Volume 48 Number 2 *Spring*

Article 8

1995

General Walter Krueger and Joint War Planning, 1922-1938

George B. Eaton *U.S. Army*

Follow this and additional works at: https://digital-commons.usnwc.edu/nwc-review

Recommended Citation

 $Eaton, George\ B.\ (1995)\ "General\ Walter\ Krueger\ and\ Joint\ War\ Planning,\ 1922-1938,"\ Naval\ War\ College\ Review:\ Vol.\ 48:No.\ 2\ ,$ $Article\ 8.$

Available at: https://digital-commons.usnwc.edu/nwc-review/vol48/iss2/8

This Article is brought to you for free and open access by the Journals at U.S. Naval War College Digital Commons. It has been accepted for inclusion in Naval War College Review by an authorized editor of U.S. Naval War College Digital Commons. For more information, please contact repository.inquiries@usnwc.edu.

General Walter Krueger and Joint War Planning, 1922–1938

Major George B. Eaton, U.S. Army

OINT OPERATIONS, JOINT EDUCATION, AND joint war planning are nothing new for the Army and Navy, although there are those who apparently lose sight of the fact. Unfortunately, as in many other sectors of American life, the U.S. military often forgets how it dealt with such issues in previous eras. During the 1920s and 1930s, while the nation was immersed in isolationism, the war colleges and the senior staffs of the Army and Navy dealt at length with the problems of joint operations, joint doctrine, and joint war planning. Many of the innovations and developments of the period paid almost immediate dividends during World War II. More interestingly, some features of 1930s joint planning and doctrine are being used today as "new" procedures.

After World War II, Admiral Chester Nimitz said that the Pacific campaign had turned out just as it had been gamed for twenty years at the Naval War College; the only thing, he recalled, that had not been anticipated was the kamikaze. The Army may not have been so sanguine in those same twenty years. It had at times argued with, and at times agreed with, the Navy on plans for a possible war against Japan. Most of the disagreements seem to have centered over command issues, the relief of the garrison in the Philippines, and the length of time it would take the Army to mobilize and train before it was prepared to conduct operations. In addition to war plans, both the Army and the Navy developed exercises for their respective war colleges and for testing joint plans

Major Eaton is a 1980 graduate of Knox College in Galesburg, Ill., and attended the University of Minnesota under a fully funded Army program, receiving a master's degree in military history. He taught military history at the U.S. Military Academy from 1990 to 1993 and is a 1994 graduate, in the College of Command and Staff, of the Naval War College. Major Eaton has presented a number of scholarly papers and is preparing a biography of General Krueger in connection with doctoral studies. He is currently the executive officer of the 528th Special Operations Support Battalion, U.S. Army Special Operations Command, at Fort Bragg.

1

Naval War College Review, Spring 1995, Vol. XLVIII, No. 2

and doctrine. In several cases the two colleges cooperated in developing war games.

During the entire interwar period, General Walter Krueger played a key role for the Army in both planning and exercises. Between 1921 and 1938 Krueger attended both the Army and the Naval war colleges, taught at the Army War College for one year and at the Naval War College for four years, and served seven years in the Army War Plans Division. This article explores General Krueger's role in the development of war plans and exercises, especially War Plan Orange. Krueger, it will be seen, was a central and catalytic figure in the preparation of a generation of Army and naval officers for the Pacific Ocean battles of World War II and in moving the Army to a modern, flexible method of war planning. In a useful sense, to examine Walter Krueger's career in the 1920s and 1930s is to study the progress of joint planning in the interwar years.

Walter Krueger was born in Flatow, West Prussia, on 26 January 1881. His father died in 1884, and in 1889 Anna Hasse Krueger brought Walter and his two siblings to the United States. When the Spanish-American War broke out in 1898, Walter was enrolled in the Cincinnati Technical Institute. He enlisted in the 2d Volunteer Infantry and served in Cuba at Santiago and Holguin. In June 1899 Krueger enlisted in the regular Army. He was posted to the Philippines and fought in several engagements during the Philippine Insurrection, rising to the rank of sergeant. Krueger received a commission in 1901, having passed a written examination in lieu of West Point attendance (a common procedure at the time). After a tour in the United States, which included teaching at the Infantry and Cavalry School, Krueger returned to the Philippines, where he mapped areas of Luzon to the north and east of Manila.

Krueger's career soon settled into the slow grind of the old Army. He was promoted to captain only in 1916, but by the end of the First World War he had spent two tours in France, as operations officer of a division, chief of staff of the Army Tank Corps, and as operations officer of two different corps, including the one that commanded the occupation troops in Germany from 1918 until 1923. He was then assigned to the second Army War College class convened after the war. After graduation, although now qualified for either General Staff service or higher command, Krueger was retained at the College, first as an instructor and then in the Historical Division. He traveled to Berlin in early 1922 to study German strategy.

In April 1923 Krueger began his first tour in the Army War Plans Division (AWPD). He remained in the Division until June 1925, when he was assigned to the Naval War College as a student in the senior class of 1926. In 1928, after bursitis ended a brief period of training at the Army Flight School (at the age of 47), Krueger returned to the Naval War College as an instructor. He was

responsible there for teaching German strategy in World War I, the Army command system, and joint operations. He left Newport in 1932.

For two years, Krueger, now a colonel, commanded the 6th Infantry Regiment. In 1934 he returned to the Army War Plans Division as its executive officer, and in June 1936 he was appointed as Chief, AWPD, serving on the Joint Board. It was a momentous time to serve in War Plans; during this four-year tour the manual *Joint Action of the Army and Navy* was revised and expanded, War Plan Orange was drastically revised, the defenses of Oahu were upgraded, and the Rainbow plans were begun. George Marshall succeeded him on the AWPD when now-Brigadier General Krueger was assigned to command a brigade in June 1938. In 1939 he commanded the 2d Infantry Division, VIII Corps in 1940, and in 1941 the Third Army. In February 1943 he was transferred to Australia to take over Sixth Army, and as General Douglas MacArthur's senior ground commander he began the long campaigns across New Guinea and New Britain to, ultimately, the Philippines.

Walter Krueger's Army career involved remarkably broad experience with the Navy and in joint operations and planning; it repeatedly placed him where some of the most fruitful work in those years was being done.

The Army War College and Army War Plans

As a faculty member at the Army War College, Lieutenant Colonel Krueger focused on operations, war planning, and strategy in the World War. Lectures on "The Basic War Plan," Germany, and Hannibal aside, few details of his activities at the College are known. Krueger did spend, however, four months in 1922 in research at the Reichsarchivs in Potsdam. With his perfect German and his Prussian heritage, he was apparently the first American allowed into the German war archives after 1919. His lectures on German strategy were so well regarded that in 1923 the Chief of Staff of the Army directed that they be reproduced and distributed to all general officers, General Staff officers, and the General Service Schools.

