REORGANIZING FOR GLOBAL WAR: GENERAL MALIN CRAIG AND THE TRIANGULAR INFANTRY DIVISION, 1935-1939

A Monograph

by

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ABSTRACT

REORGANIZING FOR GLOBAL WAR: GENERAL MALIN CRAIG AND THE TRANSFORMATION OF INFANTRY DIVISIONS, 1935-1939, by MAJ John A. Womack, 42 pages.

The United States Army infantry division became one of the keys to Allied victory in the Second World War, the first truly global conflict for American land forces. Officially adopted in 1939, the triangular infantry division model was the product of many years of hard work, testing, and persuasion by senior leaders of the United States Army. General Malin Craig, Chief of Staff of the Army from 1935 to 1939 was one of the most powerful advocates for transformation of the infantry division table of organization. Inheriting an army with very little combat capability in 1935, General Craig took on the task of modernizing the Regular Army after years of downsizing and neglect. He saw an opportunity in the expanding federal budgets and threats of renewed global conflict that characterized the late 1930s. His strategic vision, which linked national military priorities to tactical capabilities, became the centerpiece of a program to modernize army plans, equipment and organizations for forward defense of the United States. Developed over a career that spanned the Spanish-American and First World Wars, and included command and staff assignments from platoon to corps levels, General Craig's strategic vision featured streamlined, strategically mobile and tactically maneuverable infantry divisions with modern equipment as part of the nation's first line of defense. During his tenure as Chief of Staff, he faced resistance to change from within and outside the Army. Despite these obstacles, General Craig was able to set the conditions for the Army to adopt a more strategically mobile and tactically maneuverable infantry division organization just prior to the United States' entry into the Second World War.

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ACRONYMS

AEF	American Expeditionary Force
AGF	Army Ground Forces
CSA	Chief of Staff, United States Army
FSR	Field Service Regulations, United States Army
GHQ	War Department General Headquarters
PID	Provisional Infantry Division/Proposed Infantry Division
USMA	United States Military Academy

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INTRODUCTION

What transpires on prospective battle fields is influenced vitally years before in the councils of the staff and the legislative halls of Congress. Time is the only thing that may be irrevocably lost, and it is the thing first lost sight of in the seductive false security of peaceful times.

— General Malin Craig, Annual Report of the Chief of Staff, July 1939

When the United States declared war on the Axis powers following the attack on Pearl Harbor in December of 1941, the United States Army faced the prospect of its first truly global war. The 1898 war against Spain introduced the Army to the challenges of expeditionary warfare in two theaters, but operations in Cuba and the Philippines were not conducted simultaneously. The First World War was a truly global conflict for most belligerents, as it may have been from the perspective of the US Navy, but for American land forces it remained a single-theater conflict. Thus it was not until November of 1942 when American divisions began operations in both North Africa and New Guinea, that the US Army experienced a true "world" war. Less than three years later those divisions were settling into occupation duty in Germany and Japan.

Among the many keys to Allied victory in the Second World War was the US Army infantry division, the centerpiece of American land forces. As opposed to their more famous, and more specialized, counterparts such as armored and airborne divisions, infantry divisions fought sustained campaigns as the main combat element of corps and armies in every theater, under all imaginable conditions. Sixty-seven of these divisions were manned, armed, trained and shipped to theaters of war from both coasts over a period of less than three years, all by an army that could not have fielded a single full-strength division in 1939.¹

¹George C. Marshall, *Biennial Reports of the Chief of Staff of the United States Army, 1 July 1939* – 30 June 1945 (Washington, DC: Center of Military History, United States Army, 1996), 4; Peter R.

How did this happen? How was the United States Army able to emerge from a twentyyear period of neglect and rapidly expand to the fighting strength necessary to win a global war? The answer is, of course, that countless hours of thought and work by millions of men and women ultimately made such a feat possible. All of that effort might have been for nothing, however, if it had not been for the determination and vision of General Malin Craig, the 13th Chief of Staff of the United States Army. As Chief of Staff of the Army from August 1935 to July 1939 General Craig had more influence on the transformation of US Army infantry divisions than his relative absence from the historical record suggests. After failing to change the division structure early in his tenure as Chief of Staff, General Craig worked to make structural changes that allowed the Army to rapidly transform the organization of infantry divisions prior to the United States' entry into the Second World War. Thus General Craig, while he was not able to fully implement changes to the infantry division during his time as Chief of Staff, created the conditions that allowed the rapid conversion and mobilization of new divisions prior to and during the Second World War.

The Army's ability to win a war either at home or abroad was far from assured during the years between the two World Wars. Almost an entire generation of senior leaders, both military and civilian, struggled to return the US Army fighting strength throughout the interwar period. They faced a daunting challenge. Mass-media coverage of the horrific casualties and high monetary cost of the First World War combined with the promise that it had been the "war to end all wars" fuelled public distrust of the military and distaste for military spending. In this context, military leaders who suggested any growth or modernization, or even resisted scaling back the military typically received an openly contemptuous reception in the halls of the United States Congress. Even General John J. Pershing, the most widely respected military officer in the United

Mansoor, The GI Offensive in Europe: The Triumph of American Infantry Divisions, 1941-1945 (Lawrence, KS: University Press of Kansas, 1999), 35.

States following the war, was obliged by Congress to oversee cuts to Army strength and readiness that he considered dangerous and ill-advised.²

General Pershing's successors as Chief of Staff did not fare much better. As the national mood gradually became hostile to both militarism and big government throughout the 1920s and early 1930s, the Army's senior leaders were obliged to plan for future conflicts with an increasingly smaller budget and pool of manpower. Ironically, it was the Great Depression that created an opportunity to do more than plan for a modern US Army. When a stock market crash brought the economy to its knees in 1929 the national mood began to shift yet again, and with the election of President Franklin D. Roosevelt and the beginning of the New Deal, a new era of government spending began. Public perception of the Army began to change as well, as Army officers became the public face of a key New Deal program, the Civilian Conservation Corps. General Douglas MacArthur, who served as Chief of Staff for the first half of the 1930s made use of this slowly opening window of opportunity to modernize the Army by establishing the GHQ Air Corps, securing the purchase of modern airplanes, and creating a rational system for integrating the National Guard and Organized Reserve into the Regular Army in a crisis.³

In his final report as Chief of Staff in 1935, General Douglas MacArthur emphasized the need for the Army to clearly articulate to the civilian leadership of the nation a plan to make effective use of the trickle of money and manpower that had begun to flow in the early 1930s. He stressed the necessity of demonstrating to the taxpayers and their representatives the Army's intent to strengthen the defenses of the United States and her overseas possessions, and not to create an expeditionary, militaristic war machine. These ideas became consistent themes in

²US War Department, *Annual Report of the Secretary of War to the President: 1922* (Washington, DC: Government Printing Office, 1922), 114-5.

