1930's a growing body of theory for future strategic missions. Considerable caution had to be exercised

59. Greer, The Development of Air Doctrine, pp. 29-31, 52.

in doing this, for excessive devotion to anything but the official doctrine was likely to be treated as heresy within the War Department, and the American public was easily aroused over any plans or equipment that suggested an offensive war was being contemplated.

One consequence of this was the kind of organizational schizophrenia in the Air Corps and such double-talk about air doctrine. As an example there were two well-formulated plans for the use of air power in 1926. Training Regulation 440-15, "Fundamental Principles of Employment of the Air Service," dated January 26, 1926, and promulgating the official air doctrine, was sanctioned by the General Staff and War Department and, although it made a few traditional concessions to the possibility of limited strategic-type operations it represented the traditional attitude to war and air power. TR-440-15 described the fundamental mission of air units as aiding ground forces in the achievement of decisive victory, and this was to be done by both direct and indirect aid. Direct aid was to be provided by air units operating as an organic part of the ground command, while indirect support might be provided by other units which may or may not be in the immediate battle area. The latter would be a GHQ air force, a self-contained, highly mobile force, whose objectives upon outbreak of war would be to gain control of the air, disrupt enemy movements and facilities, protect friendly forces from enemy air attack, and then either aid the ground forces directly or continue indirect support "whenever conditions are favorable, by carrying out special missions at great distance from the ground forces" against targets which might include critical areas of the

enemy homeland.⁶⁰ This sounds more radical than it was, and while it provided GHQ aviation with a limited strike mission and gave recognition to the GHQ concept, it was not until 1935 that a GHQ air force was created.⁶¹

Also to appear in April 1926 was the Air Service Tactical School text, the "Combined Air Force Text." It envisaged the mission of the air forces as cooperation with the military and naval forces in the furtherance of the national war policy and operations which would destroy the enemy's morale and will to resist by the most effective means available. While this embraced the doctrine of pure strategic warfare, the text also recognized the necessity of gaining control of the air and providing some assistance to field forces.⁶²

While radically different in concept, these two documents contain two points in common. They both recognized some need for aviation support of ground forces, and both were emphatic that control of the air was vital. Yet even in these areas there was conflict, and this was to stand in the way of Air Corps expansion geared to meet even its official role. Both the Navy Board and the Army General Staff seriously doubted the possibility of significant air attacks against the United States, giving substance to arguments against a large air force, and the Navy was doubtful of the value of air power for coastal defense.⁶³

The problem of responsibility for coastal defenses had become a source of Army-Navy conflict when the shore-based Army airplane began

60. Craven and Cate, Plans and Early Operations, p. 45.

61. Ibid., p. 31.

62. Greer, The Development of Air Doctrine, pp. 31, 41.

63. Ibid., p. 31.

The first part of the paper is devoted to the study of the properties of the function $f(x)$ defined by the equation $f(x) = \int_0^x f(t) dt$. It is shown that $f(x)$ is a constant function and that its value is zero.

In the second part of the paper, we consider the function $f(x) = \int_0^x f(t) dt$ and show that it is a constant function. We then consider the function $f(x) = \int_0^x f(t) dt$ and show that it is a constant function. Finally, we consider the function $f(x) = \int_0^x f(t) dt$ and show that it is a constant function.

The third part of the paper is devoted to the study of the properties of the function $f(x) = \int_0^x f(t) dt$. It is shown that $f(x)$ is a constant function and that its value is zero. In the fourth part of the paper, we consider the function $f(x) = \int_0^x f(t) dt$ and show that it is a constant function. We then consider the function $f(x) = \int_0^x f(t) dt$ and show that it is a constant function. Finally, we consider the function $f(x) = \int_0^x f(t) dt$ and show that it is a constant function.

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to challenge the Navy's traditional responsibility for defense beyond the shoreline. The Aeronautical Board in 1917 solved the problem temporarily by deciding that the shoreline would be the line of demarcation although some overlapping might be necessary.⁶⁴ By 1926 this demarcation was becoming more and more unworkable as the Navy began basing aircraft in the Army's domain, and the Army often extended its flights beyond the shoreline. The Joint Board attempted to solve the dispute in 1927 in a publication it issued entitled Joint Action of the Army and the Navy. In coastal defense the Navy's task was declared to be support of "local naval defense forces operating for the protection of lines of sea communication and coastal zones against attacks by hostile submarines or surface raiders," and the task of Army aircraft was to defend harbors, cities and munition plants in United States territory.⁶⁵

This brought little relief to an Army air arm that was anxious to extend its coastal defenses far out to sea to intercept both enemy aircraft and ships. In view of high level doubts about hostile aircraft attacks, the Army Air Corps might well have wondered if it had a mission at all. The stalemate was to continue until 1931 when Admiral William Pratt who had become Chief of Naval Operations, reached an agreement with the Army Chief of Staff, General Douglas MacArthur, by which the Navy air arm would relinquish its coastal defense responsibilities and future demarcation was to be determined by mission rather than

64. Adrian O. Van Wyen, The Aeronautical Board 1916-1947 (Washington: Director of Naval History, 1947), p. 30.

65. Turnbull and Lord, History of United States Naval Aviation, p. 278.

geography. Pratt's motivation was to make the defensive mission a secondary one and to stress development of fleet offensive potential rather than leaving any portion of the fleet waiting for attack in defending the coast.⁶⁶ The Pratt-MacArthur agreement was not a clear-cut decision and the controversy was to continue, but in many ways it was a landmark agreement. Aside from underlining increasing Navy emphasis on offensive air power as the best defense, the decision was a major move to free the Army Air Corps from defense of cities, harbors, and munition plants, and opened the way for a new exploration of the role the Army's air arm should play in national defense. It was to pave the way for the long range bomber to play a key role in defense of the United States and its overseas possessions.

The importance of the problem of finding an air doctrine is of threefold importance to this study as it helps explain events to happen over ten years later. First, the neglect of American Army air power is partially explained by the limited mission that it was assigned. This is far from being the only reason, but air defense of an area that was not felt to be in real danger of attack or of a possession like the Philippines which by 1931 was becoming more a sacrificial lamb, and support of ground forces which were at almost minimal level and which planned no large expeditionary mission were not missions conducive to the development of massive air power. Second, the narrow boundaries of the defense-only doctrine reflects the dichotomy which is a major theme of this paper: the gap between American commitments and willingness to

66. Turnball and Lord, History of United States Naval Aviation, p. 280.

support them. Finally, the air doctrine of TR-440-15 is to be found elsewhere in almost identical form. It is strikingly similar to Japanese air doctrine of the 1930's. But America had more expansive doctrines developed and waiting in the wings. Japan remained largely inflexible.

In examining aviation developments in Japan from 1922 to 1931 one is confronted with an alarming scarcity of information. The few available details are too often of questionable accuracy, and may be later contradicted by more reliable information on a later period. It would be possible to fill some of the gaps by way of inference from the better-documented aviation events of the 1930's, but this process will be used sparingly to avoid repetition.

Japan's plans to expand her aviation⁶⁷ after World War I brought impressive expansion and developments in that country's air power, although economic and technological problems and a national tendency toward disarmament and financial retrenchment prevented the program from producing all that was desired. Nevertheless, her progress was such that Japan was listed by the 1924 Aircraft Yearbook as a significant potential air power, while the United States was not mentioned in the same listing.⁶⁸

Japan continued to rely to a large extent on foreign aviation missions and foreign equipment to strengthen her air forces. The success of these missions was apparently more than acceptable, for Japan is reported to have sent home in late 1923 one-third of the British air

67. See above, p. 32.

68. Aircraft Yearbook 1924

mission advising on the construction of the Japanese aircraft industry, because of the great progress made. Japan was also keeping her eyes open to aviation developments abroad, maintaining a mission in France, and employing French technicians to visit the United States to obtain information on technological progress there.⁶⁹

The Imperial Japanese Navy's air arm demands particular attention not only because of the progress it made, but because it was the air branch of the service with prime responsibility for operations against America in the event of hostilities. The Navy had made plans for expanding and strengthening its aviation units in 1920, and after the Washington Conference the Navy, feeling that the inferior ratio accepted there would "weaken the Imperial Navy," mapped out even more extensive plans to overcome these weaknesses in part by building up air strength.⁷⁰

While this program suffered from 1922 to 1927 Japan was to become a leading nation in aircraft carrier aviation by 1924. Japan's first experimental carrier, the Hosho, was completed in 1922, and in March 1923 Navy pilots participated in their first carrier qualifications.⁷¹ In the same year the first fleet exercises involving carrier aircraft were held.⁷²

Japan elected to convert ships into carriers that were designated to be scrapped. In 1922 or 1923 work began on converting the Anagi and Akagi into 27,500 ton carriers. The Anagi was damaged in the

69. Aircraft Yearbook 1924, p. 200.

70. "Outline of Naval Armaments and Preparations for War" (5 parts, Japanese Studies in World War II, Japanese Monograph 145, Washington: mimeographed, unrelated copy in Office of the Chief of Military History, Part 1, 1922-1934), p. 7.

71. John Deane Potter, Yamamoto (New York: The Viking Press, 1965), p. 22.

72. Aircraft Yearbook 1924, p. 201.

earthquake of 1923 and scrapped before construction was completed, but a replacement, to become the Kaga, was soon ordered. The Akagi when it joined the fleet gave Japan a modern, fast carrier capable of carrying over 50 aircraft. By 1927 Japan was rapidly pushing toward maximum treaty strength in carriers with construction authorized on the carrier that was to become the Ryujo.⁷³

Japan was also putting aircraft on battleships and developing land-based and sea-based airplanes. Aviation was still tied to the fleet and reconnaissance and gun spotting a primary mission, but the success of the Navy air arm in aerial bombing during the 1930's and after would strongly suggest that preparation for strike missions was not neglected. It would also seem correct to conclude that increasing emphasis was given to anti-ship missions, air control and amphibious support missions. From 1924 to 1930 the number of fighter and attack air units was to more than double.⁷⁴

The Japanese Navy does not seem to have escaped an airpower versus seapower controversy. Even though this nation made amazing strides in naval aviation during the 1920's, Japan seemed to have her share of tradition-minded naval officers who depreciated the value of air power, considered carriers too vulnerable, and felt the battleship was always to remain the key to naval supremacy. Some of these were to remain faithful to this conviction to the end of World War II.⁷⁵ There is also evidence to suggest that there was a dominant naval view in the 1920's

73. "Outline of Naval Armaments," p. 19.

74. Ibid., p. 7.

75. Fuchida and Okumiya, Midway, pp. 240-241.

that the best air defense of Japan was a force of auxiliary vessels strong enough to prevent hostile carriers from getting within launching range.⁷⁶ Japanese air power advocates also appear to have taken extreme positions branding the battleship as completely worthless.⁷⁷

By 1931 naval air power had become strong enough to play an important part in operational planning for any future conflict. Like United States naval aviation, Japan was placing increasing emphasis on offensive air operations against sea and land targets, and this focus, which made necessary extensive training in overwater navigation and aircraft with capacity for long range flights, was to pay important dividends for the next ten years.

Japanese Army aviation after 1922 continued its expansion program in spite of a general tendency to reduce the size of the Japanese Army.⁷⁸ Emphasis was placed on the reconnaissance and pursuit function, but bombing aviation was gaining in importance throughout the 1920's. The air units remained subordinate to ground force commanders who viewed aircraft primarily as a tactical weapon for immediate support of troops at short range.⁷⁹ Training, organization and technological developments were geared to this concept. Throughout most of the period there does not seem to have been too much concern over the threat of air attacks against Japan, probably because of the absence of threatening

76. H. D. Kennedy, Some Aspects of Japan and Her Defense Forces (, 1928), p. 124.

77. Fuchida and Okuniya, Midway, p. 240.

78. Kennedy, Some Aspects of Japan, p. 110.

79. United States, United States Strategic Bombing Survey Pacific War (No. 62, Japanese Air Power, Washington: Military Analysis Division, 1945), p. 1.

air power in Asia and because of Japan's geographical position. Consequently her air defenses were organized ineffectively and destined to remain neglected.⁸⁰

No evidence has been found that suggests there was an air doctrine controversy in Japan during this period, although it is highly improbable that the gospel of strategic air power as preached by Mitchell and Giulio Douhet went unheard. If there were proponents of such doctrines in Japan it would seem that they either went unnoticed or were ignored, for Japan at no time to the end of World War II was capable of making heavy, sustained, long-range attacks on rear areas or economic targets.⁸¹ This was in large part due to the strategic premise adopted after 1918 that a short war with a quick victory was necessary, and long-range, strategic bombing was not felt necessary for this.⁸²

Japanese air units remained deployed in Formosa and Korea to support conventional forces in defending these possessions. The Army aircraft in Korea had as an additional mission support of the Kwantung Army Garrison guarding the Southern Manchurian Railroad.⁸³ The only major deployment of Japanese air units in response to a threat was in 1928 when about six Army airplanes were used in the Japanese occupation of Tsinan in Shantung Province of China in response to threats to Japanese interests during the Chinese civil war.⁸⁴ No information of their role in this occupation has been found.

80. United States, Strategic Bombing Survey, p. 2.

81. Ibid., p. 1.

82. Ibid., p. 2.

83. "Japanese Operational Planning," p. 20.

84. "Air Operations 1931-1945" (Vol. 4, Japanese Studies on Manchuria, Washington: typed MSS, undated, Office of the Chief of Military History), p. 5.

AIR POWER AND DIPLOMACY ON THE EVE OF CRISIS

The last days of the summer of 1931 offer a significant point at which an evaluation of air power as a factor in Far Eastern relations can be made. Air power by September of that year had taken its place in the arsenals of both Japan and the United States and each recognized the potential threat of the other's air power. But air power was too much of an infant to be a major factor in shaping events in the Pacific at that time. One must look elsewhere for factors that shaped Japanese or American decisions on international relations. Before 1931 little use had been made of aviation in actual hostilities in the Far East but the rudiments of what was soon to follow were there.

A comparison of Japanese and American aviation technology and air doctrines reveals more similarities than differences with both nations making impressive technological advances and both gradually expanding an air doctrine in a parallel fashion in spite of many obstacles. Yet one is cautioned not to ascribe more to air power development in these years than is due. The cries of the Mitchelites notwithstanding, the fact remained that the air weapon's true potential was still largely unknown, and a weapon's value is generally measured in how well it fits present assumptions of warfare, not those of some unknown point in the future. What was known in 1931 was that the airplane had value as a scout, an observer, a gunfire spotter, and in a more limited sense it could be used in pursuit and bombing. The Japanese and the Americans assigned to the airplane missions commensurate with its ability, and while air employment doctrines were beginning to swing more to emphasis

on the latter two functions, those who would assign the more ambitious tactical and strategic missions to air power would have to wait until technology, resources, organization and decision-makers would support such a doctrine.