In July 1922, AWPD requested that Krueger be assigned to it, and the period of grooming for joint duties and joint cooperation began. Immediately upon arrival he was thrust into war planning and exercises, as part of the "G3," or Operations, section. He was part of a five-man group responsible for preparing Army plans, coordinating joint plans with the Navy, and formulating exercises. At least two officers in the G3 section of AWPD worked on each of the plans, to maintain continuity and achieve "harmony of thought." By April 1923 Krueger was appointed to the Joint Planning Committee of the Joint Board and was working in earnest on joint plans, doctrine, and operations.

At this point a word needs to be said about the mission of the General Staff and AWPD in the 1920s and on the function of the Joint Board and Joint Planning Committee. Prior to World War I, despite the attempted reforms of the Secretary of War, Elihu Root, and the establishment of the General Staff in 1903, the War Department remained tied to the Bureau system. The chief of each bureau (the Adjutant General, Quartermaster, etc.) ran it like a fiefdom, and woe betide the Chief of Staff of the Army who tried to make changes or to bring the bureaus under his control. The Chief of Staff was charged with day-to-day operations and planning for contingencies, but he was also the Commanding General of the Army, expected to take command of all forces in the field in case of war.⁸

When World War I broke out, President Woodrow Wilson decided to keep his Chief of Staff, General Peyton March, in Washington and designated General John J. Pershing to command in the field. Pershing was given such latitude that he vied with March for power and influence, establishing in essence his own army in France. When the war was over and the occupation troops had returned, the War Department decided to strengthen the role of the Chief of Staff (who was now Pershing himself). Legislation was rewritten to ensure that the Chief would be the field commander in the next war. The War Department also adopted the French "G-staff" system (G1 for personnel, G2 for intelligence, G3 for operations and training, and G4 for logistics), and it added a War Plans Division. Division.

That division was charged with developing contingency plans for future wars. These were the "color plans" for each potential enemy (red for Britain, green for Mexico, orange for Japan, tan for Cuba, etc.). ¹¹ It had its own G-staff organization and in time of war was to attach itself to the field army: the chief, AWPD, was to become its Chief of Staff, and the other planners, already conversant with the contingency plans, would constitute the nucleus of his staff. ¹²

The Joint Army and Navy Board (better known as the Joint Board) had been established in 1903 to advise the president and the secretaries of War and the Navy on issues involving both services. Its mandate was limited in that as originally chartered it could discuss only matters referred to it; eventually it was given the right to initiate studies. The Chief of Staff and the Chief of Naval Operations were members, as were their assistants and the chiefs of their respective war planning divisions. ¹³ It quickly became apparent that these senior officers did not have the time to study adequately problems involving joint issues; accordingly, they created a Joint Planning Committee, which researched issues as charged by the Joint Board and made recommendations. If it could not resolve differences, the Committee presented the Board with the Army and Navy positions. By 1932 only three matters out of over five hundred had had to be presented to the president for decision due to the Joint Board's inability to reach

consensus. The Joint Planning Committee also had the right to initiate studies. With three or more members from the respective war planning offices, it met informally, keeping no minutes.¹⁴

After his appointment to the Joint Planning Committee, Krueger was given oversight of several AWPD projects. He was responsible for the Panama Defense Program, which had been instituted to correct deficiencies noted in a January 1923 joint exercise. He was also given responsibility for War Plan Tan (intervention in Cuba), Brown (intervention in the Philippines), and Orange (war with Japan). ¹⁵ It appears that Krueger was also given staff responsibility for the use of chemical weapons, artillery developments, and the deployment of the Air Corps. ¹⁶

It was as a member of the Joint Planning Committee that Krueger first met and developed relationships with naval officers, associations he would carry with him to the Naval War College and in his work on the General Staff in the 1930s. The naval officers included Captains Wilbur Coffey, William S. Pye, and William H. Standley.

At that time, the Committee was working on a revision of the estimate of the enemy situation for War Plan Orange. As approved by the Joint Board on 7 July 1923, the estimate drew the following general conclusions: first, the U.S. would have to establish a naval presence in the western Pacific superior to Japan's; second, Manila Bay would have to be held or retaken in order to achieve the above; third, the U.S. would have to control all Japanese Mandated Islands (the Marianas, Marshalls, and Carolines, given to Japan-but not to be militarizedunder the Versailles Treaty); and fourth, achieving these three goals would compel Japan to submit. The estimate foresaw a long and primarily maritime war in which the U.S. would immediately assume the strategic offensive. 17 The Joint Planning Committee then began to prepare the Joint War Plan. The first draft, by Krueger and Coffey, contained little except some dates and sizes of forces—the fleet would concentrate in Hawaiian waters at D+10 (i.e., the tenth day of the war) at a strength 25 percent larger than Japan's, and the Army would provide ten thousand troops. It did, however, specify an immediate offensive against the Japanese to destroy their fleet—therefore exemplifying, as at least one historian of War Plan Orange has it, the "Thruster" strategy. (The alternative "Cautionary" strategy foresaw a slower advance across the Pacific, taking small islands as advanced bases.)18

The second draft was written solely by Krueger and was much longer (the estimate of the situation being greatly expanded) and more detailed. The discussion of war aims was Clausewitzian, in that Krueger refused to state specific aims, saying rather that they would depend on the cause of war. He did not, however, believe there would be an unlimited war, inasmuch as he did not

foresee Japan threatening the national existence of the United States. Krueger noted that while the U.S. had the advantage over Japan in manpower, industry, and finance, the distances in the Pacific were a disadvantage to American naval operations. He expected the Japanese to seize American possessions, including the Philippines, Guam, Wake, and Samoa, and then shift to the strategic defensive. He concluded that the United States would be forced, accordingly, to the offensive in order to maintain or regain its western Pacific possessions and establish superiority in the Far East. He also felt that the U.S. would have to target Japanese naval forces and also its economic life (through embargoes, blockades, etc.). ¹⁹

Navy missions remained the same in the second draft, but the Army's were more specific. The Army was to generate fifty thousand troops by D+10 and an additional, unspecified contingent by D+30. It would garrison the Marshalls and Carolines (relieving Marines already there), recapture Guam, and conduct additional joint operations as required. Krueger also specified the command relationships involved; he believed that unity of command was necessary—which was not the accepted view at the time—and he proposed creation of a Joint United States Asiatic Expeditionary Force (USAEF) under one commander.²⁰