³Russell F. Weigley, *History of the United States Army* (New York: Macmillan, 1967), 400, 414; US War Department, *Annual Report of the Secretary of War to the President: 1935* (Washington, DC: Government Printing Office, 1935), 54, 61-4.

reports to the War Department, congressional testimony, and public statements from the Chief of Staff for the remainder of the decade.⁴

Following General MacArthur's unprecedented five year term of office, General Craig immediately began an attempt to capitalize on the momentum his predecessor had worked so hard to generate. His first priority was a revision of war plans. He directed a General Staff study of the existing plans to determine if they were executable with the existing force structure, and discovered that they were not. The most pressing problems were manpower and materiel. The plans for defense of the United States had assumed that the Regular Army would be maintained at an authorized strength of 165,000 enlisted men as the National Defense Act of 1920 stipulated. However, Congress repeatedly slashed the War Department budget in the years following 1920, and Army enlisted manpower was less than as 118,000 by 1935. The same plans anticipated the Army being able to use surplus stocks of ammunition and other supplies that had existed at the close of the First World War, but had been depleted in the intervening years. General Craig was determined to craft both executable plans for the defense of the United States, and a viable force structure to execute them.⁵

A vital element of General Craig's vision for a credible defensive force was a streamlined infantry division. The large, cumbersome infantry division tables of organization which the Allied Expeditionary Force had developed to fight the trench warfare that characterized the First World War were largely unchanged in 1935. Their reliance on massed infantry, a large artillery component, and animal-drawn transportation had made them ideal for the muddy slog of combat

⁴US War Department, Annual Report 1935, 69.

⁵US War Department, *Annual Report of the Secretary of War to the President: 1936* (Washington, DC: Government Printing Office, 1936), 41; US War Department, *Annual Report of the Secretary of War to the President: 1939* (Washington, DC: Government Printing Office, 1939), 23; Mark S. Watson, *Chief of Staff: Prewar Plans and Preparations*, The War Department. United States Army in World War II (Washington, DC: Historical Division, Department of the Army, 1950) 26, 30; Weigley, 417.

in 1918 when progress was measured in inches and feet. They were, however, no longer appropriate in the world that had emerged from the "war to end all wars" – a world that featured wireless communication, rapid-fire weapons, airplanes, tanks, and motorized transportation.⁶

REORGANIZATION DURING AND AFTER THE FIRST WORLD WAR

The US Army's preparations for, and participation in trench warfare in the First World war were the catalysts for change to the division organization that was established in the early twentieth century, and enshrined into law by the National Defense Act. The division table of organization, adopted in 1905 and further modified by the *US Army Field Service Regulations* of 1910 consisted of three infantry brigades of three regiments each, a cavalry regiment, and artillery brigade of two regiments, engineer and signal battalions, and division trains (see figure 1). With a total strength of 19,850 men the 1910 division's small regiments and lack of machine guns were not well suited to the static defensive style of warfare that had developed in Europe after 1914.⁷

The three-brigade division was field tested during the crises on the Mexican border between 1911 and 1916, and modified by General Pershing to organize his mixed force of two cavalry brigades and one infantry brigade for the Punitive Expedition into Mexico in 1916. Thus Pershing was perhaps the only officer who had experience maneuvering a three-brigade division in combat prior to his appointment as commanding general of the American Expeditionary Force the following year. The War Department published an update to the division tables of organization in 1917 which increased the division's firepower by adding riflemen and machine gun companies to the infantry regiments and a regiment of heavy guns to the artillery brigade.

⁶Weigley, 415-6.; US War Department, *Annual Report of the Secretary of War to the President:* 1937 (Washington, DC: Government Printing Office, 1937), 25.

⁷National Defense Act of 1916, Public Law 85, US Statutes at Large 39 (1916): 166; United States War Department, US Army Field Service Regulations 1910 (Washington, DC: Government Printing Office, 1910), 42; Weigley, 348.

The new tables also expanded the signal battalion, added an air squadron and proportionally expanded the trains. The aggregate strength of the 1917 division grew to 28,356 men.⁸



Headquarters and Supply companies not shown in diagram.

Figure 1. The Three-Brigade Division, 1910.

Source: Derived from tables of organization in United States War Department, *Field Service Regulations United States Army 1910* (Washington DC: Government Printing Office, 1910), 42.

The division structure the Department of the Army adopted for the AEF was envisioned as an expedient for a rapidly expanding US Army participating in trench warfare for the first time. General Pershing, as commander of the AEF, approved enlargement of American infantry regiments, because he felt that it was the best organizational solution for a rapidly growing army with a limited number of experienced leaders. The division organization he adopted came to be

⁸John B. Wilson, *Maneuver and Firepower: The Evolution of Divisions and Separate Brigades* (Washington, DC: Center of Military History, 1998), 36-8.

called "square" because it used four of these large regiments, organized in two brigades. This allowed the division commander to attack enemy trenches in a square formation with a regiment forming the assault echelon of each brigade, and another regiment in reserve. The lead regiment sought to penetrate the enemy's defensive line and then allow the other regiment to pass through and exploit the penetration. If the penetration failed, the brigade commander could rotate the fresh regiment into newly formed friendly defensive line to effectively stop an enemy counterattack. Thus the square division was an optimal formation for the particular style of warfare that the AEF encountered in France during the First World War.

Once the fighting ended, the AEF staff and the War Department put forth a significant effort to capture lessons from the First World War and apply them to what they believed would be the future of armed conflict. However, political and social attitudes in the United States turned against expansionism and intervention, and some began to question the need for any military capability after the "war to end all wars." Within this context, two schools of thought emerged within the army over the proper organization of divisions for future wars. The disciples of General Pershing believed, on the one hand, that the division structure adopted for trench warfare was an expedient designed for a specific set of circumstances that the army was unlikely to encounter again. The other camp held fast to the notion that the organizations that had won the First World War were the right ones for all future wars, and should be maintained.