A few summary generalizations on war planning are also in order. Japanese and American war plans and defense policies had contained provisions for operations against each other for over 20 years. These are of immense significance in the sense of their recognition of the possibility of war over conflicting policies, and in their adoption of basic concepts for war that remained generally constant. Beyond these two attributes though, one must brand both nation's efforts at war planning as unsound. The United States had devoted much attention to its Orange plans, but in 1931 the gap between American Pacific commitments, which the plan professed to uphold, and the military ability to enforce them was so great that War Plan Orange was each year becoming little more than an academic exercise in unreality. Japanese war plans provided broad strategic concepts, but few details and remained excessively vague on specifying just how a war was to be finally won. Japan's never-abandoned national policy was such that the provocation of war with the United States, China and Russia, either singly or simultaneously was possible, yet her plans made no provision for total war or fighting more than one enemy at a time. But whatever the shortcomings of either plan, events were soon to reconfirm that one long-standing premise was correct: American and Japanese Far East policies were incompatible.

The policies of friendship, internationalism and peaceful diplomacy that characterized the foreign relations of Japan from 1922 to 1931 and brought with only occasional exceptions comparative harmony to United States-Japanese relations, were becoming increasingly unacceptable to large segments of the Japanese population from 1927 on. Constitutional and party government had been workable as long as it could retain popular support by maintaining prosperity and at least a status quo in Manchuria, but in 1927 a chain of events started, which was to lead to the downfall of liberal party government and to the ascendancy of the militarist, nationalist and extremist elements.

The decline of party government began with an economic crisis in 1927 and the loss of public support that followed was intensified with public resentment at the Hamaguchi government's acceptance of less than parity at the 1930 London Naval Conference. When the world depression reached Japan on top of already serious economic deflation, Japan was hit exceptionally hard, and the political parties received the brunt of the blame. Not only did the depression call into question the validity of Japan's constitutional order, but it cast doubts upon the value of the world economic system. Arguments for military expansion to create an autonomous Japanese economic empire insulated from the vagaries of the world economy became more widespread.⁸⁵

In addition to the crisis within Japan, there was also a threat to the status quo in Manchuria from a more unified, strengthened nationalistic China that was attempting to undermine Japan's position

85. John K. Fairbank, Edwin O. Reischauer and Albert M. Craig, East Asia, The Modern Transformation (Boston: Houghton Mifflin Company, 1965), pp. 577-583.

in Manchuria. There was also a resurgence in Soviet Russian power in the Far East which had been demonstrated in the Sino-Russian border war of 1929. With China actively challenging Japan's "lifeline of empire" and with Russia a potential threat, Shidehara's "friendship policy" was soon to crumble, as the Army, with growing support from important groups of the population, chose to initiate a return to a "positive policy."⁸⁶

86. Fairbank, Reischauer and Craig, East Asia, pp. 583-586.

CHAPTER IV

CIVIL IN MANCHURIA: JAPANESE AIR POWER AND AMERICA'S RESPONSE, 1931-1935

When a bomb damaged a small section of the tracks of the Japanese South Manchurian Railway a few miles north of Mukden on the evening of September 18, 1931, Japan returned to a "positive policy" with a vengeance. It was a manufactured crisis, plotted by officers of the Japanese Kwantung Army with the knowledge of that Army's commanding general and the General Staff in Tokyo,¹ and the Japanese forces wasted no time in launching "punitive operations" which were to expand Japan's control into all of Manchuria and parts of Inner Mongolia and northern China before a truce in 1933.

Japan did not delay in employing its air power in the conflict. Army aviation units were widely used as Japan advanced through Manchuria, and Navy aircraft played an active role in operations in Shanghai. With her use of military aviation Japan brought air power from the realm of training operations and theory into the field of battle for the first time in a truly modern sense. It was an important testing ground for equipment, tactics and doctrine, and a useful training ground for giving combat experience to her pilots. To others, Japan's air action brought only concern and shock, especially after her often brutal bombings of cities.

The response of the United States to Japanese aggression was one

1. John E. Fairbank, Edwin O. Reischauer and Albert K. Craig, East Asia, the Modern Transformation (Boston: Houghton Mifflin Company, 1963), pp. 536-537.

of measured caution and an opposition of diplomatic remonstrances rather than threat of use of any forceful action. Japanese aerial bombardment of cities provoked a violent reaction in America, but mere attitudes and protests, no matter how strong, do not take the place of action, and international agreements for the preservation of peace are but expressions of sentiment and attitude unless there is an expectation of enforcement. Japan judged correctly that the world in 1931 would not offer any effective challenge to her venture.

Militarily the impact of Japan's resumption of aggression brought no drastic changes to American war planning and aviation development. War Plan Orange at the end of 1935 was basically unchanged, although Army planners in particular had taken careful note of Japanese action in Asia, including her use of air power. By 1935 they were calling for a realistic plan which would abandon assumptions of early operations in the Western Pacific. American air power was suffering from the effect of the depression in addition to its usual obstacles, but by 1935 naval aviation was beginning to benefit from expansion made possible in part by anti-depression funds, and the Army finally acquired a General Headquarters air force in addition to a prototype of a heavy, long-range bomber: the B-17.

Japan after her success in Manchuria began taking steps to secure her gains in Manchuria. A puppet state of Manchukuo was created and recognized by Japan in 1932. When the League of Nations adopted the report of the Lytton Commission, which condemned Japan's actions in Manchuria and called for a restoration of Chinese sovereignty there,

Japan resigned from the League. In 1924 Japan gave notice of her intention to withdraw from adherence to the naval limitations of the Washington Conference, and by early 1936 she had severed completely her connection with disarmament efforts by refusing to sign the London Naval Treaty and walking out of that conference. Within Japan party government came to an end for all practical purposes with the assassination of Premier Inukai by an ultranationalist in May of 1932. The cabinets for the next four years were to be a precarious balance of factions held together by two moderate admirals, but time was running out on parliamentary democracy in Japan.

THE MANCHURIAN CRISIS AND AIRPOWER: 1931-1933

While the Japanese government was recovering from the surprise of the military's latest use of its autonomy of command and trying to reassert control over Japan's foreign policy by limiting the hostilities, the Kwantung Army had already seized Mukden and Changchun from the Chinese and were preparing to extend their conquests throughout all of Manchuria. There was little doubt that the Mukden crisis and subsequent action had been long-planned, that it was deliberate, and that Japan's designs were political as well as military.² The government of Prime Minister Watakatsuki attempted to convince the world on September 21 that Japanese forces were acting only in self-defense and that the Army was already returning to the South Manchuria Railway zone, but the Army was actually continuing its advance.³ In addition the Kwantung Army was

2. Henry L. Stimson, The Far Eastern Crisis (New York: Harper and Brothers Publishers, 1936), pp. 32-33.

3. Fairbank, Reischauer and Craig, East Asia, p. 537.

getting assistance in its "self-defense" operations: air squadrons of the Japanese Army were arriving.

Army operational plans before 1931 had provided for aviation assistance in the event of hostilities against Japanese forces protecting the South Manchuria Railway, and upon the opening of hostilities three air squadrons were dispatched almost immediately to Manchuria. One of these was sent from Korea, while two were sent from Japan.⁴ These units were to be used exclusively for support of ground troops, but Japanese air doctrine by late 1931 did not make this as limited a mission as one might think. Japanese aviators were quick to demonstrate that this included gaining air superiority and strikes away from the front lines.

The air units had an easy task in disposing of the ineffective air forces of Manchurian Marshal Chang Hsueh-liang and seizing his airfield in Mukden. This quickly eliminated any serious problem of interference from the enemy's air power, and thus a primary requirement of effective use of air power was met.⁵

With only sporadic interference from Chinese aircraft thereafter, Japanese aircraft were free to undertake armed reconnaissance missions directed against "bandits," and bombing missions directed both against enemy frontlines and areas away from them. The reconnaissance missions were to make up a large portion of the air effort in Manchuria and were particularly important due to the lack of large, massed Chinese armies. The reconnaissance planes were usually armed with machine guns and a few bombs and ranged over vast areas of Manchuria scouting for enemy activity

4. "Air Operations 1931-1945" Vol. 4, Japanese Studies on Manchuria, Washington: typed MSS, undated, Office of the Chief of Military History), p. 2.

5. Ibid., p. 4.

and attacking banks of "bandits" when possible.⁶ Since the term "bandit" was later defined by Prime Minister Inukai as a regular Chinese soldier who stopped getting paid,⁷ the term apparently was used to describe anyone whom Japanese pilots thought was the opposition. As the pilots became more skilled at this so did the Chinese. By 1932 Chinese forces, usually in small, scattered groups, had learned how to anticipate air raids and to hide effectively from them.⁸ Japanese pilots were not the only ones to learn from combat.

While reconnaissance and scouting missions were important, it was the attack mission of aircraft that gave a better picture of air power potential. The Japanese were to use fighter and bomber aircraft for this job in addition to the armed reconnaissance planes mentioned above, and the Manchurian proving ground was to bring interesting results. There were two alternative uses of bombing operations in support of ground forces. Aircraft could either bomb enemy rear reserves, supply depots and points of assembly just prior to the main attack of ground forces, or they could provide close-support in the form of attacking enemy front lines and forward artillery positions just prior to a final ground assault. Army aircraft did both and experienced both success and failure. The close-support role brought to light problems of intelligence, timing and identification in addition to the problems of accuracy. There were many instances of Japanese aircraft bombing their

6. "Air Operations," pp. 4, 10.

7. United States, Department of State, Papers Relating to the Foreign Relations of the United States: Japan 1931-1941 (2 vols., Washington, 1943), Vol. 1, p. 67.

8. "Air Operations," p. 10.

own forces, and extensive use of close-support tactics were further frustrated by the absence of massed Chinese resistance.⁹

Bombing attacks behind enemy lines were to have wide use in Manchuria, and they suffered from many of the same problems. They also presented a problem which transcended the immediate realm of military technique and entered the domain of diplomacy and public opinion. The hostilities were less than three weeks old when, on October 8, eleven Japanese aircraft, flying ahead of their ground forces bombed the city of Chinchow. The targets were apparently offices of the Manchurian government and railway yards with few if any targets being of a pure military nature.¹⁰ Regardless of the contribution of these attacks to the eventual capture of Chinchow, world public opinion was angrily aroused. Japan learned quickly that foreign public opinion which might ignore aggression on the ground became quickly inflamed when bombs fell away from frontlines.

By May 1932 Japan's air power in Manchuria had increased to a total of three air battalions which included heavy and light bombing squadrons, fighter squadrons and reconnaissance squadrons. These battalions became the Kwantung Army Air Unit and began establishing airfields in Manchuria for permanent use.¹¹

The last major operations in which aviation was involved came between January and March of 1933 with operations against the regular

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9. "Air Operations," pp. 15-20.
 10. Hilton P. Goss, Civilian Morale Under Aerial Bombardment 1914-1939 (Air University Documentary Research Study, Montgomery, Alabama: Research Studies Institute, Air University, 1948), pp. 106-107.
 11. "Air Operations," p. 2; "Japanese Operational Planning Against the USSR, 1932-1945," Japanese Special Study on Manchuria, Vol. 1, Army Forces Far East, 1955, unpublished monograph on file Office of the Chief of Military History, Washington, D. C., p. 40.

Chinese Army in the Jehol and Hopei provinces of northern China. These followed the general pattern of ground support operations with more opportunity for close-support missions.¹² Some isolated air action took place after the Tangku Truce of May 1933, but for all practical purposes the Army's Manchurian air combat was over in March.

The Japanese Navy air arm was to participate in less combat action during the Manchuria Crisis with its operations taking place in the Shanghai area, but its bombing activity in populous and well-observed Shanghai stirred up an even greater round of protests than the Army in Manchuria.

Military action in Shanghai was the result of an economic boycott and other anti-Japanese activities by the Chinese which had grown more intense with Japan's aggression in Manchuria. On January 20, 1932 the Chinese Mayor of Shanghai was presented with a list of demands which in effect called for an end to the boycott, and later warned that if these demands were not met voluntarily Japan would take the necessary steps to enforce them, with January 19 being soon established as the deadline. The mayor accepted the Japanese demands in their entirety on January 28, but the commander of Japanese forces nevertheless decided to send out troops late that night to protect Japanese nationals. Early the next morning they clashed with elements of the Chinese Nineteenth Route Army which was quartered in the Chaipai sector to protect Shanghai and Nanking. This force had been stationed here regularly and was not connected with the boycott. Nevertheless the clash that occurred led to over a month of fighting, which unlike the general level of opposition

12. "Air Operations," p. 10.

in Manchuria, was all-out fighting. By March Japan was still unsuccessful in attempts at dislodging Chinese troops from the area and decided to withdraw.

Among the many reinforcements that had arrived in Shanghai while Japan waited for a reply to its demands was the aircraft carrier Kaga with a complement of about 60 airplanes. After the Chinese offered resistance to Japanese ground forces spreading through Shanghai, Admiral Shiozawa, the naval commander, ordered the Kaga's air complement to bomb the Chaipei sector on January 29. In the mass attack that followed and in intermittent attacks that took place throughout the day the aircraft failed to dislodge them, although they inflicted great damage. They did succeed in setting on fire much of the quarter of Chaipei by incendiary bombs and in killing and injuring thousands of unwarned civilians. These attacks have been described as the "most severe bombing of a civilian population between 1918 and the Spanish Civil War in 1936;"¹³ and the world had its first glimpse of what modern aerial bombardment could do to a thriving, populous city.

These attacks were only the beginning of air action in the Shanghai area. Between late January and early March when the Japanese decided to withdraw, naval aircraft launched from the Kaga, and later the Hosha, and from a land field which the Japanese constructed, continued their attacks against Chinese military and civilians alike. Bombs also began to fall upon the property of third nations, giving neutral nations more substantive complaints against air attacks.¹⁴

13. Goss, Civilian Morale Under Aerial Bombardment, pp. 106-108.

14. Ibid., pp. 113-116.

It is difficult to determine to what degree the attacks on civilians and property of neutral nations was deliberate. Undoubtedly some of the attacks were designed to intimidate the population and therefore deliberate, while others were the result of faulty intelligence, lack of bombing skill and the close proximity of military and non-military targets. Yet it is impossible to deny the possibility that overzealous and ruthless pilots sought purposefully to inflict unnecessary injury. In any case the Japanese were to become masters at such extracurricular attacks from 1937 on.