Krueger's second draft is of particular interest in several respects: it envisioned Japanese actions as they would actually occur in 1941 and 1942; it recognized Japanese economic vulnerability; and it recommended the advance across the Central Pacific that would in fact be conducted by Admiral Nimitz in World War II. However, it was probably unrealistic in 1923 to expect the Army to have fifty thousand troops available in Hawaii at D+10, unless mobilization had already occurred; Krueger did not address that problem. In addition, his worksheets suggest that he expected the Marines to have garrisoned the Carolines and Marshalls, notwithstanding his estimate that the Japanese would try to take all American possessions; he seems not to have considered that those islands would have to be retaken. Finally, he never clearly stated the scope of operations. Despite its unwillingness to state war aims, the document looked like an all-or-nothing proposition for total war. Perhaps the greatest flaw in these early drafts (and in the final approved plan) is that the restrictions of the Washington Naval Treaty made it unlikely that the Navy could successfully take the actions envisioned. In sum, the plan was infeasible.

Krueger's ideas can be traced in his fifth draft of the plan (the third and fourth having been submitted by Navy members of the Joint Planning Committee). This version, dated 28 February 1924, was much sparser than his previous effort. It is apparent that Krueger's earlier suggestion of unity of command had encountered opposition. His new paragraph on command specified, in an apparent attempt to clarify matters and mollify naval planners, that the com-

mander in chief of USAEF would, during the initial phase, be the Commander in Chief, U.S. Fleet, and that during the "Subsequent Phase" either an Army or naval officer would be designated by the president as joint commander. Other changes retained some of the problems of the earlier drafts. First, the naval forces to be gathered in Hawaii at D+10 were to be 50 percent greater than the Japanese, as opposed to the 25 percent mentioned earlier (a strength advantage that would require the entire U.S. Navy to achieve). In addition, Manila was now to be reinforced; the potential reconquest operation had been dropped. Also, this draft would have had the Army pre-stock supplies and equipment for the initial fifty-thousand-man contingent in the Philippines. The planning committee had obviously changed its assumptions; it now expected the Philippine garrison to hold Manila Bay until the Navy arrived with reinforcements.

The last draft, submitted in response to a 10 July 1924 Joint Board directive to revise the interservice command relationships, was also written by Krueger. This version dropped the idea of unity in command; Krueger was clearly ahead of his time on that issue. There were now three phases—Initial, Second, and Conditional Subsequent—the last being any actions required should the sea and air campaign against Japan's navy and its economic base fail. Each service would create a single command for all its forces in the theater, and a joint staff would be formed for the Army and Navy commanders. The Army would no longer be responsible for retaking Guam or providing troops to relieve the Marine garrisons in the Carolines and Marshalls. However, another fifteen thousand troops were to be available at D+30 for movement to Pacific locations "to be seized and held." That is, the Army was envisioning being able to provide—within thirty days—almost every soldier it then had on active duty. Krueger's draft was approved, without amendment, by the Joint Board on 15 August 1924. 22

Krueger next turned his attention to the Army Strategic Plan Orange. This document, with its annexes, determined which troops would be mobilized to execute the overall plan, directed the procurement and storage of equipment in the Philippines, and specified the reconquest of Guam as the mission of the troops to be assembled at D+30. Further, the plan asserted that Manila would be reinforced before the Japanese could take it—although the Japanese were expected to land three or more divisions on Luzon within eight days of declaration of war, whereas the fifty-thousand-man reinforcements were not due (in Oahu) until D+10. The way around this problem was to define D-Day as the day the war plan was activated, presumably before the first day of the war; the planners assumed there would be time to mobilize. ²³

Errors of logic abounded in the Army plan. The same paragraph that noted the Japanese could land in eight days also predicted that they would conduct a surprise attack. The paper noted how much more difficult it would

be to gain naval superiority over Japan if Manila had already fallen, yet it acknowledged, as noted, that reinforcements could not arrive on time if mobilization had not occurred well ahead of the outbreak of war, and it assigned no alternative base area if Manila Bay were no longer available. It was already known that Guam could not support the entire fleet. In sum, Krueger and AWPD were assuming away the threat to Luzon and taking for granted that reinforcements would arrive in time. The plan's covering letter (by Krueger) suggests that the planners knew all this: "Although a great amount of work has been given to its preparation, it contains no doubt many small errors and inconsistencies and perhaps a few large ones. In my judgment the plan constitutes a suitable basis for development and I therefore submit it with the recommendation that it be approved. 24 Perhaps, after compromising on the issue of unity of command, the Army planners were simply waiting to try again, in a formal revision to the approved plan. It is interesting to note that the first draft of the subsequent revision gave the Army until D+50 to assemble troops (now 65,000) at Oahu and addressed the possibility that Manila had fallen; however, successive drafts still envisioned massing the entire U.S. fleet in the Pacific, as if there would be no other threat, and seemed to ignore treaty limits on the number of ships. 25

The development of joint war plans such as Orange was not Krueger's only experience in this area; for example, he also observed the joint exercise at the Panama Canal in February 1923. On the basis of his report and those of other observers, the Joint Board announced that it would design future joint exercises itself. This idea was tested in January 1924, and Krueger was the action officer for developing the joint plan and the advisor to the chief Army umpire. Two 1924 exercises tried plans Krueger had helped prepare for defense of the Canal Zone and led to a series of recommended improvements including more troops, ammunition stocks, and capital construction. Both of these Panama Canal exercises were "joint" in that both services participated, but the scenario had them opposing each other, not operating as a team. Krueger served in a similar position in the Grand Joint Exercise in Hawaii in the spring of 1925. On this occasion the two services for the first time acted on the same side, in a joint attack upon the defenses of Oahu. 27

The Naval War College and OP-VI

Armed with this experience in joint war planning, Krueger reported to the Naval War College. Now, for the first time, he would work with war gaming as developed at Newport. His first experience in this realm was in Joint Problem I, played by his class (apparently individually) from March to May 1926. His 1926 solution helps to clarify his thinking in the 1924 revision of War Plan Orange.