The Square Division

Soon after the United States entered the First World War, Chief of Staff of the Army Major General Hugh L. Scott directed the War College to study the division structure and recommend changes appropriate to the style of warfare the British and French armies were engaged in. The French army had adopted a division model featuring two brigades of two large (approximately 2,500 men) infantry regiments each, which allowed commanders to replace regiments or brigades one-for-one without breaking up existing organizations. A team of War College students studied this model and concluded that American infantry divisions could be reorganized along similar lines by reducing the number of brigades per division from three to two, and the number of regiments from nine to four. The resulting "square" division consisted of two infantry brigades arranged in the French model, supported by a field artillery brigade of three regiments, an engineer battalion, a trench mortar battery, and an air squadron. The animal-drawn trains remained largely unchanged from the 1910 organization. To make up for the loss of combat power caused by reducing the number of infantry regiments by more than fifty percent, the War College recommended increasing the size of each regiment by 459 soldiers to 2,517, as well as an almost tenfold increase in the number of machine guns, enough to provide each infantry battalion with a supporting machine gun company. Additionally the total number of artillery pieces, seventy-seven, remained unchanged from the three-brigade structure, increasing the number of guns available to support each brigade.⁹

On May 29 1917 the War Department sent a small group of officers representing each of the major branches of the army to Europe to study the organization and tactics of the Allied ground forces. Led by Colonel Chauncey B. Baker, an accomplished army logistician, this team, known as the Baker mission, laid the foundations for the AEF's large unit organization. After he assumed command of the AEF General Pershing was given wide latitude to organize his troops as he saw fit upon arriving in France. After careful study of the battlefield conditions and both Allied and German tactics, Pershing and his staff, after conferring with the members of the Baker mission, made changes to the division table of organization proposed by the War College as part of a larger effort called the General Organization Project. This project encompassed the

⁹Wilson, 38, 48; Jonathan M. House, *Toward Combined Arms Warfare: A Survey of 20th Century Tactics, Doctrine, and Organization* (Fort Leavenworth, KS: Combat Studies Institute Press, 1984), 10, 41; United States Department of the Army, Historical Division, *Organization of the American Expeditionary Forces*, vol. 1 of *United States Army in the World War 1917-1919* (Washington, DC: Government Printing Office, 1948), 118.

organization and structure of all units of division size and higher that would compose the AEF, and included recommendations from the AEF staff, the General Staff, the War College, and the Baker mission.¹⁰

Three concepts influenced the overall philosophy of the General Organization project: streamlining, task organizing, and pooling. Streamlining means the elimination of all subordinate units that are not always essential in combat. Task organizing, a related concept, means temporarily reorganizing a unit for a specific mission or task, for example, by attaching assets that are not normally assigned. Pooling means grouping the assets a unit may sometimes need under a higher echelon to be task organized when necessary. An enduring example of this is artillery. Pooled at the brigade or division level, it is available to support companies, battalions, and regiments when called upon, yet these lower echelon units remain unencumbered by the heavy logistical requirements and relative lack of maneuverability of artillery formations. These three ideas, which General Pershing considered fundamental to the effective employment of the Army, drove the design of combat units up to and including the division, and by extension the components of higher echelons at which non-divisional assets were pooled. Thus it became enshrined in practice, if not doctrine, that the organization of divisions would determine the organization of corps and armies.¹¹

The National Defense Act of 1916 had fixed the number of companies in each infantry regiment which meant that the AEF planners who wanted to add a machine gun company to each infantry battalion in the square division could not do so without eliminating rifle companies. The

¹⁰US Department of the Army, Historical Division, Organization of the AEF, 56.

¹¹John J. Pershing, "Wrapper Indorsement" (Forwarding Report of A.E.F. Superior Board on Organization and Tactics to the Secretary of War)," 16 June 1920, 1-2; Kent Roberts Greenfield, Robert R. Palmer, and Bell I. Wiley, *The Organization of Ground Combat Troops*, The Army Ground Forces, United States Army in World War II (Washington, DC: Historical Division, Department of the Army, 1947), 293; United States Department of the Army, FM 1-02: *Operational Terms and Graphics* (Washington, DC: Government Printing Office, 2004), 1-185.

General Organization Project and the War Department collaborated to get around this problem by increasing the number of automatic rifles in each regiment and adding a four-company machine gun battalion to each brigade. The War Department also approved an additional machine gun battalion at the division level, this one with only two companies equipped with motorized heavy machine guns. It also further increased the number of soldiers in each infantry regiment to 2,736. The increased number of infantrymen in each division, together with the addition of larger and heavier weapons which used significantly more ammunition than traditional rifles, meant that the size and carrying capacity of the logistical units supporting the division were correspondingly increased. Thus an increase in manpower and firepower, while it boosted the combat capability of American divisions, also increased their logistical tail, further reducing their mobility.¹²

The General Organization Project also increased the engineer battalion to regiment size, and placed a trench mortar battery under the control of the artillery brigade. Divisional artillery brigades in the AEF were equipped with French-made 75mm and 155mm howitzers, but their tables of organization remained unchanged from the War College proposal. The General Organization Project also eliminated the air squadron in accordance with General Pershing's desire to pool air assets at an echelon above division. The division trains in the August 1917 table of organization were a mixture of animal-drawn and motorized transportation, a compromise designed to accommodate the anticipated shortage of shipping, which limited the number of animals and amount of fodder that could be sent to Europe, and the shortage of available motor vehicles and their attendant drivers and mechanics, which prevented complete motorization. ¹³

The infantry division table of organization recommended by the General Organization Project, which General Pershing approved for use by the AEF, was the result of this consensus.

¹²National Defense Act of 1916, 177; John J. McGrath, *The Brigade: A History, Its Organization and Employment in the US Army* (Fort Leavenworth, KS: Combat Studies Institute Press, 2004), 33-4. ¹³Wilson 53-5.

With an authorized strength of 27,120 men it was the largest division in any army at the time. The War Department adopted the AEF division table for the entire Army, added more infantrymen, and officially published the new table of organization in January of 1918 (see figure 2). The American divisions were so large by comparison to their French and British counterparts, which had started the war with authorized strengths of 15,000 and 18,000 respectively, and whose actual combat strength was significantly lower by 1917, that Allied commanders often used them in place of entire corps formations in the line. ¹⁴

The square division was designed and modified to fight the trench warfare that developed as a result of the military stalemate of the European powers between 1914 and 1917. The division structure emphasized firepower over mobility and symmetry over economy. Each infantry brigade commander controlled two regiments, meaning that the brigade could fight with one regiment and keep the other in reserve or fight with two regiments abreast on a single battalion frontage, leaving the majority of the battalions in reserve. Such a narrow frontage allowed the division to mass artillery and other division assets at the point of penetration in the offense. Once the forward units created a gap in the enemy's defensive line, the brigade could maneuver fresh battalions from the close reserve through the gap to exploit, pursue, or secure the lodgment until the divisional artillery could reposition to support a follow-on attack. The addition of machine gun battalions at both the brigade and division levels provided commanders enough machine gun companies to augment each infantry battalion, or exploit a successful attack with overwhelming firepower.¹⁵

¹⁴McGrath, 35; House, 10-11; US Department of the Army, Historical Division, *Organization of the AEF*, 121.

¹⁵US Department of the Army, Historical Division, Organization of the AEF, 91.



Headquarters and Supply companies not shown in diagram.

Figure 2. The Square Division, January 1918.