The Chinese had on several occasions sent their own aircraft against the Japanese, but they proved no match for the superior Japanese aircraft. Japan was able to retain control of the air throughout the hostilities.¹⁵

The results of aerial action in Shanghai were well-observed and well-reported. If Japan had hoped to undermine the morale of Chinese soldiers and civilians by unmerciless bombings and hasten a retreat or surrender, they appear to have failed. One of the major assumptions of strategic air power advocates was given a limited test, and, while results were not conclusive, observation showed that, not only did such bombings fail to break civilian morale and intimidate enemy troops, but they had an opposite effect in intensifying hate and resentment against the Japanese and toughened the Chinese soldiers will to fight.¹⁶ These attacks also earned the condemnation of the world. With the Manchurian

15. William Green and John Fricker, The Air Forces of the World (New York: Hanover House, 1953), p. 179.

16. Goss, Civilian Morale Under Aerial Bombardment, pp. 113-116; Stinson, The Far Eastern Crisis, pp. 123-132.

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Crisis of 1931 to 1933, air power became an important subject in diplomatic cables.

America's response to Japanese aggression in Manchuria and China consisted of diplomatic protest, reminders to Japan of her obligations under existing international treaties, and some cooperation with the League of Nations. In January of 1932 the United States adopted a policy of non-admission of the legality of any situation de facto or treaties or agreements between Japan and China impairing American treaty rights, the Open Door policy, China's sovereignty, independence and administrative and territorial integrity, and non-recognition of "any situation, treaty, or agreement which may be brought about by means contrary to the covenants and obligations of the Pact of Paris. . . ." ¹⁷ Before this Secretary of State Henry L. Stimson had exercised caution in responding to early Japanese action. Stimson felt that more liberal elements in Japan would regain control over the military and restore order to the Far East, and that overly strong protest or action on the part of the United States might provoke such an extremist, anti-American attitude as to undermine the chances of a restoration of order. ¹⁸

By the end of 1931 Stimson was beginning to realize the futility of such a mild policy and the ineffectiveness of international pressure against Japan to date. He became more determined that America should take more positive action. ¹⁹ There was considerable recognition in

17. United States, Department of State, Peace and War: United States Foreign Policy 1931-1941 (Washington, 1943), p. 160.

18. Stimson, The Far Eastern Crisis, pp. 34-37.

19. Robert H. Ferrell, "Henry L. Stimson," The American Secretaries of State and Their Diplomacy (Vol. 11, New York: Cooper Square Publishers, Inc., 1963), p. 236.

America of the danger of inaction in the face of Japan's resumption of her old, well-known policy of expansion; and in the winter of 1931 and early 1932 there was even concern that Japan might extend her operations against American Pacific possessions,²⁰ but the state of American public opinion and the American economy were such that President Hoover would not permit the use of language than even hinted that sanctions might be applied.²¹ Stimson had to be content with a policy of non-recognition and legal and moral sanction.

Japanese bombing activities caused Stimson and the American public great concern. Stimson became especially upset over the Chinchow bombing in October of 1931 and called this "a matter of great importance in the United States" since "bombing of an unfortified and unwarned town is one of the most extremes of military action, deprecated even in the time of war."²² He became even more upset over the repeated bombings in Shanghai, branding Admiral Shoizawa's initial order the "act of either a perfectly ruthless or badly excited man."²³ The protests of world public opinion did not escape notice in Tokyo and seemed to have had an affect in curbing indiscriminate bombing.²⁴

On May 31, 1933 the Tangku Truce brought hostilities between China and Japan to an end. China agreed to demilitarization of the

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20. Stimson, The Far Eastern Crisis, p. 138.
 21. Ferrell, "Henry L. Stimson," pp. 236, 242; Henry L. Stimson and McGeorge Bundy, On Active Service in Peace and War (New York: Harper Brothers, 1948), pp. 244-245.
 22. United States, Foreign Relations: Japan 1931-1941, Vol. 1, pp. 18-21.
 23. Stimson, The Far Eastern Crisis, p. 124.
 24. Goss, Civilian Morale Under Aerial Bombardment, pp. 107, 118.

Peiping-Tientsin area and Japan agreed to withdraw her forces to the Great Wall, after ascertaining that China had complied with her agreement. Japan now had not only the puppet-state of Manchukuo, but troops in Jehol and in the Peiping-Tientsin area (by virtue of the Boxer Protocol), to protect Manchukuo from the south. Her return to expansionism had been both successful and easy. Her evaluation of the strength of the international agreements on East Asia had been correct.

AVIATION AND PLANNING IN JAPAN: 1933-1935

Among the legacies of the Manchurian campaigns were the lessons for Japanese air power and its enhanced position in Japan's defenses. Earlier chapters have traced the growth of Japan's aviation and have shown that Japan possessed most of the ingredients for major air power status in 1931. Operations in Manchuria and Shanghai were to provide two more combat experiences for aircrews, airplanes and air tactics, and recognition that air power can make an important contribution to warfare in a variety of roles. As a result Japan's air services were to play a dominant role in defenses and planning from 1933 on. The status of other nation's air power was also to be an important factor in plans and decisions.

Basic to any air power is equipment. By 1930 Japan was approaching the stage where she was able to rely more and more on her own aircraft production and less on foreign planes, and by the end of the Manchurian campaign the transition was largely complete. Both air services were seeking to expand not only the size of their forces, but performance

ability of their planes as well. Japan had been fighting Chinese between 1931 and 1933; she would possibly be fighting Americans and Russians in the future, and the challenge to her air power would be much greater there.

While Chinese air operations against the Japanese were almost non-existent and ineffective when they were attempted, the lessons learned by Navy and Army aviators in the little counter-air action they had and in their free reign of air bombardment pointed to the great importance of winning and maintaining air superiority. From the early 1930's on Japan's emphasis was to be on new and better construction in fighter and bomber aircraft and away from reconnaissance and scouting.²⁵ Japanese-Army air tactical doctrine from 1933 to about 1939 was to give primary emphasis in the attainment of air superiority to the bomber aircraft with fighters providing these the necessary support. Tactical thinking at this time was that the best means of achieving air superiority was to take the initiative and move with speed and surprise into enemy territory to destroy enemy aircraft on the ground. Little emphasis was placed on interception of enemy aircraft.²⁶

In the years after the Manchurian Incident Japanese Army and Navy aviation based their plans on the requirements of future air wars with Russia and the United States as well as on the lessons learned on the continent of Asia. Japan's expansion into all of Manchuria and her retention of military strength in Manchukuo after the truce posed a

25. "Air Operations," p. 12; "Outline of Naval Armaments and Preparations for War" (in 5 parts, Japanese Studies in World War II, Part 1, no. 145, mimeographed, undated copy in OCMH, Washington, D. C.) Part 1: 1922-1934, p. 52.

26. "Air Operations," pp. 54-55.

threat to Russia, and that nation's recovery from revolution and her increased interest in strengthening her Siberia military forces brought to the fore the historic concern of the Japanese Army about the menace from the north.²⁷ Thus plans for expansion and operations of the Army air force from 1933 were to be based on destruction of Russia's growing Asiatic air power and support of Japanese ground forces in defending the empire, particularly from the north. The goal of Army air power expansion was narrowly focused on the ability to move quickly from well-developed airbases in Manchuria into nearby border areas. This is the most important explanation for the limited striking range Army aircraft were to have.²⁸

Japanese naval aviation came to center more around the carrier striking force. The Kaga and Hosho had participated in the Shanghai attack, and with the completion of Japan's fourth carrier, the Ryujō in May of 1933 the carrier air force was gaining recognition in many circles as the Navy's main offensive units.²⁹

The Navy continued to promote its plans for expansion with an eye to the United States. As long as America failed to build up to her allowed strength, Japan had felt some sense of security, but with the American naval expansion plans of 1934 Japan not only sought appropriations to build up to treaty limits, but began to intensify her demands for parity with America in naval armaments. These demands were not new and Japan's replenishment plans for naval expansion were underway before the

27. Takushiro Hattori, "The Complete History of the Greater East Asia War" (4 vols., Dai Ton Senso Zenshi, Tokyo: Wasu Publishing Company, 1953), typewritten MSS translation, Doc. 78002, Office of the Chief of Military History, Washington, Vol. 1, p. 12.

28. "Air Operations in the China Area, July 1937 - August 1945" (Japanese Studies in World War II, Japanese Monograph 76, copy in OCMH, Washington, D. C.), p. 16.

29. "Outline of Naval Armaments," p. 19.

United States' Vinson-Trammell Act was passed, but it was a convenient way to justify increased appropriations as well as an excuse for increased armaments.³⁰

Japan's dilemma in the problem of naval armaments was that she did not have the facilities, money or material to compete with wealthier nations in a quest for naval supremacy; a state of competition which could easily result if the naval limitation treaties were abrogated. On the other hand public and naval indignation at limits of less than parity had been in large part responsible for the assassination of two prime ministers, and it would be dangerous, to say the least, for any government to accept continuation of an inferior ratio.³¹ Japan chose to go to the preliminary conference of the upcoming London Naval Conference with proposals that included a common upper limit on naval armaments set as low as possible, and a drastic reduction of offensive forces, including aircraft carriers.³² Arguments of the United States and Great Britain that equality of security was obtainable with less than equality of armaments fell on deaf ears, as did Japan's demands for parity. Japan on December 29, 1934 gave the required two years' notification of her intention to terminate her adherence to the Five Power Naval Treaty of 1922, and on January 15, 1936 her delegation walked out of the London Naval Conference.³³

Japan's proposal for the reduction or abolition of aircraft carriers

30. United States, Foreign Relations: Japan 1931-1941, Vol. 1, pp. 250-251.

31. Ibid., p. 250; "Outline of Naval Armaments," Part 2, 1934-1939, p. 1.

32. United States, Foreign Relations: Japan 1931-1941, Vol. 1, pp. 254-255, 234.

33. Herze Tate, The United States and Armaments (Cambridge: Harvard University Press, 1948), pp. 189-190.

and her listing of these vessels at the top of her list of particularly offensive ships is somewhat difficult to interpret. This was a strange proposal to come from such an air power enthusiast as Admiral Yamamoto, and from a nation that was rapidly building up to treaty strength in aircraft carriers and placing increasing emphasis on carrier aviation in operational planning. Perhaps Japan was offering proposals of such scope in order to give weight to her demands for parity in vessels of a more "defensive" nature, or perhaps she was merely setting the stage for her walkout and withdrawal from world armaments limitation.³⁴ No satisfactory answer has been found in the material examined for this paper.

There was no fundamental revision of Imperial Defense policy through the end of 1935, and the vague guidelines of earlier policies continued to serve. The Manchurian operations had generally taken place within the framework of the 1923 plan. Yet with the acquisition of Manchuria and what were felt to be continuing threats to Japan's security, many could argue that defense policies were in need of revision. They were to get their way in 1936.³⁵

The period between 1931 and 1935 can be viewed as important transitional years for Japanese air power. Whereas the period before 1931 might be called the infancy and adolescence of her aviation, the four years that followed witnessed a growth toward full manhood. Japan's air arms were all in all well-prepared for the rapid expansion and demands to be placed on them in the next six years.

³⁴. United States, Foreign Relations: Japan 1931-1941, Vol. 1, pp. 256-257.

³⁵. See Chapter V.

THE RESPONSE OF AMERICAN AVIATION AND
WAR PLANNING TO JAPANESE AGGRESSION

When Japan embarked on her course of aggression in Asia, thereby challenging America's Far Eastern policy, the military response of the United States was so feeble that it is not even deserving of the term "measured and cautious." The only response that even suggested the possibility of military sanction was the decision to keep the United States fleet in waters around Hawaii after the Japanese attack on Shanghai and to order some token reinforcement of Hawaii and the Philippines. The fleet had been scheduled to be there long before the Mukden incident, and while its presence was undoubtedly noticed, it is going perhaps too far to say as Stimson later did that the fleet's position "undoubtedly exercised a steadying effect," and that "it was a potent reminder of the ultimate military strength of peaceful America which could not be overlooked by anyone, however excited he might be."³⁶

If Stimson meant by "ultimate military strength" America's vast power potential he was on firmer ground, but the status of American preparedness in the summer of 1931 was more likely to encourage aggression rather than deter it, although both the Army and Navy were aware of the threat posed by Japan's actions. The sad truth was that depression had been added to the long list of factors that had held American armaments at minimal level. Aviation, which had often fared better than other armaments, was no exception, although pre-depression expansion dating

36. Stimson, The Far Eastern Crisis, p. 138.

from 1926 prevented total stagnation during the early 1930's. Yet in 1931 and 1932 the threats from Asia did not launch any significant increase in preparations for possible action in the Pacific.

The Navy's air arm was to benefit from resumption of expansion earlier than the Army Air Corps, but this was more the result of anti-depression economic measures than concern about War Eastern commitments.³⁷ An important source of financial aid to the Navy appeared when the administration of recently inaugurated President Franklin D. Roosevelt made funds available from the National Recovery Administration and the Public Works Administration. These funds were to play an important role in the building of more aircraft carriers.

American carrier strength was increased in February 1933 when the Ranger was launched, but prior to completion her size was already felt to be too small. Carrier doctrine had swung from favoring small carriers to large carriers. In 1932 the Navy General Board decided that 20,000 tons was the optimum size. Two were started in mid-1934 and were to become the Yorktown and Enterprise. Funds from the Public Works Administration made their start possible.³⁸

Naval aviation was to receive another boost from the Vinson-Trammell Act which was passed by Congress in March 1934. In addition to authorizing naval construction to bring the Navy up to the strength authorized by the London Naval Treaty of 1930, it authorized building of "the necessary

37. Mark S. Watson, The War Department: Chief of Staff, Prewar Plans and Preparations (The United States Army in World War II, Washington: Office of the Chief of Military History, 1950), p. 4.

38. Archibald D. Turnbull and Clifford L. Lord, History of United States Naval Aviation (New Haven: Yale University Press, 1949), pp. 250-285.

aircraft for vessels and other purposes," and permitted the addition of about 650 naval aircraft.³⁹ Funds were appropriated for this expansion in June, but the Navy still required outside help from NRA and WPA funds.