The General Situation issued for the game postulated that Japan and the U.S. had already mobilized, after a long period of tension. It also stated that the main frictions were related to trade and immigration and that, due to stockpiling, Japan might not require sea communications for up to a year. The situation warned that Japan was capable of a strategic surprise attack, although not against the American continent.²⁸

This Naval War College game addressed some of the problems noted above in War Plan Orange. First, alternative anchorages in the Philippines were named, and second, the game laid down that the Philippine garrison could hold for at least thirty days.²⁹ However, in his solution Krueger stated that it would take at least ten days to assemble all forces and twenty-three to steam to the Philippines, by which time, he noted, Manila could have fallen. He emphasized the additional problems the United States would face if the Philippines were lost—the U.S. could not succeed in a naval campaign without some form of advanced base in the Western Pacific. "Blue [is] on the horns of a dilemma, for he must either move across the Pacific before he has superior strength available, in order to save Manila, or wait until his forces are concentrated, and meanwhile see Manila fall into Orange hands."³⁰

In his analysis of "friendly" courses of action, Krueger argued that Orange was inferior to the U.S. in all areas except troop strength and would become more so as time went on. He concluded that in order to avoid giving the Japanese the tactical advantages of defending against an amphibious invasion, the U.S. fleet had to sortie immediately to the Philippines and defeat the Japanese fleet before Manila fell; the troops required to retake Guam, the Marshalls, and the Carolines could be transported once the advanced base had been secured. Krueger also refused to make plans for the deployment of Army troops from Hawaii: future operations would "depend so largely upon the outcome of the operations of the Blue Battlefield, that it would be futile to predict how [they] should be executed."³¹

Krueger's solution to Joint Problem I, written about a year after War Plan Orange, is useful in that it expands on the reasons for discounting the need to retake Manila, addresses mobilization and deployment schedules, and examines the defense of the U.S. and the Philippines. In addition, Krueger outlined again in the problem many of the conditions that would lead to war with Japan in 1941, foresaw Japanese operations against the Marshalls, Marianas, and Carolines, and predicted great difficulty in defeating the Japanese if they took what would have been the advanced base at Manila. Finally, in his paper Krueger remained unwilling to discuss war aims or to propose actions that would limit U.S. flexibility. However, this game was not particularly joint other than in coordinating Navy and Army air assets. The student had only to determine the proper

method of deployment. The problem Krueger would develop as a faculty member in 1928 went on actually to address joint overseas operations.

When in 1928 Krueger reported to Newport as a faculty member, the presidents of the Army and Navy war colleges had agreed to cooperate in the development of a joint overseas problem to be played at both schools. Krueger became the hiaison with the Army War College. To judge by correspondence between the two presidents, the development of the problem was not smooth. Rear Admiral Joel R.P. Pringle envisioned four goals: revising methods for joint planning, examining the problems of coordination, testing command relationships, and exercising the provisional *Joint Operations Landing in Force* (a locally produced text). While Pringle was concerned with the staff process, Major General W.D. Connor seemed to focus on problems he saw in command relations and in the evolution of the Blue-Orange confrontation before the start of the problem. Nonetheless, the game—designated Operations Problem VI, or OP-VI—was duly played in May 1929. It may be assumed that Krueger, the only Army faculty member at the Naval War College, played a major role in developing the Army portions.³²

As completed, OP-VI was truly a joint proposition, with the students having to consider loading, transporting, and debarking Army forces in an opposed landing. They were also required to design air operations and naval gunfire support. The problems arising in War Plan Orange as to the mobilization and movement of troops before the fall of Manila were set aside (despite the concern of General Connor); the city was assumed to be already in Japanese hands. The students were freed thereby to concentrate on operational and tactical problems as opposed to those of a strategic nature. The mission given was "to capture Luzon, by joint operations beginning one December [i.e., 1 December], in order to gain a base (Manila Bay) from which further operations may be undertaken to isolate Obange." 33

At the outset Blue had some 55,000 troops in the southern Philippines. However, the Blue estimate assessed the Orange forces as already having one hundred thousand troops on Luzon and that 350,000 Blue troops would be required to retake that island. Blue was seizing additional southern islands, which it planned to develop as a base area. The commander in chief of the Blue fleet, or COMINCH, decided he would need from April until November to build up the forces required. The Commander, Philippine Force, a subordinate of COMINCH, was given command of all Blue army and naval forces in the Philippines area and was assigned a series of naval as well as military missions to complete before November. The naval tasks included cutting Orange lines of communication to Luzon, and among the military missions was establishing air bases within range of the island. All command relationships were based on the principle of paramount interest. 35

The new game went far beyond the one Krueger had played in 1926. Command relationships and missions were established so that all commanders were required to consider and execute land, air, and sea operations. The problem was realistic in that it acknowledged damage to the Blue fleet, difficulty in retaking Luzon, and a requirement for land-based air and thus airfields somewhere in the Philippine Islands, preferably on Mindoro. It also foresaw the need to take a series of smaller islands to interrupt Orange communications. These missions had not been envisioned in the initial mission to COMINCH—just as they had not been addressed in the actual 1925 War Plan Orange—but they were clearly implicit.

The plan for the game assault on Luzon envisioned landings in the Batangas area south of that island to establish airfields and then in Lingayen Gulf and on Bataan in order to take Manila. Detailed plans for these landings were written by the student players after consultations with Krueger and other Naval War College faculty members. Several letters survive in which Krueger and the assistant commandant of the Army War College exchanged information. The naval officer on the Army War College faculty observed, "The joint problem is a wonder and explains the failure of so many previous joint undertakings.... Krueger [has] done some wonderful work." 37

Krueger's other major duty at the Naval War College was teaching joint operations and delivering a series of lectures on World War I strategy. The joint operations lecture was over seventy pages in length; the latter series, collected, was over three hundred pages long, and Krueger thought about publishing it. ³⁸ It was in OP-VI, however, that Krueger made a significant and lasting impression on the U.S. Navy. The game was played for most of the 1930s, with updates for changes in technology. Each group of students would spend more than a month working on the problem, and each group of graduates would add to expertise in the fleet. In fact, the estimate it contained of the Japanese situation needed little revision when war broke out in 1941. The events described in the game scenario were actually to occur, largely as written, and the process of retaking Luzon unfolded much as in the game, with airfields on Mindoro and secondary landings at Batangas and on Bataan.

Army War Plans Division, 1934-1938

Upon his return to the AWPD, Krueger was again thrown into the process of developing joint war plans. This time, as the division's executive officer, Krueger was the senior Army officer on the Joint Planning Committee. He would later, as chief of the AWPD, have a seat on the Joint Board. All papers produced by the division passed through his hands before going to the chief; upon assuming the latter duties, he had to approve them. Thus, in these years

Krueger had oversight over all aspects of Army joint war planning—but this time he had far greater experience in naval matters.