Source: Derived from 14 January 1918 division tables of organization reproduced in United States Department of the Army, Historical Division, *Organization of the American Expeditionary Forces*, vol. 1 of United States Army in the World War 1917-1919 (Washington DC: Government Printing Office, 1948), 341.

Through the General Organization Project, the General Staff and the AEF planners had created an infantry division that sacrificed mobility for a lethal combination of mass and firepower. This theory of action seemed to have been validated by American combat experience in 1918, especially the Meuse-Argonne Campaign, during which American infantry divisions were able to effectively penetrate, exploit, and retain the ground they had gained, a feat the Allies had not been able to achieve on a large scale up to that point. While the role of US ground troops in the First World War was relatively minor by comparison to the years of difficult fighting the French and British armies endured, it is certain that the introduction of a fresh and growing army on the Allied side, with divisions organized to seize and retain terrain across the trench lines, played a role in convincing the Germans to end the war before it reached their territory. This fact contributed to the belief among many senior army leaders that the square division, and its manpower-heavy subordinate infantry brigades and regiments, would remain the ideal organization for warfare under any conditions in the future.¹⁶

The Superior Board and General Pershing's Recommendations

The Superior Board, convened in April of 1919 at the AEF Headquarters in France, was headed by Major General J.T. Dickman, the former commanding general of Third Army and one of the AEFs most experienced commanders. The board's mission was to collect and organize all of the results of previous boards and studies from within the AEF and generate a comprehensive set of recommendations for the War Department on tactics and organization based on the experiences of the AEF in combat. To that end it considered all of the data that had been collected during and immediately after combat on a wide variety of topics. The board ultimately submitted a 185-page report through General Pershing to the War Department covering a wide variety of topics including headquarters organization, analysis of each of the separate combat arms, and combined arms operations and organizations, including an analysis of division organization, the administrative services, and logistics. ¹⁷

The board recommended retention of the square division structure because it had been an important feature of the AEF's success in combat during that war. Following his return to the United States General Pershing continued to digest lessons from the war and prepare for testimony before Congress with a small staff which included Brigadier General Fox Conner, Colonel George Marshall, and Brigadier General Malin Craig. Pershing and his staff carefully

¹⁶Wilson, 90.

¹⁷Superior Board, American Expeditionary Forces, "Report of Superior Board on Organization and Tactics," 1 July 1919, 2; Wilson, 83-4.

considered every aspect of the Superior Board report, withholding its release until the congressional hearings were complete in November of 1919. When he finally released the report in 1920, he included an addendum in which he disagreed with the Superior Board on the point of division structure, arguing that a triangular division was much better suited to maneuver warfare, and that the United States was unlikely to fight another static war in Europe. In the same document he specifically warned against the assumption that the square division was the "best organization that could be devised" simply because it had been successful in the First World War.¹⁸

With respect to infantry division organization, the Superior Board acknowledged the need for mobility in future wars, but nevertheless recommended retaining the square organization. The board primarily recommended changes to echelons below division, including the addition of a machine gun company to each infantry battalion as well as retention of the machine gun battalions at division level. It also recommended the addition of a cannon company to each infantry brigade, retention of the entire divisional artillery brigade, and reintroduction of an air service at the division level. The only other addition the board recommended was a military police company at the division level. Significantly, it did not recommend any streamlining or pooling of the square division's assets.¹⁹

In his addendum, entitled "Wrapper Indorsement" General Pershing expressed the opinion that the officers of the Superior Board were too close in time and space to the events of the First World War, and were not looking at the issues from a broad enough perspective. He disagreed with their recommendations with respect to infantry divisions, explaining that the AEF

¹⁸George C. Marshall, "*The Soldierly Spirit*": *December 1880 – June 1939*, vol. 1 of *The Papers of George Catlett Marshall*, ed. Larry I. Bland and Sharon R. Ritenour (Baltimore: Johns Hopkins University Press, 1981), 194, 224; Pershing, "Wrapper Indorsement", 1-2; Forrest C. Pogue, *George C. Marshall: Education of A General 1880-1939* (New York: Viking Press, 1963), 209.

¹⁹Superior Board, 114.

division organization may have been too large and immobile even for the type of warfare it was designed to fight. Pershing believed future wars would be fought in North America, where the open nature of the terrain prevented the densely packed battlefields that characterized the early phases of the First World War in Eastern France and thus would not allow trench warfare to develop. He recommended adoption of the three-regiment triangular division, streamlined with only what was necessary to fight. Such a division could operate as three highly mobile regimental combat teams of infantry and light artillery supported by pooled combat multipliers at division level.²⁰

General Pershing was concerned that enthusiasm about the success of the AEF would blind the army to the shortcomings he had observed in the division organization during the First World War, and lead the War Department to make permanent an organization that was designed as an expedient for a specific set of circumstances. This view was not limited to General Pershing. In fact the original idea for convening the Superior Board to collect the AEF's lessons before demobilization consumed the attention of its leaders came from Brigadier General Lytle Brown, the chief of War Plans Division, who believed that the division, corps, and army organizations that had been designed for trench warfare might be inappropriate for future conflicts in which the US Army might fight.²¹

The National Defense Act of 1920

The National Defense Act of 1920 did not directly address the issue of division organization, but it did create the legal framework in which Army leaders, including General Craig would operate for the next twenty years. For example, the act created the powerful chiefs of

²⁰Pershing, "Wrapper Indorsement", 2, 8; Wilson, 90. General Pershing's concept for regimental combat teams, which was eventually implemented in 1939 by Generals Craig, McNair, and Marshall, continues to dominate the organizational concept for US Army combat units almost 100 years later.

²¹Wilson, 83.

the combatant arms, appointed by the President and interested primarily in preserving the influence of their individual branches. While the language of the Act indicated that the branch chiefs' authority was completely separate from that of the Chief of Staff of the Army, it also removed many of the restrictions on the size and influence of the General Staff which had been imposed by earlier acts of Congress. The National Defense Act of 1920 thus set the stage for General Craig's initial failures in transforming the division structure, and his eventual triumph.²²

The 1920 Act specifically modified the language of its 1916 predecessor, retaining the language that directed the army to be "organized so far as practicable into brigades, divisions, and corps" but eliminating the language that specified the composition of divisions and subordinate units. This removed the obstacle that the General Organization Project had encountered in its 1917 effort to add machine gun units to the infantry division, namely that the number and type of companies and battalions within infantry regiments were established by law, and the army did not have the authority to reorganize them as needed. ²³

The 1920 Act established the offices of chiefs of the combatant branches (infantry, cavalry, field and coast artillery) in accordance with a recommendation of the Superior Board. The board, and Pershing's addendum, had recommended that field army staffs include branch chiefs to assist the commander in the employment of each particular branch in a combined arms team. Pershing had also suggested that the standard staff model be applied to the Department of the Army and the General Staff. The result was that each branch had a general officer, appointed by the President and legally answerable only to the Secretary of War, to advocate for it. The Chief of Staff of the Army, responsible in peacetime only for the War Department General Staff, had no statutory authority over these chiefs, and they were thus empowered to take any

²²National Defense Act of 1920, Public Law 242, US Statutes at Large 41 (1920): 770.