Concurrent with expansion in numbers of aircraft, the Navy was able to carry out research and development and experimentation in new types. Since air doctrine is only as good as the technology that supports it, many of the uses of carrier aircraft, especially in attack, had to await airplanes with greater range, strength and endurance before they could be fully exploited. The planes that were to be developed as a result of 1934 expansion programs were destined to give valiant service, especially after 1941.⁴⁰

The Army Air Corps continued its repressed existence from 1931 to 1933. Not only had the expansion program of 1926 come to a virtual halt short of reaching its goal, but funds were so scarce that it was difficult to keep the planes the Army had in the air.⁴¹

In 1933 an investigative board was appointed to examine ways the Air Corps could better contribute to national defense. This board, known as the Drum Board, did not recommend anything as radical as an independent air force, but did admit that there was room for a GHQ air force in coastal defense, and recommended that such a force have about 1800 aircraft. This recommendation was to become part of the report of the 1934 Baker Board, which had been appointed by President Roosevelt to examine the difficulties of American military aviation, so vividly demonstrated in

39. Turnbull and Lord, History of United States Naval Aviation, p. 285.

40. Ibid., p. 286; G. B. Potter, ed., The United States and World Sea Power (Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1955), p. 592.

41. Harold Hinton, Air Victory: The Man and the Machines (New York: Harper Brothers, 1948), p. 64.

the Air Corps' tragic attempt to take over flying of America's air mail. The Baker Board's report, issued July 18, 1934, was actually a rejection of appeals for a more autonomous role for Army aviation. It was highly critical of the more outspoken airmen who were demanding more recognition of the air arm, it discounted any danger of attack on the United States from the air, and it upheld the traditional view that the nation's prime defenses were the Navy and the Army, with their air forces providing assistance.⁴²

Yet the Baker report was far from a damaging blow to the Army Air Corps, particularly in 1934. The recommendation for a GMR air force, or self-contained strike component of the Air Corps, was not a new one, and actually the Air Corps had established a provisional GMR in 1933. But this was at least an important concession that there might be an independent mission for the Air Corps. The reorganization was officially adopted on March 1, 1935 and the Air Corps at least had a force that could better provide the indirect support of ground forces envisaged in TR-440-15 of 1926.⁴³

Another recommendation of the Baker Board was the immediate acquisition of 2,300 airplanes, some personnel expansion, and improvement and expansion of facilities. This moved the War Department to order in December of 1934, 50 pursuit planes, 110 attack planes and 71 observation planes.⁴⁴ The Air Corps was also able to benefit from anti-depression non-appropriated funds, securing for example relief funds which enabled

42. Office of Air Force History, The Army Air Forces in World War II (Vol. 1. Plans and Early Operations, Wesley Frank Craven and James Lea Cate, eds., Chicago: The University of Chicago Press, 1948), pp. 30-31.

43. See above p. 66.

44. Ninton, Air Victory, p. 69.

the construction of training schools to take place.

Although expansion was getting underway once again, the long-standing problem of air doctrine remained. The Air Corps was still limited to the role of defense of American territory and support of ground forces that had no large scale expeditionary missions planned. Even the GHQ air force was to be a defensive weapon. But those advocating a more strategic mission for the Air Corps refused to remain inactive. There had of course been some recognition of this mission from time to time, but this was largely a theoretical admission of the possibility of some long-range air strikes against vital areas of an enemy country after first gaining control of the air and aiding ground forces. This was of little value without the proper equipment. The Air Corps clearly needed long-range bombers if strategic doctrines were to have a chance.

The development and acquisition of a long-range bomber was a difficult evolution, beset by so many problems that it was miraculous that America was able to develop this type plane at all. A basic problem throughout most of the 1920's was the adequate technological development which would give to such a plane the speed, altitude, range and bomb-carrying capacity required. Experimental bombers produced during these years were so limited in performance and range that no one was too concerned that they might be planes for use other than in a ground support capacity.⁴⁵

By the early 1930's technology was advancing to such a state -- especially in the field of aircraft engines -- that construction of

45. Craven and Cate, Plans and Early Operations, p. 57.

long-range strategic bombers was now practical. Within the Air Corps an impressive shift of sentiment had taken place from emphasis on pursuit aircraft to the conviction that bombing aircraft with greatly increased range could best insure adequate defenses of America's coast.⁴⁶ This was not necessarily a conversion to Mitchell-Douhet concepts, but rather a reflection of interest in extending coastal defenses, and concern about possible Japanese carrier attacks launched from several hundred miles at sea.⁴⁷

The 1931 MacArthur-Fratt agreement,⁴⁸ which opened the way for some Air Corps activity beyond the shoreline, was followed by instructions from General MacArthur in 1933 which further defined the role of Army aviation in coastal defense as including operations to locate, observe and destroy enemy forces and vessels between the line of contact with ground forces and the outermost range of the aircraft.⁴⁹ Another portal to the development of long-range aircraft was opened.

The chosen approach was to request construction of an aircraft that would combine reconnaissance and bombing ability and a range of 5,000 miles at a speed of 200 miles per hour. Final approval was given for this project May 16, 1934, and among the tactical characteristics approved by the General Staff were those that would enable the new plane to reinforce American possessions as far away as Hawaii without the use of intermediate servicing facilities and to destroy distant land

46. Thomas H. Greer, The Development of Air Doctrine in the Army Air Arm 1917-1941 (United States Air Force Historical Studies; No. 89. Montgomery, Alabama: United States Air Force Historical Division, Air University, 1955), pp. 53, 59.

47. Craven and Cate, Plans and Early Operations, p. 63.

48. See above, pp. 68-69.

49. Craven and Cate, Plans and Early Operations, p. 63.

and naval targets by bombing.⁵⁰

From this authorization the Boeing Aircraft Company proceeded to construct a four-engine bomber of revolutionary design. Designated the XB-17 it flew its first successful test flight in July 1935, and by January 17, 1936 the Air Corps contracted to purchase 13 of them.⁵¹ But the struggle was far from won. The B-17 was not a 5,000-mile bomber, and even its 2,000-mile-plus range was to be brought into question. The Army-Navy controversy on coastal defense had been reopened with the retirement of Admiral Pratt on June 30, 1933, and by the time the XB-17 appeared the Joint Board in a revised "Joint Action of the Army and Navy" had by implication returned to much of the pre-1931 coastal defense doctrine. The Army Air Corps was to wait until 1939 to start receiving B-17's in large quantities.

The developments in Army and Navy aviation that have been mentioned were not made without an awareness of events in the Pacific. In fact, air power expansion at this time was predominantly guided by concern about attacks on America and American possessions from the Pacific. If there was no acceleration of aviation preparedness in response to Japan's aggression, the Army and Navy were not entirely at fault. Such decisions were political ones, and the United States sought a solution to the Far Eastern problem by non-military means.

The activities of Japan in Manchuria and Shanghai were watched with concern by those responsible for American war planning. Since the administration was firmly opposed to any action that even suggested

50. Crewen and Gato, Plans and Early Operations, p. 66.

51. Ibid., p. 66.

force, the planners were not too concerned over the possibility of putting War Plan Orange into action. There was also a tendency, at least by the Army planners, to dismiss any fears that Japan might attack the United States or her possessions anytime in the near future. It was felt that Japan was too dependent on trade with America to run the risk of war, and "only by the adoption on the part of the United States of a policy of armed intervention would Orange be justified in bringing on a war."⁵²

President Hoover had called in ranking military officers early in the crisis to seek their views on how things would stand if the United States should go to war with Japan. They recited the assumptions of War Plan Orange and asserted that America should be able to win, but four to six years would be required due to deficiencies in military strength. They also admitted that the Philippines would be quickly lost.⁵³ This fact apparently made Hoover even more reluctant to contemplate the use of force.

War Plan Orange was not quite as honest. The Joint Board maintained its position that the Philippines provided America a position of immense strategic value, and were vital to present plans even in their present state of inadequate defenses.⁵⁴ This position was retained despite dissents from Army officers in the Philippines who felt that hopes of their holding out against the Japanese were nothing but self-delusion.⁵⁵ The position of Washington planners, though, was that despite the provision of the

52. Louis Norton, "War Plan Orange," World Politics, Vol. 11, No. 2 (January, 1959), p. 236.

53. Theodorus V. Tulaja, Statesmen and Admirals (New York: W. W. Norton and Company, Inc., 1963), p. 64.

54. Norton, "War Plan Orange," p. 236.

55. Ibid., p. 237.

Tyding-McDuffie Act for independence in 1946, and serious doubts about the feasibility of plans for the relief of the Philippines in an Orange war, these islands must be defended. Thus a revised War Plan Orange in May 1935 kept the basic provisions of the 1924 Basic Plan for defense of the Philippines, although it increased the time the defenders would have to hold Manila Bay.⁵⁶

Although the revised plan maintained the old assumptions, there had been increasing demand since the Manchurian Crisis for a complete re-evaluation of Pacific military strategy in view of Japan's impressive land, sea and air power. Arguments for neutralization of the Philippines and withdrawal of American forces there and in China began to be heard again. One of the advocates of this and adoption of an Alaska-Oahu-Panama line as America's strategic frontier in the Pacific was Major General E. E. Booth, commander of the Philippine Department. This proposal came in 1933 and did not prompt any changes in the Army's support of Philippine defense provisions in Orange.⁵⁷ But by the end of 1935 there was growing conviction among Army planners that in view of the delay that would be required in establishing naval superiority in the Western Pacific, so that the Philippines might be relieved, it was folly to insist on defense of the Philippines, especially in light of Japan's adopting the view that retention of the Philippines was a liability and that sound strategy dictated adoption of the strategic triangle line advocated by General Booth.⁵⁸

The Navy disagreed, maintaining that any further reduction of

56. Norton, "War Plan Orange," p. 241.

57. Ibid., p. 238.

58. Ibid., pp. 237, 239, 242.

American forces in the Philippines would encourage further aggression on Japan's part and lower American prestige throughout the world.⁵⁹ The Navy still held to its strategic offensive approach and seemed to fear abandonment of this would severely reduce the Navy's mission.⁶⁰

So American war planners at the end of 1935 were in the middle of a debate on Pacific strategy, prompted for the most part by a recognition of the harsh realities of the situation in view of Japanese power, her renewed expansionist aims, the weakness of the Philippines, the disinclination of the nation to strengthen the Philippines, and the eventual loss of these islands in 1946. But it was to be several years before the Joint Board effectively abandoned all hope of defending them.

59. Norton, "War Plan Orange," p. 243.

60. Louis Norton, United States Army in World War II: The War in the Pacific. Strategy and Command: The First Two Years (Washington: Office of the Chief of Military History, Department of the Army, 1962), p. 38.

CHAPTER V

THE CASTING OF THE DYE:

AIR POWER AND NATIONAL POLICY 1936-1940

By the end of 1940 decisions had been made and policies had been chosen by both the United States and Japan that for all purposes left unanswered only the question of time and place of the outbreak of war. The collision course of Pacific policies that had been set many years before had not been changed, and although the United States had chosen not to enforce her policy by adequate defenses in the Far East or intervention to protect her rights in China, she had refused to abandon it. As long as America refused to modify her position or recognize Japan's conquests she stood in the way of the fulfillment of Japan's aggressive plans of expansion, plans from which Japan felt there was no turning back.

The year 1940 is also significant in that the strategic plans and the role air power was to play in them were largely set. Japan had adopted a policy of southward expansion in 1936 and by 1940 was preparing to launch operations to expand her empire in that direction. American war planning was also taking its final pre-war form, but events in Europe had largely supplanted the problems of the Pacific, and defeat of Japan was becoming secondary to plans for future victory in Europe. More important the United States was in the midst of an unprecedented rearmament program that placed great emphasis on air power.

The importance of the year 1940 for a stopping point in a study of

air power in United States and Japanese relations is that by this time the air doctrines, tactics, equipment and plans that were to affect relations prior to the outbreak of war had been generally established. There were to be important additions such as Yamamoto's plan for a Pearl Harbor attack, and America's decision to place vast air power in the Philippines in 1941, but by and large the importance of air power in pre-war relations can be found from an examination of its status in each nation in 1940 and its history in the years before.

By 1940 Japan was reaching her peak of skill and efficiency in air power and had recognized the importance of aviation in her plans for war to such a degree that she felt air superiority was vital to victory. The United States as it girded for war had made a belated acknowledgement of the importance of preparedness air power and was rapidly trying to correct the deficiencies of past years. It had the plans and superior air potential but not the time. And time was what was required to produce airplanes, pilots, bases and carriers.

JAPAN: EXPANSION OF POLICY AND ARMAMENTS, 1936- JULY 1937

In the early months of 1936 it appeared as if more liberal elements in Japan might be gaining the upper hand once again, and that strengthened parliamentary government might keep in check the radical militarist movements that were fighting for control. The hopes of moderates were to be short-lived, for although they won victory in elections on February 20, their success prompted a mutiny on February 26 of an ultra-rightist segment of the Army. The revolt was put down by the dominant faction of more

conservative generals, who were firmly opposed to such radical extremism, but not necessarily opposed to many of the strongly nationalistic policies the rebellious faction espoused.

While the extreme wing of the Japanese military had failed in its attempts to stop the shift of leadership to liberal elements, the more moderate military leaders did not, and the February 26 incident can be said to have marked the end of moderate party government in Japan. The cabinet of the new Prime Minister, Hirota Koki, that was formed about 10 days later was more favorably disposed to the military point of view and for all practical purposes held office at the mercy of the Army.¹ The Army had decided that the time had come to make the Army's policy Japan's policy, and felt this would be possible by their exerting a stronger influence on government policies. While they chose to work through existing institutions, effective control was in the hands of the military who could always withdraw or threaten to withdraw their ministers and bring about the collapse of a cabinet.

The overall goal of the Japanese Army was a Japan strong enough to be the unchallenged leader of Asia. Fundamental to this was a strong military machine backed by an industrial, self-sufficient national economy and policies which would secure Japan's position on the continent and guarantee the acquisition of strategic raw materials needed to insure self-sufficiency.² Such a goal meant expansion of military armaments, industrial strength and geographical expansion of empire as well.

1. George M. Beckman, The Modernization of China and Japan (New York: Harper and Row, 1962), p. 575.

2. Louis Morton, United States Army in World War II: The War in the Pacific, Strategy and Command: The First Two Years (Washington: Office of the Chief of Military History, Department of the Army, 1962), pp. 49-50.