The Joint Board had approved in 1928 a new Orange Plan, which remained in place, with many changes, until the mid-1930s. The plan retained some aspects of the 1925 version in that it envisioned an immediate offensive riposte toward the Philippines in response to Japanese aggression. However, OP-VI had already demonstrated that the 1925 and 1928 Orange Plans would lead to severe damage to the American fleet. ³⁹ In addition, a 1933 joint exercise raised serious doubt as to the ability of the fleet to make the transpacific passage. ⁴⁰ Little had been done, however, to change the plan until 1934, when Japan left the League of Nations and gave notice that in 1936 it would abrogate arms limitations treaties.

In 1932 Captain S.W. Bryant, USN, had become chief of naval planning and in July 1933 Admiral Standley the Chief of Naval Operations. Both of these men had worked with Krueger in previous assignments. The mid-1930s has been called "an era of harmony among the war-planning agencies. An atmosphere of shared values fostered agreement on large issues and settlement of details by mutual accommodation or at least by orderly debates that yielded results all parties could accept." Perhaps the relationships Krueger had forged with these and other naval officers, as well as his knowledge of naval operations and limitations, account for some of the new cooperation.

Both Bryant and Standley, however, were "Cautionaries." They believed that the Navy could not save Manila and that War Plan Orange should call for seizing Truk as the main advanced base, after preliminary operations in the Mandated Islands. The Navy did not show its new concept to the Army until early 1935, when Brigadier General Stanley Embick, who was known for opposing an immediate offensive against Japan, became Chief, AWPD. The opening for the Navy—besides Embick's arrival—was a memo from General MacArthur, Army Chief of Staff, asking for a revision of the plan due to changes in Army command structures. MacArthur also wanted to add a Pacific Coast Theater to control the mobilization and embarkation of troops for Hawaii. By 1935 the Army was ready to take a slower approach to war with Japan.

Embick soon energized Army War Plans to look for staging bases required before an assault on the Philippines. He was even willing to consider not retaking the Philippines at all. ⁴⁵ AWPD coordinated with Navy War Plans on the issue. Although Bryant was gone by spring, another friend of Krueger, Rear Admiral Pye, was now director, and another colleague, Captain Coffey, was on the Navy planning staff.

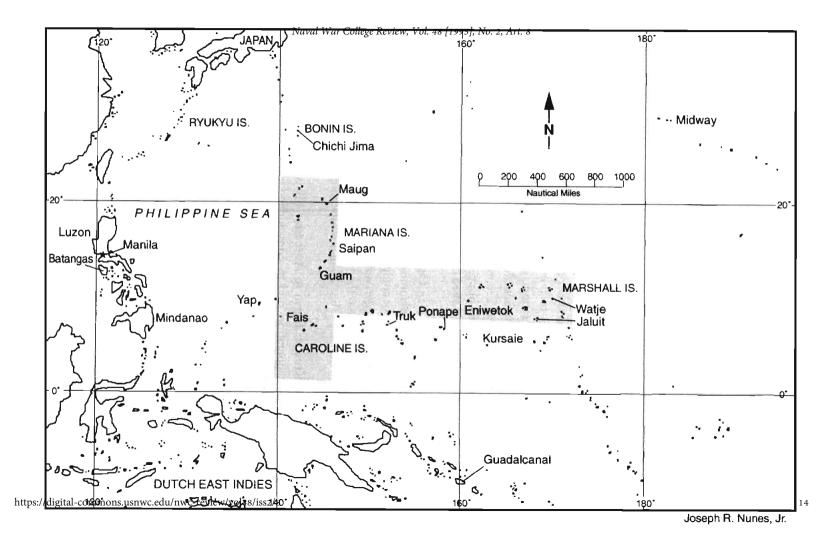
The Joint Planning Committee rapidly approved the Navy's plan, and Krueger signed the memo to the Joint Board recommending the change. Other amendments followed, but they did not affect the general concept. The new plan was much more realistic than those of 1925 and 1928. The forces in Manila

were now only to hold the mouth of Manila Bay "as long as possible," and their commander was to expect no reinforcements. The first Army force to be generated was now only 7,500 men, to be taken from an active Army division and made available in San Francisco on the twelfth day after mobilization, or M+12. Larger forces were not required until M+20 (12,000 more men), M+60 (30,000 more), M+90 (50,000 more), and M+105 (as needed). In addition, for the first time, Plan Orange now required that all forces be trained for amphibious operations. 46 MacArthur tacitly agreed to the expected loss of the Philippines.

Interestingly, the Joint Board approved the new, slower-paced plan in May 1935 as a revision to the 1928 plan rather than as a whole new document. Embick, in a letter to MacArthur, defended it as a change to "the initial deployment" of Army troops rather than as a material change to the concept for sending expeditionary forces to the western Pacific. He downplayed the significance of the planned operations in the Carolines and Marshalls prior to any move to the Philippines. In fact, the revision opened the possibility of direct attack on Japan from the bases secured in the Carolines. The newly approved Orange Plan, with its "island-hopping" approach to the Philippines, crafted under Krueger's supervision, looked much like the war that had been envisioned in OP-VI.

The next change to War Plan Orange arose almost immediately, from the efforts of the Army and naval planning staffs to work out the practicalities of the new revision. The Army did not complete its detailed planning until the summer of 1936, by which time Krueger was Chief, AWPD. A formal revision was approved in May 1936, partly as the result of a joint exercise conducted in that year to test the new war plan, but no major aspects of the plan were altered.

In this period Krueger began to synthesize his years of experience in war planning and joint operations and to study independently the concept of war planning itself, especially in the case of Japan. The result was three significant documents, the first completed less than a week after the Joint Board approved the 1936 revision to War Plan Orange. This hundred-page study evaluated Japanese courses of action in case of a Pacific war. Instead of the normal focus on Guam and the Philippines and a Japanese strategic offensive, Krueger thought that, notwithstanding limited offensive operations, the Japanese would take the strategic defensive. That is, after establishing a defensive line, the Japanese would defend it, forcing the U.S. to try to pierce its perimeter. Specifically, Krueger cited the Marianas as a key part of the Japanese war effort. The Marianas with the Carolines and Marshalls formed a large T (see map) masking the Philippines, protecting the sea lines of communication between Japan and the Dutch East Indies, and threatening the flank of any fleet movement toward the Philippines or directly from Hawaii to Japan. Krueger termed this zone the "main line of



resistance"; only after it was penetrated would the Japanese be required to offer a major fleet battle. 50

Krueger also noted that all these islands were within flying distance of each other. He specifically listed the islands large enough to support bomber squadrons—Chichi Jima, Maug, Saipan, Guam, Yap, Fais, Truk, Ponape, Jaluit, Kursaie, Wotje, and Eniwetok. He noted that if a plane flew over the Marianas chain from Japan to Yap, the longest overwater flight would be 550 miles, while from Saipan to Jaluit in the Marshalls the longest was 525 miles. The islands could therefore support each other or a long-range air movement.⁵¹