²³National Defense Act of 1920, 759; Annual Report 1922, 113.

disagreements they might have with him over his head to the Secretary, Congress, or, at least in theory, the President.²⁴

Another important feature of the National Defense Act of 1920 was an increase in the authorized size of the General Staff. The 1916 Act had limited the size of the General Staff to thirty-eight total officers, including the Chief of Staff and the president of the War College. Furthermore, it stated that no more than half of the General Staff officers were allowed to be stationed in Washington D. C. at any given time. The 1920 Act increased the total number of General Staff officers to ninety-four, and removed the restriction on the number that could work in the capital. It also clarified the duties of the General Staff making it responsible for plans, training and readiness-related activities of the Army of the United States. These changes reflected another of General Pershing's important recommendations in the AEF final report: the reorganization of the General Staff as an operational headquarters, which helped to produce a shift in the public perception of the General Staff from a potentially dangerous military shadow government to a vital component of the War Department.²⁵

GENERAL CRAIG'S TENURE AS CHIEF OF STAFF

Malin Craig was born on August 5, 1875 in St. Joseph, Missouri. He enrolled in the United States Military Academy on the recommendation of a senator from Pennsylvania, and graduated 13th of 59 in the class of 1898. Commissioned a second lieutenant of Cavalry, he served in Cuba, the American West, and China until 1903 when he attended the Staff College at Fort Leavenworth. Upon graduation from the Staff College he was placed on the General Staff Eligible list, a status that determined much of his later career. After promotion to captain and a tour in the Philippines, Craig attended, then served as instructor at, the Army War College from

²⁴National Defense Act of 1920, 762-4, 769; Superior Board, 12.

²⁵National Defense Act of 1920, 763; Watson, 57.

1909-1911 after which he served in a series of General Staff assignments and with 1st Cavalry Regiment in the Western Department. In 1916 he returned to Fort Leavenworth as an instructor, but was reassigned to the General Staff in 1917. Craig deployed to France as chief of staff of Major General Hunter Liggett's 41st Division, a typical assignment for General Staff officers, and was again reassigned as chief of staff of I Corps. In those two key jobs he gained first-hand experience of the problems the AEF encountered trying to organize, equip, and train large units in a theater of war. Between May 1917 and June 1918 was promoted through four ranks from captain to brigadier general.²⁶

His brief stint as a brigade commander was cut short by the armistice in November 1918, and he found himself assigned a chief of staff once again, this time with the Army of Occupation, Third Army, from 1918 to 1919. Third Army was commanded by General J. T. Dickman who would later head the Superior Board. Its initial mission after the armistice was to move overland from France to Germany. As chief of staff, Brigadier General Craig encountered the problem of coordinating road and cross-country movement of the large and heavily encumbered divisions and corps that had been designed to specialize in trench warfare. During a two-week period in November 1918, he coordinated the movement of two corps of three divisions each over more than 110 miles through France, across Luxemburg, and into Germany. It was likely this challenging assignment that convinced Craig of the need for infantry divisions that were not limited by the speed of men and animals on foot. In these critical assignments during and after the First World War, Craig was in regular contact with the AEF staff, among whose members were Brigadier General Fox Connor, Brigadier General Lesley J. McNair, and Colonel George C. Marshall.²⁷

²⁶"General Malin Craig," Cavalry Journal 33, no. 135 (July 1924), 329.

²⁷"General Malin Craig," *Cavalry Journal* 33, no. 135 (July 1924), 329-30; GCM Papers, Vol. 1, 144. United States Department of the Army, Historical Division, *American Occupation of Germany*, vol.

Upon his return to General Staff duty in 1919, Craig served on General Pershing's staff until the AEF was officially deactivated at which time Pershing became Chief of Staff of the Army, and Craig reverted to his permanent rank of major. In 1920 he briefly served as director of the Army War College before being promoted once again to colonel and assuming command of the District of Arizona. Following promotion to brigadier general in 1921 he was assigned as commandant of the Cavalry School, and he returned to the Philippines to command the Coast Artillery District of Manila in 1923. A promotion to major general followed, at which rank he served as the second Chief of Cavalry from 1924 to 1926, and then as Assistant Chief of Staff, G-3 of the Army from 1926 to 1927. From 1927 to 1935 General Craig commanded IV Corps Area at Governor's Island, NY, the Panama Canal Division, the Panama Canal Department, and IX Corps Area at San Francisco, CA, successively. During these critical years, in which General Craig was almost constantly in command he was in a position to observe the sharp decline in combat readiness and the hollowing out of the Army that were the hallmarks of the fifteen years following the National Security Act of 1920.²⁸

Following a brief assignment as commandant of the Army War College in 1935, he was named the 13th Chief of Staff of the United States Army, assuming those duties and the rank of (four-star) general on October 1. General Craig held the office of Chief of Staff during one of the most challenging periods of transformation for the United States Army. During his four year tenure, the government and people of the United States of America slowly and reluctantly came to realize the certainty of a second global war, and the pressing need for military preparedness. During the period of fiscal austerity that followed the First World War, the Army had observed and tested new or emerging military technologies such as tactical radios, aircraft, tanks,

¹¹ of United States Army in the World War 1917-1919 (Washington DC: Government Printing Office, 1948), 8-9.

²⁸Wilson, 110-11.

mechanized cavalry, motorized infantry, and modern small arms. General Craig oversaw an era in which the austerity eased somewhat, allowing a more rapid integration of these innovations into the force. General Craig's devotion to duty and the army did not end after his four-year term as Chief of Staff. Despite the fact that he retired at the end of his four-year term of office in September 1939, he was recalled to active duty two years later to preside over the Secretary of War's Personnel Board. General Malin Craig died from complications of a heart attack at Walter Reed Army Hospital on July 25 1945 while still on active duty, 47 years after he had first taken the oath of office.²⁹

When General Craig assumed the duties of Chief of Staff of the Army in 1935 he inherited an army that had changed very little since 1919. One of his first actions upon assuming the office was to initiate a review of existing war plans. He discovered that they were almost completely unrealistic because they assumed large stocks of equipment left over from the First World War that no longer existed, and because they depended upon the Regular Army, by then a thoroughly skeletonized force, to train and prepare the National Guard and Reserves to fight. Throughout the 1930s, as it became increasingly clear to American leaders that another war in Europe was possible, General Craig became determined to modernize the Army to ensure that it was a capable and credible force that could execute realistic war plans. He faced a dual challenge to his modernization plan. First, he had to overcome resistance to change within the Army from those who believed the organizations that had withstood the test of combat should remain unchanged, and from others who felt that their own powerful positions were threatened by the process of change. Second, General Craig had to reassure an often skeptical US Congress that the