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Japanese military policy became official government policy in August 1936 when the Hirota Cabinet adopted and reported to the emperor on August 15 a basic policy which aimed at Japan's becoming in name and fact a "stabilizing power in East Asia" with a secure diplomatic and military position there and with "national influence extended as far as the South Seas."³ This was to be achieved by eliminating the influence of other powers in East Asia, by strengthening national defenses to the necessary degree, by preparing for future operations against the Soviet Union, the United States and Great Britain and by expanding gradually and peacefully to the outer South Seas area. This basic policy was to serve as a guide for international, domestic and military policies.⁴

In outlining foreign policy goals to implement the basic policy, the Hirota policy specified that Japan would seek to settle its problems with the Soviet Union by peaceful means, including the possible establishment of demilitarized zones, and a non-aggression pact. For China the policy included continued efforts to make North China a special anti-communist, pro-Japan and pro-Manchukuo area and a source for obtaining vital resources. It stipulated that foreign policy toward the United States should be to promote friendly relations and "seek the United States' understanding of our just attitude through respect for her commercial interests in China,"⁵ but at the same time it recognized that Japan should also seek to prevent America from interfering with Japan in the Far East. It was felt that "in view of the fact that the United

3. "Political Strategy Prior to Outbreak of War" (5 parts, Japanese Studies on World War II, no. 144, copy in Office of Chief of Military History, Washington, 1952), Part 1, Appendix I, p. 1.

4. Ibid., pp. 1-11.

5. Ibid., p. iii.

States is engaged in rearming," and in light of her traditional Far East policy there was danger that she might assist China to the point of making China dependent on the West.⁶

Domestic action in pursuit of the basic principles was to include industrialization to support the overall aims, and programs to promote national unity and spirit in support of Japan's national policy. In planning for industrial expansion great emphasis was to be given to military construction, including rapid expansion of aviation.⁷

The official Hirota policy was careful not to include any reference to definite military action, although the structure of the whole program was geared to an increase in the nation's military might and to policies that would hardly go unchallenged by other nations. The "National Defense Policy" of Japan, which military leaders had prepared by May 1936 in anticipation of the governmental acceptance of their basic policy, was not so cautious. An examination of the May revision of the defense policy, the first major revision since 1923, shows clearly that the military was willing to go along with promotion of the basic principles by diplomatic and peaceful means as long as they were successful. But in case of failure on the diplomatic front, the military strength of Japan was to be ready to swing quickly into action.⁸

The 1936 defense policy was incorporated in a document known as "Outline of the Overall War Procedures of Japan." After designating the Soviet Union as the United States as the nations with which Japan

6. "Political Strategy," pp. iii, V.

7. Ibid., p. ii.

8. Takushiro Hattori, "The Complete History of the Greater East Asia War" (4 Vols., Dai Ton Senso Zenshi, Tokyo: Masu Publishing Company, 1953), typewritten MSS translation, Doc. 78002, Office of Chief of Military History, Washington, Vol. 1, pp. 247-248.

was most likely to clash (although Great Britain and China were also listed as potential enemies), the "Outline" specified that in case of war, coordinated Army and Navy activities were to be launched "in order to deal a crippling blow to the enemy and thereby effect a speedy settlement of the war."⁹ This would be done by speedy annihilation of enemy field armies and main naval forces followed by occupation of strategic enemy areas, including politically vital points.¹⁰

The Army retained primary responsibility for operations against the Soviet Union and the Army's strength, including air power, was to be based on what was needed to defeat the forces the Soviet Union could employ in the Far East.¹¹ The "Outline of Overall War Procedures" was a testimonial to the importance of air power in initial operations. It directed that upon the outbreak of war the Army first destroy the Russian forces, "particularly his air power in the Ussuri area," and in coordination with the Navy capture strategic points such as Vladivostok. The Army would then annihilate the enemy in the Amur area and take action to repulse all enemy attacks. The Navy would assist in all this in particular by destroying Russia Far Eastern fleet at the outset, by assisting in the destruction of the enemy's air power, and by controlling the waters of the adjacent seas.¹²

In case of operations against the United States, the "Outline" assigned the Navy primary responsibility and directed it to destroy the American Asiatic Fleet at the outset of war thus gaining control of

9. Hattori, "Complete History," p. 248

10. Ibid., p. 248

11. "Political Strategy," p. ii.

12. Hattori, "Complete History," pp. 248-249.

Western Pacific waters. This step was to be followed by occupation of key points on the island of Luzon in the Philippines and the enemy naval base of Guam. The Army and its air arm was to assist in the above. After success in these operations the Navy was to destroy main bodies of the American Fleet that ventured into Far Eastern waters by "launching timely attacks."¹³ Naval armaments, including fleet aviation, were to be expanded to a level necessary for success in the above plan.¹⁴

The "Outline" did not envisage any major operations against China. The operations that were to be planned would have the primary objective of securing the rights and interests of Japan that might be threatened, and protecting Japanese lives and property. In the event of an outbreak of serious hostilities in China, Shanghai and strategic points in North China, including the Peiping-Tientsin and Tsingtao areas, were to be occupied. The Navy was to cooperate with the Army in this, and thereafter assume responsibility for control of the coastal waters of the Yangtze.¹⁵ Japan, therefore, hoped to extend its control over China by political means rather than military conquest.

There were two other important principles in the defense plans of 1936. Japan was basing her operational planning on the recognition that a crippling initial blow at the outset and a speedy end were necessary in view of Japan's long-run capabilities. But military planners also were aware of the fact that future wars were likely to extend over a

13. Hattori, "Complete History," p. 249

14. "Political Strategy," p. ii.

15. Hattori, "Complete History," p. 249.

considerable length of time, and deemed it essential for Japan to undertake preparations for such a possibility.¹⁶ This was a mild confirmation of a reality of modern warfare. Finally there was a reiteration of another old premise. Japan was to do all possible to avoid fighting more than one enemy at a time.¹⁷ Japan continued to avoid planning for conflict with several nations at once.

With the ascendance of the military to a dominant position in Japan and the adoption of national policy and defense plans based on military strength, the air services received a gigantic boost for acceleration of expansion and planning that was already in progress. The expansion program while impressive was still not a complete success, for technological limitations had not been completely overcome, and although military goals were paramount in Japan, the move to military dictatorship was not quite complete.

The Navy's plans for expansion of air power continued to place great emphasis on carrier aviation, although land-based bomber aircraft were not neglected. By 1936 the Navy was receiving modern types from earlier plans, and work was to soon start on advanced prototypes which were to play a major role in air warfare in the 1940's.

The 1937 Replenishment Plan was the first to be planned free of international agreements on arms limitations and the first to benefit from government buildup policies. Basic to the plan was a determination to achieve at least quantitative equality in carriers and air power with

16. Hattori, "Complete History," p. 248.

17. Ibid., p. 250.

the United States, if not qualitative equality.¹⁸ The plan called for construction of two new 20,000-ton carriers which were to balance American carrier construction authorized in 1934. But in 1937 Japan learned that the United States was preparing to construct even greater carrier tonnage. This dampened the outlook of the 1936 plan, and Japan in her search for ways to keep up started considering the possibility of converting first class merchant ships into aircraft carriers.¹⁹

The Navy air arm, as it gradually acquired improved aircraft and greater strength, did not relax its quest for more effective use of air power. During this period dive bombing and long-range bombing received added attention as did night carrier flying and combat aerobatics. In general, Navy pilots in 1936 and 1937 were becoming more skilled and were flying better equipment than their Army counterparts.²⁰

The Japanese Army air force centered its expansion plans and tactical plans on future operations against the Soviet Union, a task that was becoming increasingly important in 1936 as Russia had greatly increased her air power in the Far East. Japanese estimates placed the number of Soviet aircraft there in excess of 1,200 in 1936, approximately ten times the strength of the Kwantung Army Air Units.²¹

Like the Navy air units, the Army received additional and improved

18. "Outline of Naval Armaments and Preparations for War" (Japanese Studies on World War II, No. 149, undated, mimeographed copy in Office of the Chief of Military History, Washington), Part 2, pp. 2-4.

19. *Ibid.*, p. 5.

20. William Green and John Fricker, The Air Forces of the World (New York: Hanover House, 1958), pp. 181-182.

21. "Air Operations 1931-1945" (Vol. 4, Japanese Studies on Manchuria, typed MSS, undated, in Office of the Chief of Military History, Washington), pp. 33, 40.

equipment although expansion was far from rapid. There was a major organizational improvement in 1936 with the establishment of an Air Command Headquarters, a rough equivalent to America's GHQ air force. This command was given control over the flying units assigned to it and had direct access to the General Staff. This was not complete separation from ground units, but it was a start toward an air force concept.²²

Since the main concern of air planners was the Soviet Union, the Kwantung Army Air Unit became the key to Army air plans. By the end of 1936 this force had between 180 and 200 aircraft in five air regiments, each of which had six fighter, six reconnaissance, two light bombing and four heavy bombing companies. These were to remain on station near the borders of Manchuria and be prepared to take the offensive against the Soviet air force immediately upon outbreak of war. These regiments would be reinforced as necessary from Korea and Japan until eventually about 500 aircraft would take place in operations.²³

It was expected that initial air operations would take one month, after which the air units would engage in direct ground support operations while retaining command of the air. Army air units would be assisted by Navy air units from carrier and land bases as long as there was no threat of war with the United States.²⁴ Bombers were still to assume primary responsibility for destruction of enemy air forces, but in 1937 a slight modification to this took place. From here greater emphasis

22. "Air Operations," p. 37.

23. "Japanese Operational Planning Against the USSR, 1932-1945," Japanese Special Study on Manchuria, Vol. 1, Army Forces Far East, 1955, unpublished monograph on file Office of the Chief of Military History, Washington, pp. 40, 64.

24. Ibid., pp. 66-67, 85.

was placed on a surprise strike when war was imminent and bombers were to be preceded by fighter aircraft to secure command of the air.²⁵

Other aspects of air doctrine for Manchurian operations are also of interest. Ground support operations were to include direct and indirect support. While the first obligation of the aircraft after air supremacy was close-support assistance, they could also carry the attack far beyond front lines. Even reconnaissance aircraft were to be used for bombing and strafing.²⁶

This doctrine was soon to receive combat testing, and while many weaknesses would appear and considerable change would take place, the fundamentals remained unchanged to World War II. In this sense there is an amazing similarity between American and Japanese Army air doctrine. Both placed first priority on air superiority, and next emphasis on ground support operations, but both provided for flexibility in missions to allow some attacks at more strategic targets located some distance from battle lines. Both nations had adopted some form of GHQ air force organization but neither had an official doctrine for sustained long-range strategic bombing in 1937. Here the similarities end. Japan's air doctrine was becoming increasingly inflexible not only because of an apparent absence of well-developed unofficial doctrine, but, more important, because of lack of any long-range aircraft as her aircraft were being designed and manufactured for operations in Manchuria from airfields close to enemy targets. In both cases planning was so

25. "Japanese Operational Planning," p. 85.

26. "Air Operations," p. 56.

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narrowly focused on future operations in Manchuria that the Japanese Army air forces became slaves to such doctrines.

As the military prepared to play its role in national policy, the Army-dominated government moved closer to its natural ally, Germany. Fearing isolation after severance of other ties with the world, the Army began looking for ways to bring a Japanese-German rapprochement. The Army had been working on this since 1935, and in July 1936 persuaded the Hirota government to accept an Anti-Comintern Pact, which was signed in Berlin on November 25, 1936. While ostensibly a mutual pledge to resist international communism, in reality it included secret commitments that provided for consultation on measures to preserve the common interests of the two nations, and a provision that if either were attacked or threatened by the Soviet Union, the other would not give relief to the Soviet Union.²⁷

WAR IN CHINA, GREATER EAST ASIA CO-PROSPERITY

SPHERE AND ALLIANCE: JULY 1936-SEPTEMBER 1940

While Japan had hoped that hegemony over China might be increased by political means alone, the Chinese had other plans. China had once again been making impressive progress toward national unity, and with this progress and the increased national sentiment that followed, anti-Japanese action was being stepped-up. Particularly vexing to the Chinese was the presence of large Japanese forces in the Peiping-Tientsin area

27. Beckman, The Modernization of China and Japan, pp. 577-578.

which numbered approximately 7,000 in the summer of 1937. The Japanese government and particularly the Army were concerned about increasing Chinese pressures which were felt to be threats to Japan's policy of dominance in East Asia, yet the stress of Japan's national policy in mid-1937 was on expansion by peaceful means while preparing the military strength that might be required for action against greater powers than China. The government of Prime Minister Konoye and the senior military officers neither wanted, nor thought Japan could afford, bothersome and costly action in China.

Elements of the Japanese forces in the Peiping area apparently felt otherwise, for on July 7, 1937 hostilities erupted between Japanese forces engaged in field maneuvers near the Marco Polo Bridge and Chinese soldiers from the Wanping garrison. There is dispute even today over responsibility for this incident, but it is not unreasonable to assume that here was another case of dual diplomacy by Army units.²³ Regardless of who was responsible, the spark that was to spread into Far Eastern war was ignited.

The Konoye government and the Army and Navy adopted on July 8 a policy of supporting localized action for a settlement satisfactory to Japan, but opposed letting the matter spread. There were three important arguments against any action that might generalize the incident. The Navy feared expanded operations in China would interfere with their expansion program and possibly bring Great Britain to the aid of China;

23. Ho Shun, The Modernization of China and Japan, p. 531;
Morton, Strategy and Command, p. 50.

the Army was also concerned about interference with its expansion program and was opposed to any action that would require shifting troops away from the borders of the Soviet Union, and there was general concern that excessive intervention in China might bring economic retaliation from Great Britain and the United States, on whom Japan was still dependant for critical imports.²⁹

The policy of localizing the North China Incident did not work. An uneasy peace followed the initial clash during which both sides tried to reach an agreement. Japanese demands were harsh, amounting to requests for Chinese acceptance of Japanese domination in the north, but Chiang Kai-shek appears to have been on the brink of accepting them when, on July 25, fighting resumed.³⁰ The incident spread rapidly from here as Japanese reinforcements, including air detachments, arrived. Peiping and Tientsin were captured by July 31, fighting spread to Shanghai in August and gradually Japan was spreading its conquest to Nanking, Hankow and Canton. Despite overwhelming military superiority Japan was unable to bring capitulation of the Chiang Kai-shek government, which had moved its seat of government as Japan advanced. The Kuomintang government eventually settled in Chungking, and Japan in November 1938 proclaimed that the Chiang Kai-shek government was no more the government of China, and announced the establishment of Japan's New Order in East Asia, an insurance for the permanent stability of East Asia by a tripartite relationship between Japan, Manchukuo and China. In short Japan was setting up a

29. "Political Strategy," p. 10.

30. Dorothy Borg, The United States and the Far Eastern Crisis of 1931-1938 (Cambridge: Harvard University Press, 1964), pp. 277-282.

puppet government in China and ceasing to deal with Chiang, although continuing the war against him.