Krueger went on to discuss three possible Japanese courses of action. Each was part of a defensive strategy; each included the conquest of the Philippines, Guam, and the Aleutians (if not Alaska); and each required the Japanese to inflict heavy losses among American capital ships in order to create a more equitable situation for a major fleet engagement. The islands he had listed were to be used as air and submarine bases for raids on the American fleet. The first course of action would be the capture of Hawaii and Alaskan islands, which would lead to a campaign of attrition against the American fleet. The second alternative was to occupy the Mandated Islands and Alaska and then operate against Hawaii and the Pacific Coast. The third course was the same as the second but with more emphasis on defending the conquered assets and less on attrition of the American fleet. S2

The rationale for the first course, Krueger thought, would be the hope that the American people were too pacifistic to support a long war for the purpose of regaining Hawaii. The Japanese would expect the U.S. in that case to negotiate a conclusion or simply accept the loss. Krueger did not believe that Japan expected to follow this course of action but that "if opportunity beckons too hard Orange will succumb and make the attempt." He believed instead that the Japanese would adopt the second course. Their forces would then not be as dispersed as in the first and would not try to defend each and every Mandated island as in the third. The Japanese would focus their efforts on the T described earlier but would not strongly defend the Marshalls as a group; instead, they would develop the islands that had the highest military potential. Forces in the Aleutians would then threaten the American flank, discouraging an advance through the North Pacific and forcing the U.S. to the southern route to the western Pacific, guarded by the Marianas and Carolines. 53

The paper is interesting in many respects. First, it indicates that Krueger was thinking along the same lines as his naval colleagues. Second, it shows him once again accurately foreseeing many elements of the Pacific war; the islands and defenses he described are the same as or much like those in the Navy's actual Central Pacific campaigns of World War II. Moreover, his view of the islands as air bases and his observation that a plane could fly from one to another forecast

what was to be the great limiter of advance in the Southwest Pacific—the operating range of land-based fighter aircraft. Finally, he envisioned the defensive strategy and hope for negotiation that ultimately motivated the Japanese attack on Pearl Harbor and their Centrifugal Offensive in 1941–1942.⁵⁴

The second key document of his tenure as Chief, AWPD, was written a year later, in October 1937. In the meantime Krueger had overseen some significant changes in the way the Army would mobilize for war. Before 1936, mobilization had been based on the requirements of specific war plans. Thus, whole new units for specific tasks might be created and deployed before National Guard units were mobilized and before some active formations had even been brought up to wartime strength. This method of mobilization had caused problems in the 1925 War Plan Orange and was part of the reason the Navy was ready for immediate action while the Army required a period of time to be ready for deployment. In October 1936, therefore, the Army implemented the Protective Mobilization Plan, under which the first mission of the armed forces was to protect the nation as it geared up its war effort. A balanced force would be mobilized with the mission of covering the United States, Hawaii, and the Panama Canal. 55

It appears that this new policy of mobilizing first to defend the U.S. and only thereafter to undertake overseas operations was the spark for a 28 October 1937 memo that Krueger personally delivered to the Chief of Staff.

For some time there has been serious doubt in my mind as to the soundness of the Joint Army and Navy Basic War Plan—Orange (1928) as amended. This doubt has been intensified by events now taking place in the Far East. Moreover, the possibility that the plan referred to may be put into execution if the Far Eastern Situation should at any time be such as to involve us, has filled me with such grave apprehension that I feel duty bound to bring it to your attention.

The present plan offers but one course of action for the United States in case of a Blue-Orange war; namely, a prompt strategic offensive against Orange across 7,000 miles of sea, via the Mandate Islands. No alternative course of action is provided. In other words . . . the President would be given no choice other than to discard the offensive proposed in the plan or approve it [regardless] of the consequences in the light of—

- a. The issues involved:
- b. The international situation:
- c. Our domestic situation; and
- d. Our state of military and naval preparedness;

any one of which might have a material bearing on the line of action the United States should adopt.

The international situation today is changing with kaleidoscopic rapidity. No one can predict today what the alignments in Europe and Asia will be tomor-

row. . . . Yet the plan, disregarding these considerations, projects a series of detailed successive operations far into the future and into a theater thousands of miles distant from the Continental United States. . . .

It is also probable that the war envisaged in the plan under discussion will involve the maximum war effort of the United States. Unless, however, our people felt that their vital interests were at stake, and this is improbable, we could scarcely expect them to support an offensive war such as that envisaged in this plan. Moreover, we are today in the midst of a profound social revolution which has gradually gained more and more in extent during the past decade. Hence, the staggering toll of such a war as that envisaged in the plan might well strain our political and social structure beyond the breaking point. In any case, what would we gain, even if we were victorious, if America were ruined in the process?

Under this [plan], practically the entire resources of the country would be committed to the support of very distant, very risky offensive operations that are primarily Naval, without due regard to the fact that such offensive operations may not suffice, or may even fail. Furthermore, the wisdom of allotting so much of our limited Regular Army, especially antiaircraft artillery units, and units of the GHQ Air Force, to support such an offensive in a distant theater, before similar units are organized, trained, and equipped to replace them in the United States, is open to serious question. . . . Should the offensive fail or should some other unforeseen contingency arise . . . the security of United States territory might be seriously jeopardized by reason of the fact that such a large proportion of these units had been diverted to expeditionary forces. ⁵⁶

This is a remarkable discourse on the state of war planning in 1937. It is obvious that the Protective Mobilization Plan could not protect the U.S. if the war plan then in effect were executed in its entirety; nor would the U.S. be in a position to fight a two-front war. In light of the state of public opinion in 1937 in regard to war and European intervention, Krueger had some basis for questioning the strength of popular support. He also challenged the plan to defeat Japan by primarily naval means—"history does not record a single instance of any first-class military-naval power having ever been subdued primarily by such action." He recommended an entirely new plan that would simply establish a readiness posture and provide alternative courses of action for various contingencies. The plan had to be flexible, feasible, realistic in light of the world situation, and "above all else, it should be in harmony with our national ideals and policy."57 The idea of contingency plans rather than preset sequences of actions is clearly a development of his solution to Joint Problem I at Newport in 1926, in which he asserted that follow-on missions could not be specified until the political situation had clarified itself.