²⁹William Gardner Bell, *Commanding Generals and Chiefs of Staff: Portraits and Biographical Sketches of the United States Army's Senior Officer* (Washington DC: Center of Military History, United States Army, 1983), 122; Michael Robert Patterson, "Malin Craig," Arlington National Cemetery Website, http://www.arlingtoncemetery.net/malincra.htm (accessed March 25, 2014); Obituary of General Malin Craig, *Pittsburgh Post-Gazette*, July 26, 1945.

changes he intended to make were purely for defensive purposes. Although he did not see the results of these changes before he retired, he was able to effectively set the conditions for rapid and wide-ranging changes to the Army, including the restructuring of infantry divisions, on the eve of the Second World War.³⁰

The Infantry Division in General Craig's Strategic Vision

The US Army that General Craig inherited in 1935 was not only incapable of fighting a war overseas, as Congress and the American people intended, but had been hollowed out to the point that it was at risk of being unable to even defend the United States. Already familiar with the perilous state of the force from his multiple operational and strategic level commands in the 1920s and 1930s, his review of the war plans clarified his understanding of the dilemma that the U.S Army faced in an increasingly dangerous world. The war plans that existed in 1935 depended upon nine Regular Army infantry divisions to form the nucleus of a defensive land force composed primarily of National Guard divisions. In their hollowed-out state in 1935, the combat units that comprised the understrength Regular Army divisions could not even be combined to form one full-strength (square) division.³¹

General Craig and Secretary of War Harry Woodring presented a united front to Congress and the President concerning the urgent need for change. General MacArthur, who during his tenure as Chief of Staff had tried to warn the nation about the perilous state of Army ground forces, was largely drowned out by enthusiasm for the airplane, and the illusion that air and naval forces were all that were necessary to defend the United States from trans-oceanic attack. Craig, who as the commanding general of the Panama Canal Division had participated in joint amphibious exercises in the early 1920s harbored no such illusions. His annual reports to the

³⁰Annual Report 1939, 23; Watson, 30.

³¹Annual Report 1936, 41.

Secretary continually stressed the need for stronger coastal defenses, and a highly mobile defensive land force that could, in concert with air and naval forces, prevent a potential enemy from seizing bases from which to attack the continental United States.³²

Such warnings had seemed alarmist in the "seductive false security of peaceful times" of the fifteen years following the First World War, but in the latter half of the 1930s, as the smoke began to rise in both Europe and Asia, and the United States' potential allies began to seem weaker and weaker, American leaders started to take notice. Under Craig's leadership the General Staff pressed ahead with new war plans which called for streamlined Regular Army divisions equipped with modern weapons and motorized transportation to form the core of the Army of the United States. In his final report to the Secretary of War in July of 1939, General Craig, a product of the D.H. Mahan-era United States Military Academy and the Wagner-era General Staff School, argued for the establishment of an "outpost line" running from Alaska through Hawaii, the Panama Canal and the Caribbean. This line would protect the "main position" of the continental United States (see figure 4). While air and sea forces were able to protect the avenues of approach from the main position to the outpost line, it would require up to five full strength, highly mobile divisions to defend the critical nodes along that line, and prevent them from being used as bases to attack the main position.³³

³²Annual Report 1935, 69.

³³Annual Report 1938, 2; Annual Report 1939, 35.



Figure 3. General Craig's Strategic Vision. Source: *Created by author*.

This force, which Craig called an "Initial Protective Force," and which Secretary Woodring termed an "Army in Being," would delay an attacking enemy long enough to allow mobilization of the National Guard and Reserves to defend the main position. Thus streamlined, triangular infantry divisions, lean enough to be deployed strategically, but powerful enough to fight effectively, were an essential element of General Craig's holistic strategic vision. Without discounting the need for adequate naval and air forces, Craig made a strong argument that mobile and maneuverable infantry divisions of the type General Pershing had recommended in 1920 were a vital element of national defense and the American way of war.³⁴

³⁴Annual Report 1939, 4.

A False Start

In the summer of 1929 the Chief of Staff of the Army, General Charles P. Summerall, a former member of the Baker Mission, had initiated a field test of a proposed new organization for infantry organizations based on lessons learned from the First World War. Summerall initially directed 2nd Division, headquartered at Fort Sam Houston, Texas to conduct the test. Texas was an ideal location to test a mobile, motorized force because of its open terrain and low population density. Major General Charles Allen, the Chief of Infantry, objected to this plan, and persuaded Summerall that such a test should not be carried out under the authority of a division commander. Since the test results would affect all infantry organizations in the army, he argued, it should be under his control. With no statutory authority to oppose the Chief of Infantry on that issue Summerall relented, allowing Allen to organize the test at the Infantry School at Fort Benning, Georgia.³⁵

Far from being a bold experiment in large-unit reorganization, the 1929 test resulted only in a few tepid recommendations for changes to infantry battalions and companies. Major Charles Bolte, an instructor at the Infantry School, observed the tests firsthand. Two years later, while he was a student at the Command and General Staff School at Fort Leavenworth, he wrote an individual research paper criticizing the recommendations of the 1929 tests. According to Bolte, there were significant disagreements among the Chief of Infantry, members of the Infantry Board and the faculty of the Infantry School over the tests themselves as well as how to interpret the results. With the exception of the caliber .50 machine gun the scope of the tests had been restricted to weapons that existed in the Army's inventory at the time, and the Infantry School leadership chose not to test any organization using fully motorized transportation. Furthermore, the Major General Allen would not allow the Infantry Board to make any recommendation to the

³⁵Wilson, 126.