Air operations in the China Incident (it was not called a war) were of broad scope and great importance. The importance of air power in Japanese military policy is indicated by the promptness with which air units were alerted and dispatched upon the opening of hostilities in China. During the negotiations between July 7 and July 25 seven Army air battalions were sent from Japan to South Manchuria to stand by for possible action.³¹

While this provisional air group was in route, the Army and Navy General Staffs were establishing tentative plans for the use of air power in the event hostilities were to expand. Agreement was reached that air operations would be limited to support of Japanese forces in North China although destruction of any Chinese air opposition would be the initial objective. In counter-air operations the Army would be responsible for the northern area, while the Navy air force would destroy enemy air power in central and southern China. While Army and Navy air units were to exercise separately their respective tasks, provisions were made for the Navy to provide assistance to Army air units in close-support. The Navy was also given the task of escorting and protecting transport vessels during landings, and Army troops during and after landings until Army aircraft arrived.³²

On July 26 the Army air units sent from Japan were joined by units

31. "Air Operations in the China Area, July 1937-August 1945" (No. 76, Japanese Studies on World War II, mimeographed, undated, in Office of Chief of Military History, Washington), pp. 15-16.

32. "Political Strategy" Appendix 7, pp. i-ii.

from the Kwantung Army air unit, and both engaged in air action in the Peiping-Tientsin area, providing close-support for troops and advance bombing of Nanyuan and Chinghuayuan prior to ground action. In August Army aircraft were sent to Shanghai with the outbreak of hostilities there, although the bulk of Army air strength remained in the north during the early months of combat. Some opposition was encountered in the north from aircraft of the Chinese air force, but the Japanese appear to have faced no serious opposition in this area. Most of the Japanese strikes were against Chinese frontlines, although in October and November they enjoyed great success in attacking retreating Chinese units.³³

Naval air planning was based on the Army-Navy air plan of 3 July and provided for localized missions to gain air superiority. But more expansive plans were also made in case of the spread of the incident, and these included utilization of the entire naval air force from carriers and land bases to annihilate enemy air opposition and to strike airfields. Thus when the fighting spread to Shanghai in early August, naval air power was on the scene flying support for troop landings and counter-air operations.³⁴

On August 14 the air superiority that the Japanese had enjoyed was being seriously challenged by the Chinese, who were flying foreign aircraft that often proved superior to Japanese planes. While naval aircraft maintained what was at times rather tenuous air superiority, new Mitsubishi carrier fighters were rushed to Shanghai aboard the Izumi.

33. "Air Operations in the China Area," pp. 25-26.

34. "Political Strategy," Appendix 3, Appendix 9; Green and Fricker, Air Forces, p. 131.

and their arrival in September along with perfected Japanese fighter tactics enabled Japan by early October to achieve complete air superiority over what had been a Chinese air force of between 70 to 80 aircraft in the Shanghai area.³⁵

While carrier fighters were fighting for command of the air, attack and reconnaissance aircraft engaged in strikes against Shanghai and other central Chinese cities including Nanking. A raid on August 23 saw not only carrier aircraft but land-based naval aircraft from Formosa attacking airfields near Shanghai, Nanchang, Hangchow and Kwangteh. The flights from Formosa -- a round trip of over 1200 miles -- were viewed as a particularly important success by the Navy.³⁶

Attacks were not limited to airfields, and from mid-August naval aircraft embarked on aerial bombardment raids on cities, and other non-military targets. The issue is clouded somewhat as Chinese aircraft were also guilty of inflicting damage on civilians and neutral property, but a lack of skill seems to be the reasons for China's action. While Japanese pilots erred unintentionally as well, there was little doubt that many of these attacks were deliberate. Nanking was subjected to especially vicious attacks between August and its capture in December 1937; and again the world raised its voice in angry protest.³⁷ It has been estimated that the Japanese flew over 1,200 sorties against Nanking prior to its capture, in which over 500 tons of bombs were dropped. But as was the case five years earlier, there was no indication that air bombardment itself led directly

35. "Air Operations in the China Area," pp. 28-32; Green and Fricker, Air Forces, 191.

36. "Air Operations in the China Area," p. 27; Green and Fricker, Air Forces, p. 181.

37. Milton P. Goss, Civilian Morale Under Aerial Bombardment (Air University Documentary Research Study, Montgomery, Alabama: Research Studies Institute, Air University, 1948), pp. 118-131.

to the capitulation of Nanking or that it had the desired effect on civilian morale.³⁸

By early 1938 the China Incident had settled down to a long drawn-out affair, and Japanese air action was devoted more and more to mass attacks on cities such as Hankow, Canton and Chungking, with less ambitious attacks against Chinese ground opposition. Again the Japanese ran into difficulties with Chinese air opposition which still had a total strength of over 300 aircraft. Gradually this threat was reduced with improved fighter aircraft and tactics and Japan began carrying out what was becoming her version of strategic bombardment with impunity. In raids against cities and targets at substantial distances from Japanese bases, the Navy played the dominant role. There are two reasons for this. The most important was that Navy aircraft were about the only ones with sufficient range and performance for distant targets like Chungking and Kuming. A secondary reason was that late in 1937 there had been a delimitation of responsibility with the Navy receiving the mission of bombing targets in central and southern China.³⁹ By the end of 1940 Japan was continuing her attacks on the Kuomintang government in Szechuan Province, now from bases in Indochina as well as from China. These raids still failed to break the Chinese enemy's will to resist but they proved to be an excellent test and evaluation for aircraft, tactics and pilots, who were rotated so that as many as possible might get combat skill. The persistency of Japan's raids

38. Goss, Civilian Morale, p. 132.

39. "Air Operations in the China Area," pp. 26, 35.

against inland cities is illustrated by the fact that in September of 1940 naval aircraft flew 168 day and 14 night raids against Chungking alone.⁴⁰

While the overall contribution of Japanese air power to China operations was of immense value, there were more specific aspects of Japan's air action which were of doubtful value to the war effort and Japan's overall policy, if not detrimental to it. From August of 1937 until well into World War II Japan undertook bombing raids in which cities and other areas of high population density and little military value were subjected to air bombardment. One estimate places the total air raids against civilian population from July 1937 to March 1940 at a total of 9,786 with more than 42,000 bombs dropped, causing civilian casualties of about 51,000 killed and 65,000 wounded.⁴¹ There is no way of knowing if these figures are correct, but they should be indicative of the scope of the attacks. If they were designed to break Chinese morale and will to resist, evidence is overwhelming that they were a failure. An apt evaluation of the effect of one of these raids on Chungking was offered by the United States Ambassador to China, Nelson T. Johnson: "The effect of these bombings of undefended cities far behind the lines has been to unify the people and to build up in them a spirit of resistance that was not there before."⁴²

In addition to a noticeable lack of accomplishment, the raids on civilian targets also provoked the disapprobation of the democratic

⁴⁰. Green and Fricker, Air Forces, pp. 181-182.

⁴¹. Goss, Civilian Morale, pp. 138-139.

⁴². United States, Department of State, Papers Relating to the Foreign Relations of the United States: Japan 1931-1941, 2 vols. (Washington, 1943), Vol. 1, p. 662.

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world in forms ranging from resolutions of distress and condemnation by the League of Nations,⁴³ to shock and disgust on the part of the man on the street.

Japan also built up a bank of ill-will against her by repeated and often malicious attacks on nationals of neutral nations and their property. Between July 1937 and mid-1940 there were countless cases where Japanese pilots inflicted damage on foreign commercial interests, missions, hospitals, ships, and even motor vehicles in areas that were clearly non-military and away from cities that were being bombed. American property seemed to be a favorite target of the pilots, and American diplomats were kept busy penning protests to Japan. By February 1940 the United States Ambassador to Japan, Joseph C. Grew, had made over 149 written protests for which he had received no reply.⁴⁴ When Japan did reply a study of the replies shows that they usually took the form of denials, statements that the bombing was unintentional, disclaimers of liability or accusations that China had made the target a military one. There were variations on this general pattern, including statements that Japanese pilots were lacking in experience and skill and that American property had not been adequately marked.⁴⁵ In addition to humanitarian concern, the United States was properly protesting violations of its legitimate rights and interests in China. A strong case can be made for the view of Ambassador Grew who felt in 1939 that

43. United States, Foreign Relations: Japan 1931-1941, Vol. 1, p. 506.

44. Ibid., p. 657.

45. Ibid., pp. 603, 606.

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"these attacks are intentional and part . . . of a studied campaign to drive foreign interests out of China."⁴⁶

The most famous attack against American property during the China Incident was the bombing and sinking of the U.S.S. Panay on December 12, 1937. The Panay was an American gunboat on station in the Yangtze River that was evacuating American diplomatic personnel from Nanking prior to its fall to the Japanese. In the early afternoon on December 12 in perfectly clear weather flights of multi and single engine Japanese naval aircraft bombed and strafed the well-marked Panay, sinking it and killing and injuring Americans. Japan claimed that the attack was unintentional, and that the mistake was due to poor visibility and inadequate markings of identification on the boat, but expressed profound regret and promised to take action against those responsible. A United States Navy Court of Inquiry found that the Panay was clearly marked, the weather was clear, and that it was inconceivable that the aircraft after 20 minutes of low level attack could not identify the ship.⁴⁷

By the end of 1938 most Army air units had been withdrawn to northern China and Manchuria primarily because of their inability at long-range bombing missions and pressures from Russia. In Manchuria the Army continued its primary role of protecting Japan and Manchukuo from Russia. A series of border disputes between Japan and Russia and Japan and Mongolia created tense relations in mid-1938 and finally erupted into armed conflict between Japan and Russia at Changkufeng Hill

46. United States, Foreign Relations: Japan 1931-1941, Vol. 1, p. 643.

47. Ibid., pp. 521-526, 542-547.

on July 11, 1938. The bitter fighting included air action between Russian and Japanese air units. While the Japanese were outnumbered and inferior in performance to Russian air units, the results were indecisive. The dispute was settled by compromise in August, but peace was to be short.⁴⁸

On May 13, 1939 fighting broke out at Nomonhan on the Manchurian border with Japan taking the offensive this time. Japan had strengthened her air power and achieved quick successes against Mongolian and Soviet Far Eastern air forces. But as Russia brought in reinforcements Japan's battle for air superiority became more desperate. Air battles became of vital importance, and Japan after committing almost all of her air force to the struggle suffered a resounding defeat, losing over 500 aircraft and 150 pilots.⁴⁹ This was her first major encounter with a superior air force, and it revealed bitter truths about Japanese Army air power. It particularly brought to light how fast air potential is sapped in the face of superior opposition. An important lesson had been learned and the Army air units were determined to do something about it.⁵⁰

Manchurian and Chinese air operations were both a blessing and a curse to Japanese air power. Aviation benefited from the combat skills acquired, from tactics and equipment evaluated, from early exposure of deficiencies and from the impetus these operations provided to further

48. Green and Fricker, Air Forces, p. 182.

49. United States, United States Strategic Bombing Survey, Pacific War, Japanese Air Power, No. 62, Military Analysis Division (Washington, 1946), p. 4.

50. "Air Operations," pp. 62-68; Green and Fricker, Air Forces, p. 183.

expansion and reorganization. But the negative list is impressive. The combat losses of airplanes and personnel placed a severe obstacle in the path of both the Army and Navy's replenishment plans. While these losses did stimulate more rapid expansion of equipment and personnel, this taxed an economy that was already approaching its maximum production level for aircraft, and the expenses and resources required for support of ground operations in China interfered with naval rearmaments.

Among Army air force changes that took place after the Nomonhad Incident were modifications in tactics and planning. One result was an increased emphasis on fighter aircraft for both offensive missions and air combat. Operations had revealed that massed bomber attacks were ineffective against airfields, and the best way to achieve air superiority was by use of more and better fighters.⁵¹ Army air planners after 1939 also devoted more attention to the highly probable situation where Japan would be fighting more than one enemy, a situation which had actually existed for several months in 1938 and 1939. But the contingency plans made were still inadequate being little more than vague plans for initial action.⁵²

The Navy in 1939 and 1940 continued to press for completion of their impressive replenishment plans, always with an eye on America's progress in rearmament. Japan's goal was parity of ships and air strength with the United States Navy. In pursuit of this, great importance was placed

51. "Air Operations," p. 68.

52. Hattori, "Complete History," pp. 250-251.

on aircraft carriers and planes, so much so that naval air armaments began receiving priority within the limits of resources, manpower and construction facilities. As a result air replenishment plans were largely successful.⁵³

Yet the Navy air arm was not entirely without problems. There was still the problem of naval conservatism with many naval leaders still regarding the battleship as the nucleus of sea power. While this does not appear to have stood in the way of air replenishment programs, it does indicate that a doctrinal dispute still existed within the Navy.⁵⁴ Another problem that was arising was an inability to provide training and to recruit personnel at a pace equal to the expansion of air strength.⁵⁵

By 1940 Japan was observing United States' air expansion with alarm and was realizing the impossibility of maintaining parity with America's vast air potential. While Japanese air power was quantitatively and qualitatively far superior to America's present level of air power in the Pacific, Japan recognized that this advantage would not last forever. Since Japanese operational planning required air superiority, strong arguments began to be heard that if Japan hoped to acquire her rightful place in Asia and achieve early and decisive victory, she could not afford to wait too long.

Japan from 1937 was little by little being transformed into a militarist state in which the national cause was becoming a "holy war

53. "Outline of Naval Armaments," pp. 19-23.

54. Ibid., p. 22.

55. Ibid., p. 23.

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for the fulfillment of the historical mission of the Japanese people."⁵⁶ While the structure of parliamentary government remained, the Diet and the parties were quickly losing what little power they had in 1936. Power was in the hands of the cabinet and the military services, and for all practical purposes the cabinet was but an outlet for military policies.

The goal was constantly the policies adopted in 1936 and Japan's foreign policy and military action rarely deviated from pursuit of these. The Anti-Comintern Pact and the New Order in East Asia policy were well within the framework of long-range national goals. By the summer of 1940 with war raging in Europe and Great Britain fighting for her existence, Japan prepared to move southward to expand her empire. On July 26, 1940 the new Konoye cabinet adopted as its policy the establishment of a Greater East Asia Co-Prosperity Sphere which was to include ultimate Japanese control of Hong Kong, Burma, French Indochina, Thailand, Malaya, the Netherlands Indies, the Philippines and New Guinea. Japan hoped to be able to extend her control to these areas by peaceful means, but was prepared to use force if necessary. Specific measures that were to be taken to promote the grand objective included the conclusion of an alliance with Germany, a non-aggression pact with the Soviet Union and an all-out effort to bring the China Incident to an end.⁵⁷

On July 27 the Liason Conference, a policy-planning body of selected cabinet members and the military chiefs of staff, approved the Co-Prosperity Sphere program and set the guidelines by which the program

56. John K. Fairbank, Edwin O. Reischauer and Albert M. Craig, East Asia, The Modern Transformation (Boston: Houghton Mifflin Company, 1965), p. 601.