The response of the Chief of Staff was almost immediate. On 3 November he sent to the Chief of Naval Operations a retyped copy of the letter over his own signature, with very few changes other than deletion of the emotional

reference to social revolution. On 5 November Stanley Embick, now a major general and the Deputy Chief of Staff, sent a memo to AWPD directing it to prepare for the Joint Board a memorandum recommending that War Plan Orange be rescinded and a new Orange Plan be created that provided for the defense of the U.S. and thereafter for contingency courses of action. On 10 November the Joint Board agreed that the 1928 War Plan Orange should be cancelled immediately and directed the Joint Planning Committee to produce a new document and, subsequently, contingency plans to go with it.⁵⁸

The Joint Planning Committee was immediately deadlocked. Its members disagreed as to general concept, missions, and operations in the western Pacific, and they could not come to consensus. Krueger's old "Thruster" colleague, Captain Coffey, was the senior naval member of the Committee and tried to sustain the offensive war approach. On 30 November the Committee sent two separate drafts to the Joint Board, but that group also found itself stalemated. On 7 December it directed the Committee to start over, this time providing very specific guidance. The result was the same. The next draft, sent to the Joint Board on 27 December, had two columns each for missions, concepts, and Pacific operations—one the Army draft, the other the Navy proposal. Again, the Joint Board could not agree. Finally, General Embick and Rear Admiral J.O. Richardson were charged with drafting a new plan. They took the last Joint Planning Committee draft, chose the passages they wanted and struck out the others, accepting either the Army or the Navy proposal, paragraph by paragraph. The new plan was approved by the Joint Board on 21 February 1938. 59

The new approach, then, was a compromise between the two services, but it met the criteria established by Krueger in his memorandum of 28 October. The key assumption was that there would be a period of tension but that Japan would strike without warning. Another postulate was that the U.S. would have enough naval strength to operate westward of Oahu. The concept for waging the war was to exert, by primarily naval means, progressively more severe military and economic pressure. In the mission statements can be sensed the divergence of opinion between the services. The joint mission was to defeat Japan "while conserving the resources of the United States and protecting United States' territory." The Army was to defend the continent, prepare for contingencies, and support the Navy. The Navy was to defeat Japan's forces, interrupt its sea communications and protect those of the U.S. and its allies, and support the Army. Specific Army missions were the defense of the West Coast, the occupation of the Aleutians, and the protection of Oahu and the Panama Canal. The Navy was authorized to operate against Japanese forces in the western Pacific so long as lines of communication were secure. 60 Command relationships were not specified.

On 22 November, during the drafting of the new plan, Krueger wrote his third significant memorandum on war planning of this period—possibly as advice to his subordinates on the Joint Planning Committee. His opening comment was pure Clausewitz: "The first and most critical decision which the statesman and the highest military authority must make in connection with any war is to determine the nature of the war." He argued that a plan must take account of political objectives, international considerations, and other issues at stake. Whether a war was to be limited or unlimited had also to be considered and, if the latter, whether the population would support it. "If unlimited war is beyond the strength of a nation, ... then disaster will overtake the nation that engages in it." War plans, Krueger continued, had to allow the nation first to mobilize and then to take whatever courses of action were required at the time. He felt there should be a mobilization plan, a concentration plan to achieve the state of readiness required, and then a number of tentative operations plans meant only to show in a general way what things could be done. Such an approach, he felt, did not limit options to the defensive but allowed in fact the greatest freedom of action. In a direct rebuff of the Navy position, he argued that its proposals went beyond mobilization, concentration, defense, and preparation, and that they tended to involve the United States in larger wars. "Let us not forget," Krueger ended, "Napoleon's assertion that he never had a plan; that France and Germany each had a plan, but that beyond the respective concentrations, both failed."61

This memo was Krueger's final important input to the war planning process before he left AWPD in July 1938. His impact had been significant. Not only had he stimulated a drastic revision of the plans for war with Japan, calling on his extensive personal knowledge of Japan's power, options, and likely actions as well as of the requirements of war in the Pacific, but his principles for war planning had affected the rest of the "color-coded" plans. In December 1937, during the revision of Plan Orange, the Japanese sank the gunboat USS Panay; later that month President Roosevelt authorized the first talks with the British Admiralty, and in January 1938 the first discussions were held with the Canadians. Events had finally forced the war-planning machinery to recognize, as Krueger had implied, that Japan might not be the only enemy in a future war and that the U.S. could have powerful allies. Later that year efforts began that resulted in the Rainbow Plans; these and future plans were based on the current international situation, not a frozen set of assumptions.

Of greater interest to the modern officer is the resemblance of Krueger's method of war planning to the approach used today by the Joint Staff and the unified commanders. Krueger's insistence on flexibility, political direction, economic and diplomatic action, and contingency plans bears striking

resemblance to Adaptive Planning and Flexible Deterrent Options. Krueger recognized that the inflexible war plans of World War I and those developed by the U.S. Army and Navy in the 1920s and 1930s would have forced the nation into total war and required commitment of the vast majority of active forces to a single campaign, leaving none for the defense of the continent or for a second, simultaneous effort.

Krueger's career itself foreshadowed modern joint ideas. From the early 1920s to the late 1930s he served in a succession of positions that added to his experience of and contacts with the Navy. He could never have appreciated the flaws of the contemporary war-planning method had he not spent time in close association with naval officers. The result was input that resulted in a War Plan Orange requiring no essential changes until 1935. He was then active in the revision of that plan to reflect a more cautious approach, and ultimately its abandonment in 1938. Additionally, Krueger played an important role in producing a wargame series that trained Army and naval officers for a decade in the methods of joint planning and landing force operations and that helped maintain focus on war in the Pacific.

Walter Krueger's prescription for planning and his views on joint command were dramatically new in his time and did not receive full acceptance, but in the past decade they have become standard procedure for the U.S. military. They anticipated the modern war-planning community's approach, which is based on the current situation, contingencies, and political decision making—and they took shape in a period in which the foundations were laid for the joint warfare edifice that is being constructed today.