War Department that would change the organization of infantry units above the battalion level. In addition, it was Bolte's observation that the leadership of the Infantry School was interested in hurrying the testing process along in order to ensure that the tests were completed before General Summerall retired the following year.³⁶

As a result of these restrictions on the test procedure, the Infantry Board and School did achieve any consensus on the issue of units above the battalion level. The tactical unit-level tests that they did conduct were also limited to a single season of the year and a limited array of terrain at Fort Benning, Georgia. According to Bolte, the thick foliage and underbrush on Fort Benning in the late summer and early fall when the tests were conducted severely limited the effectiveness of both observed artillery fire and machine guns. Without further tests in a variety of terrain and climatic conditions, Bolte asserted, the 1929 tests should not be considered definitive. Furthermore, the conclusions of the Infantry Board that personnel should not be reduced, machine guns should remain pooled at regiment and higher echelons, and that the existing organization was sufficiently mobile, were not supportable given the limited scope of the tests. The true effectiveness of an infantry battalion with fewer soldiers and rifles, and more machine guns, could not be truly tested, Bolte argued, without considering more advanced weapons, motorized trains, and a variety of conditions.³⁷

Shortly after his appointment as Chief of Staff of the Army in October 1935, General Craig began to work on modernizing infantry divisions as part of his comprehensive plan to reorganize ground forces and war plans. His predecessor in the Chief of Staff's office, General

³⁶Charles Bolte. "Should the organization of the divisional infantry as shown in Tables of Organization dated June 30, 1930 be definitely adopted, and if not, what changes therein should be made?" Individual Research Paper. Command and General Staff School, Fort Leavenworth, Kansas, 1932, 2-5. Bolte served as an infantry battalion operations officer and later battalion commander following graduation from CGSS. He went on to command two divisions during WWII, and after the war commanded U. S. Army, Europe and Seventh Army, and became Vice Chief of Staff of the Army.

³⁷Bolte, 9-10.

Douglas MacArthur, had made great progress in building the Air Corps and establishing a command and control structure for defending the North American continent. However land forces had remained virtually unchanged since the end of the First World War. Craig asked the senior commanders of the army for recommendations on how to reorganize divisions to increase mobility and firepower, and to reduce the time necessary for transmission of orders. He discovered that there continued to be very little agreement between the senior leaders, and especially between the Infantry School, the Infantry Board, and the chief of Infantry, all of whom would have to concur to changes affecting the infantry component of divisions. ³⁸

Fifteen years after General Pershing had publicly disagreed with the Superior Board over the utility of the square division in maneuver warfare, the same controversies raged within the Army. Many officers, like General Craig, had risen high enough during the First World War to understand the impact of the square division on trench warfare as well as the transition to maneuver following the armistice. These officers had endured reduction in rank and the trauma of rapidly reduced manpower and budgets during the 1920s. Like General Craig, they had climbed back up the ranks, and were now influential leaders in the Army, but their experiences during the First World War still had a powerful influence on their perception of the needs of the Army. There was a faction who believed, as the members of the Superior Board had, that the institutions and organizations that had proven themselves in combat were equally appropriate for future wars. These officers favored the square division with its overwhelming mass of manpower and artillery. The other faction believed, as General Pershing had, that the next war would be very different from the trench warfare of 1918, and thus would require a very different division organization.

General Craig, who had worked closely with Pershing both during and immediately after the First World War, believed that the United States Army would most likely be employed to

³⁸Harry C. Ingles, "The New Division," *Infantry Journal* 46, no. 6 (Nov-Dec 1939), 522; Wilson, 132.

defend the borders, coastline, and outlying territories of the United States. It would be a war of maneuver featuring tanks and airplanes, but also infantry and artillery combat teams that could maneuver rapidly in the open terrain of North America, or deploy quickly to defend outlying territories. Craig was convinced that, even if the United States never again became entangled in a foreign war, as many hoped, the Army retained a solemn duty to be ready to defend the nation from attack. As the smoke from multiple conflicts in Europe, Africa, and Asia began to rise, the need to modernize ground combat forces seemed more and more urgent to the Chief of Staff.³⁹

It was Major General John B. Hughes, the Assistant Chief of Staff, G-3 who suggested to Craig a way work around the branch chiefs' veto power, and move ahead with modernizing the Army's divisions. Since the division was a combined arms organization, with elements of infantry, artillery, and supporting arms, the Chief of Staff should ignore the claims of the Chief of Infantry to sole jurisdiction over the structure of infantry divisions. This would bypass not only the Chief of Infantry, but the Infantry Board, and the Infantry School, who seemed incapable of agreeing on any changes to the First World War-era structure. General Craig, Hughes suggested, should form his own board from members of the General Staff, who, in accordance with the National Defense Act of 1920, answered only to him, and were empowered to make decisions affecting training, readiness, and war plans.⁴⁰

The Modernization Board

After his initial effort to build consensus within the power structure established by the National Defense Act of 1920 was stymied by senior officers who seemed more concerned about the prestige of their office than the readiness of the Army, General Craig changed his tactics. On January 16, 1936 he created a new organization as General Hughes had suggested. Officially

³⁹Pogue, 313.

⁴⁰Wilson, 126; National Defense Act of 1920, 764.

entitled the "Organization Committee on Modernization of the Organization of the Army" the new board became known simply as the Modernization Board. General Hughes, the G-3, chaired the Modernization Board, and its other members were representatives from each of the General Staff sections. General Craig's initial guidance to the board was to generate recommendations for the restructuring of all large units from division to field army, but the members of the board decided to focus on divisions since, as doctrine and practice from the First World War had shown, the structure of the division would determine what was required from the higher echelons. Since the Modernization Board was concerned with subjects which affected all branches and departments of the Army, no branch chief or branch-specific board would be able to veto their recommendations to the Chief of Staff.⁴¹

The Modernization Board delivered its first report to the Chief of Staff on July 30, 1936. The report recommended that a new set of tests be conducted to determine the best organization for a division equipped with modern weapons such as the M-1 Garand rifle and air-cooled machine guns. It also advocated testing a fully motorized division that would move using no animal power whatsoever. It recommended eliminating the brigade headquarters echelon, and elimination of one infantry regiment, in other words, a triangular division. This combination would allow the Army to increase the effectiveness of ground combat forces without having to ask Congress for more personnel. General Craig ordered the tests to commence the following year, and designated Major General Fox Conner, his former USMA classmate and General Pershing's former Chief of Staff, as his personal representative at the tests.⁴²

⁴¹United States War Department, *Field Service Regulations, United States Army 1923* (Washington, DC: Government Printing Office, 1923), 1; Wilson, 127.

⁴²Wilson, 129. Ingles, 522.
The Provisional Infantry Division Tests

General Craig designated 2nd Division, which had been rejected by the Chief of Infantry in 1929, to conduct the 1937 test. Still based in Texas in a near ideal geographic location for testing the proposed organization in a variety of conditions and terrain, the division was commanded by Major General James K. Parson. Parson's chief of staff, Brigadier General Lesley J. McNair, who had been the AEF chief of artillery in the First World War, meticulously designed the test procedures in order to gain as much data as possible from this unique experiment. The division was reorganized with a table of organization and equipment that the Modernization Board designated the Provisional Infantry Division. From September to November of 1937, 2nd Division, now fully motorized and reduced to a total strength of 13,500 men, maneuvered from Arizona to Mississippi in a test exercise designed to provide the board with information to refine its recommendations. The 1937 test avoided the shortcomings of the 1929 test by fully exploring the possibilities of motorization at all echelons, incorporating new weapons, and operating over as wide a variety of terrain and conditions as possible.⁴³