57. Hattori, "Complete History," p. 25.

was to be carried out. This policy was embodied in a document known as "Outline of General Principles to Cope with the Development of the World Situation." This specified that Japan's objectives should be gained by peaceful means, but listed criteria for the use of arms in the southern area that included:

1. When the China Incident has been generally settled, force of arms shall be employed for the solution of the southern area problems by seizing a favorable opportunity; the situations at home and abroad permitting.
2. In case the China Incident remains unsettled, our policies shall be pushed within the limits of not coming into open hostilities with a third power, but in case of particularly favorable development of the situation at home and abroad, force of arms may be employed in order to solve the southern area problem.
3. Utmost effort shall be made to employ force of arms against Britain only; and since involvement in a war with the United States may become unavoidable in such an event, all possible preparations shall be made therefor.⁵⁸

The term "situations at home and abroad" was the Liason Conference's way of saying successful completion of an alliance with Germany, a non-aggression pact with Russia and a strengthened wartime structure of industry and armaments at home.⁵⁹

That there was concern over American rearmaments is shown by the view of one of the military members at the conference who felt the time was ripe for expansion southward by whatever means. He pointed out that the United States was preparing for war, and feared that American Far Eastern policy might become stronger after rearmament.⁶⁰

On September 22, 1940 Japanese troops began to move into French

58. Hattori, "Complete History," p. 34

59. Ibid., p. 36.

60. Ibid., p. 35.

Indochina and the move southward was underway. On September 27 Japan concluded a Tripartite Pact with Germany and Italy which, in effect, was a warning for the United States to remain neutral. As armament expansion and other military preparations continued Japan was approaching the point where only one item was missing to make the "situations at home and abroad" criteria complete: a settlement with the Soviet Union. Japan was to achieve this in April 1941.

UNITED STATES: RETREAT AND REARMAMENT, 1936-1940

As the peace of the world became more threatened by events in the Far East and Europe, the United States held tenaciously to the belief that it was not in America's interest to get involved, that by policies of non-entanglement, neutrality, unpreparedness, and intervention by diplomatic remonstrances on moral and legal grounds the United States and its interests could somehow remain secure. Not all of those who were responsible for American policy were blinded by this ostrich-like approach to security. As the Japanese were pushing their attack into China in 1937, Secretary of State Cordell Hull admitted to Grew that "hostilities are not likely to be brought to an end by manifestations of disapprobation on moral and legal grounds," but added that it was necessary to keep in mind the wishes and attitudes of the American people.⁶¹

So while Japan closed the Open Door in Asia and armed in preparation for even greater aggression, and while Germany and Italy defied

61. United States, Foreign Relations: Japan 1931-1941, Vol. 1, p. 362.

international agreements in Europe and Africa, America legislated neutrality and kept her armaments at a totally inadequate level. The situation demanded leadership, and forceful action from a position of strength-in-being; the United States was not willing to provide this until the eve of war.

The United States never abandoned its traditional Far Eastern policy and continued its policy of refusing to recognize agreements and situations that violated it. Army and Navy planners were therefore prevented from ignoring these commitments although denied the requisite strength to enforce this policy. Yet by early 1938 War Plan Orange, which had never been fully realistic in its approach to defense of American Far Eastern interests, had for all practical purposes written off the defense of the Philippines and interests west of Hawaii. The plan's partial retreat from the Western Pacific to the strategic triangle defense concept reflected concern over events taking place in Europe and the danger of a two ocean war.

Before this in 1936 and 1937 debate had continued between Army and Navy members of the Joint Planning Committee on American Pacific strategy. At the end of 1936 the Secretaries of the War and Navy Departments had appraised America's military position in the Far East as so weak "that today our position . . . is one that may result not only in our being forced into war but into a war that would have to be fought under conditions that might preclude its successful prosecution."⁶² By 1936 the Army, convinced of the impossibility of defending the

62. Louis Morton, "War Plan Orange," World Politics, Vol. 11, No. 2 (January, 1959), pp. 241-242.

Philippines, had eliminated from its strategic plan all provisions for sending reinforcements there.⁶³

With the outbreak of the China Incident the Joint Board viewed the existing Orange plan as unsound and directed a re-examination of the plan. The result was a split report, with the Army urging adoption of a defensive position of readiness east of the 180th meridian and the Navy holding to its traditional view that planning should aim at defeat of the enemy at the earliest opportunity instead of a purely defensive strategy of readiness. The Navy felt that they could and should take the offensive into Japanese territory once the war began.⁶⁴

But after several more split reports a compromise was reached, and a new plan Orange was adopted in February 1938. In it the Navy did not abandon its concept of a progressive advance across the Pacific, but the new plan did not specify any time for this. The Army gained official recognition of the Alaska-Oahu-Panama strategic triangle defense concept as being of primary importance. Manila Bay was still to be defended, but no plans were mentioned for reinforcements of the garrison there and no statement was made of the time it would take the fleet to come to the rescue of the Philippines.⁶⁵

After the Munich Agreement in September 1938 American planners became even more concerned about the possibility of a two ocean war and the security of the Western Hemisphere. In studies prior to this, the Joint Planning Committee had examined various contingencies that might arise and concluded that priority in a two-ocean war must go to defense

63. Horton, "War Plan Orange," p. 244.

64. Ibid., p. 247.

65. Ibid., pp. 247-249.

the following are the n th powers of the first n natural numbers:

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1888496, 1925039, 1962102, 2000687, 2039796, 2079431, 2119594, 2160287, 2201512, 2243271, 2285566, 2328399, 2371772, 2415687, 2460146, 2505161, 2550744, 2596897, 2643632, 2690961, 2738886, 2787409, 2836542, 2886287, 2936646, 2987621, 3039224, 3091457, 3144322, 3197831, 3251986, 3306799, 3362282, 3418447, 3475296, 3532841, 3591094, 3650057, 3709742, 3770161, 3831326, 3893249, 3955932, 4019387, 4083626, 4148661, 4214504, 4281157, 4348622, 4416811, 4485736, 4555409, 4625842, 4697047, 4769026, 4841781, 4915324, 4989667, 5064812, 5140771, 5217546, 5295139, 5373562, 5452827, 5532946, 5613931, 5695794, 5778537, 5862172, 5946711, 6032156, 6118509, 6205782, 6293987, 6383136, 6473241, 6564314, 6656357, 6749372, 6843371, 6938366, 7034369, 7131392, 7229447, 7328546, 7428691, 7529894, 7632157, 7735492, 7839911, 7945426, 8052049, 8159792, 8268667, 8378686, 8489861, 8602204, 8715727, 8830442, 8946361, 9063496, 9181859, 9301462, 9422327, 9544466, 9667891, 9792624, 9918667, 10046032, 10174741, 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902278906, 914848806, 927620606, 940597706, 953784406, 967185006, 980803906, 994645606, 1008714606, 1023016406, 1037556606, 1052340006, 1067372406, 1082660006, 1098218006, 1114052006, 1130169006, 1146576006, 1163280006, 1180298006, 1197637006, 1215304006, 1233306006, 1251650006, 1270344006, 1289396006, 1308814006, 1328606006, 1348682006, 1369061006, 1389753006, 1410768006, 1432115006, 1453814006, 1475875006, 1498308006, 1521124006, 1544333006, 1567946006, 1591974006, 1616438006, 1641359006, 1666749006, 1692620006, 1718984006, 1745854006, 1773243006, 1801164006, 1829630006, 1858665006, 1888283006, 1918500006, 1949330006, 1980787006, 2012887006, 2045645006, 2079077006, 2113200006, 2147930006, 2183284006, 2219279006, 2255934006, 2293269006, 2331304006, 2370059006, 2409554006, 2449810006, 2490847006, 2532686006, 2575348006, 2618854006, 2663235006, 2708413006, 2754420006, 2801288006, 2849049006, 2897735006, 2947379006, 2997914006, 3049374006, 3101783006, 3155175006, 3209584006, 3265044006, 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of the vital positions of the Western Hemisphere. Even in the event of a war with Japan alone the committee felt that America could expect to lose all her possessions west of the Hawaiian Islands. Regardless of what the eventual situation might be, it was believed that America could be best defended by a strategy of defense in the Pacific.⁶⁶

In 1939 the planners began to think more in terms of Germany, Japan and Italy acting together in coalition and began to examine more seriously the possibility that the United States would not be fighting alone. This led to a series of five contingency plans, known as the Rainbow plans. Ultimate choice of strategy would be a political one, but the planners were determined to be prepared for a variety of situations.

The five plans that were formulated all had the common objective of defense of the United States and the Western Hemisphere against aggression, and the situations included assumptions of United States involvement either alone or with allies, and contingencies that included emphasis on offense in the Pacific, strict defense of the Western Hemisphere only, or hemispheric defense with action in Europe. Two of the plans, Rainbow 2 and Rainbow 3, provided for early operations into the Western Pacific. Rainbow 2 assumed that the United States would be acting in concert with Great Britain and France and would be able to launch an immediate offensive across the Pacific with only limited participation of American forces in Europe and the Atlantic. Rainbow 3 assumed no allies for the United States, and while hemispheric defense was to retain priority, conditions were to be such that American forces could undertake early operations from Hawaii

66. Mark S. Watson, United States Army in World War II, The War Department: Chief of Staff; Prewar plans and Preparations (Washington: Office of Chief of Military History, 1950), p. 99; Morton, Strategy and Command, pp. 68-70.

into the Western Pacific.⁶⁷

With the outbreak of war in Europe in September 1939 it appeared as if Rainbow 2 fitted the situation best, and hurried efforts were devoted to the completion of that plan. In the spring of 1940 with the resumption of the German offensive and the threat of Japan's exploitation of the European situation to take over British, Dutch and French possessions in the Southwest Pacific, the Rainbow plans calling for offensive against Japan were given top priority, but this was to be short-lived. With the fall of France in June 1940 the focus of attention again returned to the Atlantic with recognition that danger there represented a far greater threat to American security than Japanese aggression. Here it was to remain.⁶⁸ By December 1940 the Joint Board had approved American strategy that would have as its major objective the security of the Western Hemisphere, and until forced into war the United States should concentrate on preparing for hemispheric defense in both the Atlantic and Pacific while maintaining cooperation with Great Britain in this task. If forced into war American strategy should be to concentrate its efforts on the defeat of Germany first, maintaining a strategic defensive in the Pacific to contain Japan. Until forced into war with Japan the United States should attempt to restrain Japan by political and economic means while taking care to avoid forcing Japan into open hostilities. If war came with Japan America would have to fall back to the strategic triangle line until such time as the situation would permit a progressive offensive back across the Pacific.⁶⁹

67. Morton, Strategy and Command, p. 71.

68. Ibid., pp. 73-76.

69. Ibid., pp. 84, 90-91; Watson, Chief of Staff, pp. 115-119.

of the system. The first step is to determine the total number of units in the system.

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This plan of action which the situation envisaged in preliminary Rainbow 5 of 1939 became the basis for more detailed planning in 1941 and closely reflected the pattern of operations that took place in World War II. Yet it is important to realize that this was not abandonment of American interests and possessions in the Far East. Japan was to be contained by political and economic means from further aggression, particularly against British, Dutch and American possessions in the Far East, and if war came with Japan, the United States would in due time take the offensive to defeat Japan. Strategic thinking and planning at the end of 1940 was a shift in priority from Pacific-oriented planning that had been dominant for years to planning for what was recognized as a more serious threat from Europe. American military strength was too weak, despite rapid rearmament, to provide defenses that would be required to maintain American interests in all parts of the world, and until military preparations exceeded what was required for defense of the Western Hemisphere and Atlantic operations, the expectation that American possessions in the Western Pacific would be lost was only a realistic appraisal of the situation. It was a retreat, not surrender or abandonment, and hopefully America could forestall precipitation of conflict with Japan until either events in Europe were more favorable or United States military strength, especially air power, reached the point where a forceful position could be taken in the Pacific as well.⁷⁰

The strategic decisions of American military planners in 1939 and 1940 were in large part based on a new awareness of the importance of air power and the shocking inadequacy of American air power. Although the

70. See below, pp 145-146.

United States had started a major rearmament program in 1938 which was expanded and accelerated in 1939 and 1940, two decades of neglect of air power could not be corrected overnight. The expansion was to be unprecedented and in many ways miraculous, but the task was so great and time so vital that the United States was still trying to achieve a position of readiness when war came in December 1941.

From 1936 through most of 1939 the broad picture of American military aviation remained much like it had been since 1934. Naval aviation continued making modest but steady expansion within doctrinal confines that were conducive to such a program, while the Army Air Corps continued its struggle not only for growth and acquisition of modern equipment, but for a modern mission as well. The limited gains of the Navy, authorized by the Vinson-Trammell Act of 1934, required financial assistance from emergency government agencies, and pointed out the need for balanced expansion whereby additional aircraft are matched by additional personnel, training facilities and repair facilities. By May 1938 the Yorktown and the Enterprise had been commissioned and America added two large carriers to its sea-going air power arsenal. Yet while naval air power profited by the expansion program and continued to demonstrate in fleet exercises the offensive potential of carrier task forces, naval aviation in early 1938 was still too weak to undertake much more than the official support of the fleet missions assigned it. The United States Navy was to remain a battleship-oriented Navy until after the Battle of Midway in 1942.⁷¹

The story of the Army Air Corps from 1936 until well into 1939 is its

71. Thaddeus V. Tuleja, Statesmen and Admirals (New York: W. W. Norton and Company, Inc., 1963), pp. 184-185.

struggle for development of more long-range bombers, for procurement of ones that were already available, and for redefinition or elimination of the defense-only concept of air power that continued to shackle Army aviation. All these were related problems and were but a continuation of the same problems that had existed since the early 1920's. Between January and August of 1937 the Air Corps did take delivery of 13 B-17's which had been officially sold to the public and the General Staff as weapons chiefly for sea search and sea attack.⁷² But the Army General Staff opposed acquisition of any more of these for fiscal year 1938, officially because they felt that the role of coastal defense could be better filled by small, two-engined bombers. It seems probable that an additional reason for this stand was fear that more long-range bombers might detract from the important ground support mission.⁷³

In addition to the General Staff another major stumbling block was the opposition of the Navy to Army flights beyond the immediate coastline. This led to a verbal Army-Navy agreement in May 1938 which limited the range of Air Corps operational flights to no more than 100 miles off shore. Thus a request for additional long-range bombers was returned that same month by the Deputy Chief of Staff with the following reminder:

(1) Our national policy contemplates preparation for defense, not aggression, (2) Defense of sea areas, other than within the coastal zone, is a function of the Navy, (3) The military superiority of . . . a B-17 over the two or three smaller planes that could be procured with the same funds remains to be established. . . . If the equipment to be provided for the Air Corps be that best adapted to carry out the specific

72. Thomas H. Greer, The Development of Air Doctrine in the Army Air Arm: 1917-1941 (United States Air Force Historical Study, No. 89, Montgomery, Alabama: United States Air Force Historical Division, Air University, 1955), p. 84.