Notes

- 1. E.B. Potter, Nimitz (Annapolis, Md.: Naval Institute Press, 1976), p. 136.
- 2. See Edward Miller, War Plan Orange (Annapolis, Md.: Naval Institute Press, 1991), passim. See also National Archives (hereafter NA), Record Group (RG) 165 War Plans Division, General Correspondence, 1920–1942, boxes 264–73 "Color Plans," and NA, RG 407 Administrative Services Division, Ops Branch, Special Projects—War Plans "Color" 1920–1945. The latter are the classified file copies of the plans.
- 3. Military History Institute (hereafter MHI), File 224-28, "The Basic War Plan," Remarks delivered at the W.P.D. Conference, Army War College (AWC), 12 January 1922; Krueger Papers, box 21, file: Articles and Speeches, "Observations and Reflections on the Situation in Germany," a lecture at the AWC, 28 September 1922, and "The Military System of the German Empire," a lecture at AWC, 24 October 1922; Krueger Papers, box 22, folder WWI Corr. and Materials, "Evolution of the German War Plan of 1914," a lecture at AWC, January 1923; and Krueger Papers, box 21, "The Conditions of Success in War as Illustrated by Hannibal's Campaigns in Italy," a lecture at AWC, 20 March 1923. This lecture was later published in Coast Artillery Journal, but the copies in the Krueger papers are undated. Although this last lecture was dated in 1923, it is clear that he also gave it in 1922. See Krueger Papers, box 21, Brig. Gen. E.F. McGlachlin, "The Art of Command, Part III," a lecture at the AWC, 17 December 1921, p. 3, where he notes that Krueger will give a lecture on Hannibal. In his talk on war planning Krueger advised students as to what a joint war plan should contain but made no comments on the process.
- 4. Krueger Papers, file 1, box 1, letter in German dated 22 June 1922 addressed to the Chief, German Archives, thanking him on the eve of Krueger's return to the U.S. for his assistance; Krueger Papers, box 13, Detached Service Record. This is a handwritten record kept by Krueger from 1914 to 1942 detailing all assignments, leaves, promotions, and temporary duties.

- 5. NA, RG 165, War Plans Division, General Correspondence, 1920-1942, box 51, file 867-1.
- 6. All dates pertaining to Krueger's tours at AWPD are from NA, RG 165, Records of the Army War Plans Division, Subject and Name Index, microfilmed as series M1080, roll 10, subject: Krueger, and from his Detached Service Record (see endnote 4, above).
- 7. Ibid., pp. 4, 5, and 8. "Harmony of thought" may have meant, in the modern vernacular, "sanity check."
- 8. Ray S. Cline, The United States Army in World War II: The War Department: Washington Command Post: The Operations Division (Washington: Office of the Chief of Military History, 1951), pp. 14-7.
- 9. Edgar F. Raines, Jr., and David R. Campbell, The Army and the Joint Chiefs of Staff: Evolution of Army Ideas on the Command, Control, and Coordination of the U.S. Armed Forces, 1942-1985 (Washington: U.S. Army Center of Military History, 1986), p. 2.
 - 10. Cline, p. 20.
 - 11. Ibid.
 - 12. Ibid., pp. 31-4.
 - 13. Raines and Campbell, pp. 3-4.
- NA, RG 165, box 149, file 3740-1, Memo by Krueger, "Relations Between the Army and Navy,"
 August 1937, p. 3.
- 15. NA, RG 165, box 85, file 2138, packet of memoranda from April 1923 to July 1924, all entitled "Safeguarding Plans and Projects"; box 77, file 1727, memorandum, subject: Defense Projects and War Plans, 22 May 1924.
- 16. NA, RG 165, Records of the Army War Plans Division, subject and name index, microfilmed as series M1080, roll 10, subject: Krueger, cards 2 and 3; RG 165, box 77, file 1727-2, memorandum, subject: Defense Projects and War Plans, 22 May 1924; RG 165, box 85, file 2138, Safeguarding Plans and Projects, 24 July 1924. Krueger observed General "Billy" Mitchell's bombing of a former German battleship in September 1923 and submitted a report, RG 165, file 1430, 8 September 1923; unfortunately, the report in sinsing from the files. See also RG 165, box 71, files 1347-1, 1347-2, Annual Reports of the AWPD, 1924 and NA, RG 165, box 77, file 1727-7, memorandum "Present Status of War Plans," 10 April 1926; box 71, file 1347-2, "Status of War Plans and Defense Projects," 11 December 1924.
 - 17. NA, RG 225, series M1421, Records of the Joint Board, roll 9, Joint Board (hereafter JB) 325-207.
- 18. NA, RG 165, box War Plan Orange, file 2720-22. This packet of papers is a development file for the 1928 revision but includes drafts of the 1924 version. One of the first pages is a table of contents. The first draft by Krueger and Coffey is undated but was probably from fall 1923. It also appears to be an incomplete copy, ending abruptly on page 4. See Miller for discussion of the terms "Thruster" and "Cautionary."
 - 19. NA, RG 165, file 2720-22, 2d draft, 7 November 1923, pp. 2-3.
 - 20. Ibid., pp. 5-11.
 - 21. Ibid., 5th draft, 28 February 1924, passim.
- 22. Ibid., item 8, "Draft by Krueger," 15 July 1924, passim; JB 325-228, annotation on copy of Joint War Plan Orange, indicating approval 15 August 1924.
- NA, RG 407, box 69, file 230, Adjutant General Office, Administrative Services Division, Operations Branch, Army Strategic Plan Orange, 29 January 1925.
- 24. NA, RG 165, box War Plan Orange, file 1991, Krueger, memorandum, subject: Army War Plan Orange, 23 January 1925. Miller suggests that the Army had a surge of interest in saving Manila. He also notes that Army planners soon realized that Manila would probably be lost and that more time would be needed to mobilize troops; see pp. 132-49.
 - 25. NA, RG 165, file 2720-22, item 9, draft 23 September 1926 (Capt. Pye).
- 26. NA, RG 165, box 60, file 1004, packet of documents relating to exercises in the Panama Canal Zone, 1922–1923; box 73, file 1470, packet of documents relating to joint exercises, winter 1923–1924.
 - 27. NA, RG 165, box 76, file 1678, packet of documents relating to maneuvers in Hawaii, spring 1925.
- 28. Krueger Papers, box 21, file NWC Course 1925–26, Joint Problem I—Class of 1926, section 2-26(a), pp. 1-2, and section 2-26(c), Krueger Solution, p. 22.
 - 29. Ibid., sections 2-26(d) and 2-26(a), p.5.
- 30. Ibid., Krueger's solution, pp. 12, 23, and 32. The convention was that the U.S. was "BLUE," the enemy "ORANGE."
 - 31. Ibid., Krueger's solution, pp. 25, 43, and 52.
- 32. MHI, AWC Curricular Archives, file 242-13 is a packet of correspondence between Pringle and Connor for March-August 1928. One of 17 April 1928 sets Pringle's goals, and one of 11 June 1928 appoints Krueger as the Naval War College (NWC) point of contact.
- 33. Naval Historical Collection (hereafter NHC), RG 4, file 1438, OP-VI, 1438-A, pp. 1-4 and annex C, p. 2.
 - 34. Ibid., OP-VI, 1438-B, section 4, pp. 5-6, and 1438-C, p. 22.