73. Alfred Goldberg, ed., A History of the United States Air Force 1907-1957 (Princeton: D. Van Nostrand Company, Inc., 1957), p. 43.

functions appropriately assigned it under Joint Action . . . there would appear to be no need for a plane larger than the B-17.⁷⁴

This statement succinctly summarized the problems of Army air power development until September 1939.

In their search for a broader, more strategic mission Air Corps leaders were not deserting official air doctrine which recognized the importance of air superiority, direct support of ground armies, and indirect support by quasi-strategic missions. They were merely seeking to expand this and to gain the equipment with which to win air superiority. In the years before 1939 it appears that American air doctrine was relatively uninfluenced by other nation's use of air power although Air Corps officers could not help but be impressed by the air power other nations were building. Yet American air theorists regarded most air combat before September 1939 as but limited proving grounds for the weapons and technology of support aviation.⁷⁵

Air Corps leaders were particularly impressed with Japanese aviation, although they saw nothing novel in Japan's air power. Commenting in October 1937 on Japan's air forces in the China Incident, Major General H. H. Arnold was impressed that they showed an awareness of sound tactical doctrine, seeking first air superiority then such targets as enemy airfields, rail centers, war vessels and aircraft factories in addition to direct ground support operations. Arnold felt that "the employment of the Japanese Air Force is directly in line with the most up-to-date teachings of our own Air Corps Tactical School and with the doctrines of our own

74. Watson, Chief of Staff, pp. 35-36.

75. Greer, The Development of Air Doctrine, p. 101.

Old Air Force. That is significant. There is abroad in the world a first rate air power which knows how to use its air strength."⁷⁶

As war clouds formed in the Pacific and the Atlantic, America began accelerating its aviation expansion. The first service to benefit was the Navy by the Naval Expansion Act of May 1938, which authorized carrier tonnage up to a total of 175,000 tons, the immediate construction of one carrier, and the construction of naval aircraft and supporting parts and equipment to bring the total of "useful naval aircraft" to not less than 3,000.⁷⁷ This authorization stimulated in turn the need for additional training facilities and naval air bases.

To satisfy the need for air bases and bases for submarines and surface vessels, a board of naval officers, headed by Rear Admiral A. J. Hepburn, was appointed by the Secretary of the Navy in May 1938 to recommend the number of additional bases that would be required and suitable locations. In its report in December 1938 the Hepburn Board included recommendations for air bases on Guam, Wake and Midway Islands. Guam was felt to be of great strategic value as a major advanced flight base. It was felt that its location in the midst of Japan's mandated islands could neutralize the defense value of these bases which were believed to be heavily fortified.⁷⁸ Congress eventually met some of the recommendations for Pacific bases and for bases within the United States, but refused to fortify Guam, in part because of fear of offending Japan.⁷⁹ Actually Japan had only token defenses on most of the mandates prior to 1939 and undertook strengthening of these

76. Greer, The Development of Air Doctrine, p. 102.

77. Archibald D. Farnbull and Clifford L. Lord, History of United States Naval Aviation (New Haven: Yale University Press, 1949), pp. 300-301.

78. Tuleja, Statesmen and Admirals, pp. 179-180.

79. Ibid., p. 180; G. J. Rowcliff, "Guam," United States Naval Institute Proceedings, Vol. 71, No. 507 (July, 1945), p. 789.

islands including the deployment of air units there in large part because of American rearmament.⁸⁰

Accelerated expansion of American airpower was to come after the Munich Conference of 1938 which seems to have convinced President Roosevelt that air power would play a dominant role in any upcoming conflict in which the United States might be involved.⁸¹ As a result Roosevelt in early 1939 called the Army Air Corps "utterly inadequate" for American defense needs and urged that the Army air arm be increased to include at least 6,000 aircraft. Congress responded and passed on April 3, 1939 an emergency air defense bill authorizing the procurement of 3,251 aircraft, to bring total air strength to 5,500 aircraft, and appropriated \$300 million for this, an amount about one-half the total aircraft appropriations of the preceding 14 fiscal years.⁸²

A re-examination of the role Army aircraft should play in hemispheric defense was started by the Army Air Board as a result of this positive recognition of the potentialities of air power. It recommended that the Air Corps with long-range bombers should play a major role in guarding the approaches to the Western Hemisphere in keeping with the recent expansion of American strategic policy toward defense of this entire area. This report was approved by the new Chief of Staff, General George C. Marshall, who concluded that it gave "for the first time a specific mission for the Air Corps."⁸³

Actually the Air Corps had anticipated this recognition and expansion

80. Thomas Wilds, "How Japan Fortified the Mandated Islands," United States Naval Institute Proceedings, Vol. 81 (April, 1955), pp. 400-404.

81. Goldberg, A History of the United States Air Force, p. 43.

82. Office of Air Force History, The Army Air Forces in World War II (Vol. 1, Plans and Early Operations, Wesley Frank Craven and James Lea Cate, eds., Chicago: University of Chicago Press, 1948), p. 104.

83. Goldberg, A History of the United States Air Force, p. 44.

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before it was finally sanctioned. By the time appropriations for expansion were passed the Air Corps had already negotiated many contracts and manufacturers were preparing to get production started. Time was important, for when war erupted in Europe on September 1, 1939 the Army Air Corps had only 800 first line combat planes and these were qualitatively inferior to most foreign combat aircraft. There were only 23 B-17's in service, and of all the aircraft in stock in 1939, only the B-17 was to fly as a first-line aircraft after Pearl Harbor.⁸⁴

The Air Corps had been anticipating the new mission assigned them for years, and the official recognition of the need for more long-range bombers and overseas bases merely put the stamp of approval on a shift in doctrinal thinking that had already taken place. This was no panacea though, for excessive emphasis on the bomber led to continued neglect of pursuit aviation. There were many causes for this neglect which had started in the early 1930's, but perhaps the primary cause was the belief that the United States would not be attacked by enemy air power; and if it was, the bomber, which air leaders felt could develop speeds and fire power so great that it did not need fighter escort, could provide all the air defense needed.⁸⁵ This overemphasis on the long-range bomber was to bring tragic results when America's obsolete fighter aircraft engaged in combat early in the war.

In 1940 the resumption of Nazi aggression was to bring forth a demand for air power that completely dwarfed previous programs. In May 1940 Roosevelt called on Congress to provide authorization for a total strength of 50,000 aircraft for the Army and Navy which he hoped would be backed by

84. Goldberg, A History of the United States Air Force, pp. 44-45.

85. Greer, The Development of Air Doctrine, p. 35.

the ability of American aircraft industries to produce that number a year.⁸⁶ To a nation whose military strength in April 1940 was less than 4,000 aircraft, few of which were modern, and whose capacity for aircraft production was less than 5,000 per year, this was recognition of air power with a vengeance. The United States had the potential to meet these demands and subsequent authorizations, but it was preparing for possible conflict against nations that had long been on a war footing. What was needed was time, and this Congress could not grant.

Rearmament was paralleled by other steps which if not designed to deter Japanese aggression at least would hopefully hinder her progress. Too many of these steps were void of forceful meaning and action, yet others, especially economic restrictions perhaps had some bite. A moral embargo was placed on the export of American aircraft and aircraft equipment in mid-1938, and this was followed by other measures including abrogation of the Japanese-American commercial treaty in July 1939 which in early 1940 left the United States free to employ economic sanctions. By 1940 the United States had also repealed the arms embargo section of the Neutrality Laws and this in conjunction with other preparations opened the path away from isolation and strict neutrality.

Yet regardless of the merits of the measures short of war, the problem at the end of 1940 was one of time, as neither nation was willing to change its fundamental policy. As the United States was trying to overcome the great problems of balanced preparations and to stall Japan's southward movement by carefully avoiding provocative action, Japan was

⁸⁶. United States, Department of State, Peace and War: United States Foreign Policy 1931-1941 (Washington, 1943), p. 530.

anxiously working for completion of a "favorable development of the situation at home and abroad." In both nations air power had become an important determinant of what would happen, for as Japan started military plans for her move southward and as the United States pushed forward plans for the defense of the Western Hemisphere, air power became a keystone in planning. By the end of 1940 the factors of air power that would influence events of the next year had been generally determined. Japanese air power was approaching peak efficiency, while the United States was embarked on a crash air expansion program which remained unable to provide to overseas bases air contingents adequate for fulfillment of their mission. And sadly it would not be possible to bring these up to strength without seriously hampering expansion and training at home.

EPILOGUE: 1941 AND GENERAL CONCLUSIONS

While 1941 is a year of importance and significance in any study of air power, it is to receive only brief mention in this preliminary study. Details are abundant and the story of air power in the Pacific in the days before Pearl Harbor is interesting and exciting, but the fact remains that the crucial years of air power were those before 1941. The development of aviation technology, an aircraft industry, a training program for aircrews, an air doctrine, and the implementation of defense plans all require considerable time even in periods of emergency. There can be modifications and acceleration and specific air orders of battle can change in a short span of time, but the outcome of events of a given year are more likely to have been determined by basic decisions made years before.

In the case of Japan a major reason she elected to go to war in 1941 was her belief that she had air superiority in both numbers of aircraft, and quality of pilots and aircraft in 1941.⁸⁷ This evaluation was correct in 1941, but Japan also recognized her limited war potential and realized that her advantage in air power would decrease as American air power responded to rearmament programs of 1939 and 1940. Japan's move south was to be the culmination of a traditional national policy and a goal that had been stated as early as 1936 and amplified in 1940. The air power that was to play a major role in her plans for war was the product of years of growth and maximum expansion of air power since 1937.

The decision to attack the Philippines and Pearl Harbor were made in 1941, and they were not radical innovations, but logical consequences of war planning that had stressed surprise, the need for quick and decisive victories and annihilation of American naval, military and air strength in the Pacific. Again general decisions predate the specific decision of 1941.

On the American side there took place a series of events in late 1941 that might have changed the view presented here that the role of air power would play had been determined before 1941. In 1941 the United States began having second thoughts about leaving the Philippines weakly defended. By the end of the summer with the Germans occupied with Russia and Japan expanding slowly southward, the United States moved toward a more hardened resistance to Japan. One manifestation of this was a decision not only to reinforce the Philippines so that they could be defended in the event of war, but to provide long-range bombers as a deterrent to Japanese aggression.

⁸⁷. Hattori, "Complete History," pp. 260-261, 263, 278.

and for offensive strikes against Japanese forces and installations within the tactical operating radius of the bombers in the event of war. Reinforcement of the Philippines was given top priority, and by November all modernized B-17's and all B-24's in the United States as well as some B-17's from Hawaii were to be sent there. But the decision was made too late. On December 8, 1941 only 35 B-17's of a scheduled complement of 165 had arrived. The same was true of the pursuit aircraft destined to bolster air defenses with only 107 of a scheduled 240 in the Philippines in early December. American assumptions that hostilities with Japan would be avoided until March and April of 1942 were four months off the mark.⁸⁸ Again it was time that was needed to alter decisions of preceding years.

No attempt will be made here to present a summary of material presented in the preceding pages, nor will an attempt be made to analyze air power in the Pacific in terms of its use in World War II. However a few general observations are in order.

1. A clear definition of national policy with strategic planning based on this definition and backed by willingness of a nation to support such a policy are vital ingredients for the successful development of modern systems of warfare such as military aviation, which are in the end only instruments of national policy. The United States for over 40 years maintained a Far Eastern policy that it was unwilling to back with the force necessary for making it a viable policy until it was too late. The only policy that was willingly backed was that of defense of America only.

⁸⁸. Craven and Cate, Plans and Early Operations, pp. 176-193; Morton, Strategy and Command, pp. 96-101.

and this, coupled with the prevailing view that America was safe in her geographical isolation as long as she did not get involved in events not of her own choosing, was not conducive to the development of air power.

Japanese national policy, on the other hand, was more favorable to air power development, and although her war planning was vague and incomplete, the strategic premise was clear. It was a policy that envisaged more than defense of the shoreline of the Japanese Islands, and air power was seen to be a helpful means to achievement of national goals.

2. The fact that American air power was able to acquire the foundation for expansion that was to turn early defeat into victory in the Pacific is testimony to those who saw beyond the confines of a narrow defense-only policy and were able to lay the technological and doctrinal groundwork which was available when America finally awoke to the necessity of strong air power. An excess of theory was about the only item United States air power had in abundance. It was this bank of theory, which went beyond accepted doctrines of air power, that in combination with America's vast air potential, helped pave the way to victory.

3. Military air power was a factor of great importance in the events leading to Pearl Harbor. The fact that it was carrier air power seeking primarily to destroy carrier air power that opened hostilities between the United States and Japan would alone make air power important. Yet for years before this Japan had made the airplane a vital part of its military machine, and from the mid-1930's onward Japan recognized that command of the air was as important as command of the land and sea below. Japan watched the air power of other Pacific powers with care. Parity

with the United States in air power was an important goal of the Japanese Navy, and when it appeared that American rearmaments might eventually challenge Japanese air superiority in the Far East a strong argument was provided for starting the major southern offensive.

While the United States underestimated the strength of Japanese air power, it was nonetheless respected, and an important factor in arguments for re-examination of America's position in the Western Pacific. Significantly when the United States attempted to strengthen its position in the Philippines in 1941, it was to be air power that received priority. But the recognition of its importance is only part of the formula for effective air power. The United States elected to complete the formula too late.

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The first part of the document is a letter from the Secretary of the State to the Governor, dated the 10th day of January, 1862. The letter is addressed to the Governor and is signed by the Secretary of the State. The letter contains the following text:

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In the second section, the author outlines the various methods used to collect and analyze the data. This includes both manual and automated techniques. The goal is to ensure that the data is as accurate and reliable as possible.

The third part of the document provides a detailed breakdown of the results. It shows that there is a significant correlation between the variables being studied. This finding is supported by statistical analysis and is consistent with previous research in the field.

Finally, the document concludes with a series of recommendations for future research. It suggests that further studies should be conducted to explore the underlying causes of the observed trends. This will help to refine the current model and provide a more comprehensive understanding of the phenomenon.

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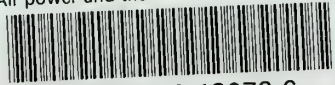
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