Major General George Lynch, the Chief of Infantry in 1937 observed the test that year and offered a range of criticisms of the proposed division structure, mostly concerning whether or not antitank guns should be considered infantry or artillery weapons. He also strongly opposed the inclusion of a general officer in command of the division service of supply, arguing that such a high-ranking logistician would confuse the issue of command. He did not, however offer any serious criticism of the main features of the triangular division, including the elimination of an infantry regiment and the two brigade headquarters. Historian John B. Wilson claimed that General Lynch "vetoed" the Proposed Infantry Division because of his objections, however, the

⁴³"Texas Preview," Army and Navy, *Time*, November 22, 1937, 24; Ingles, 523.

fact that the tests continued in spite of his criticisms is evidence of the soundness of General Hughes' concept for the Modernization Board.⁴⁴

Following the 1937 test, an article in the New York Times revealed what the newspaper claimed to be leaked information, namely, that the Chief of Staff, General Craig was preparing to name a committee to rewrite the division table of organization and equipment. This board, the paper claimed, would consist of Major General Fox Conner, Brigadier General George Marshall, and a third officer to be named. General Marshall, who first heard about the committee by reading the New York Times article, commented in a letter to Lieutenant Colonel Walton Walker that such a committee would be a "stacked deck" for the triangular division, consisting of the two men who had represented General Pershing's position on a streamlined division in a 1920 organization board, but had been overruled by officers who agreed with the Superior Board's position. It seems that General Craig had planned to expand the existing Modernization Board by adding Conner, Marshall, and McNair, the unnamed third member from the New York Times article and Marshall's former cabin mate on the sea voyage to establish the AEF in 1917. However, the mythical "stacked deck" never came into play, since General Conner retired for health reasons, and General Marshall was called to more pressing duties in late 1937. As a result, General McNair essentially redesigned the Proposed Infantry Division himself based on the data he collected in the initial round of tests.⁴⁵

McNair's experience in the AEF and relationship with General Pershing had clearly convinced him of the value of streamlining, pooling and task organizing. His 1938 Proposed

⁴⁴Wilson, 130-1.

⁴⁵Wilson, 90, 131. Marshall, vol.1, 572-3. *New York Times*, Nov. 12 1937. General Craig sent Marshall to make final arrangements for General Pershing, whose health was failing in early 1938. By the time General Pershing recovered and Marshall returned to normal duties, Conner had retired for his own health reasons. Ultimately, McNair wrote the final recommended table of organization for the Proposed Infantry Division.

Infantry Division is a study in minimalism. With a total strength of 10,275 it was about a third of the size of the 1918 square division (see figure 3). The most drastic change was elimination of the infantry and artillery brigade headquarters, and reduction of infantry regiments to three. The regiments themselves were roughly two-thirds of the size of their First World War counterparts at 2,329 men each. McNair intended these smaller infantry regiments to make up in firepower what they lacked in mass, using the semiautomatic rifle and light and medium machine guns to achieve an increase in firepower with fewer infantrymen. Machine guns were completely integrated into infantry companies, eliminating the need for the separate machine gun battalions at brigade and division level. Each infantry battalion retained a fourth company for heavy weapons and each regiment gained an anti-tank company.⁴⁶

McNair reduced the divisional artillery to three light battalions, enough to provide a direct support to each infantry regiment. These were initially equipped with twelve 75mm guns each, but intended to receive the 105mm howitzer, which was not available at the time of the 1936 test. A medium artillery battalion for general support, equipped with twelve 155mm howitzers rounded out the divisional artillery. The reduction from three regiments to four battalions was in part a reflection of the trend towards reducing intermediate headquarters using the same logic as eliminating the infantry brigades. It was also a natural result of improving artillery technology. With longer ranges, more rapid rates of fire and fully motorized formations, to include the ammunition train, artillery units were far more capable and responsive to the rapid maneuver of the infantry regiments than the technology of the First World War had allowed.⁴⁷

⁴⁶Greenfield, Palmer, and Wiley, 274-5.

⁴⁷Ingles, 524; Wilson, 132.



Headquarters and Service companies not shown in diagram.

Figure 4. McNair's Proposed Infantry Division, March 1938.

Source: Derived from tables of organization reprinted in Greenfield, Palmer, and Wiley, *The Organization of Ground Combat Troops*, The Army Ground Forces, United States Army in World War II (Washington, DC: Historical Division, Department of the Army, 1947), 274-5.

The engineer regiment was reduced to a battalion and the signal battalion to a company. The assets that were formerly pooled in the square division's sanitary trains were reorganized as a medical battalion, with the exception of the field hospital, which would be pooled at the corps echelon. McNair recommended streamlining out most of the remainder of the square division's trains, based on the theory that infantrymen or gunners could double as truck drivers, and units with motor transportation could move their own supplies. This new feature was considered a mixed blessing by some because it replaced the problems of mobility posed by animal power with a new and different set of problems: the fuel, maintenance, and expertise required to move a large body of troops using motor vehicles. The only unit that McNair added to the division table of organization was a military police platoon. All of the assets that had been stripped out, including reconnaissance, tanks, reinforcing artillery, bridging, and the majority of the logistical support, would come from pooled assets at corps or army level as the division needed them.⁴⁸

The second test, conducted in the summer of 1939 was intended to validate the infantry division table of organization that General McNair had recommended to the Modernization Board based on the data from the 1937 test. Once again General Craig selected the 2nd Division, by this time officially renamed the "2nd Provisional Infantry Division." The 1939 test, also conducted in Texas, was planned and executed by Major General Walter Krueger, the new commander of the 2nd Division. The test successfully validated the PID table of organization, with only minor changes, for example, the addition of mechanics to repair and maintain the larger number of vehicles in the 2nd Provisional Infantry Division, and the consolidation of the regimental bands into a single division band. The Modernization Board prepared the final table of organization from the combined results of both tests as the Proposed Infantry Division. By the time the board presented their results to the Chief of Staff for approval in September of 1939, General Craig had retired. His successor, General Marshall, approved the new table of organization and continued the process of peacetime transformation of the Army that General Craig had begun.⁴⁹

GENERAL CRAIG'S LEGACY IN THE MARSHALL ERA

General George C. Marshall, who officially assumed duties as Chief of Staff on September 1, 1939, approved the new triangular division on September 14 as one of his first official acts, and began the process of converting all Regular Army divisions to the new structure. Adopting the Modernization Board's final recommendations, he made the triangular structure

⁴⁸Greenfield, Palmer, and Wiley, 275, 300; John J. Sayen Jr., *US Army Infantry Divisions 1942-43*, Battle Orders 17 (Oxford: Osprey 2006), 8; Wilson, 55.

⁴⁹Wilson, 132-3.

official for infantry divisions in the Regular Army and, eventually, the National Guard as well. General Marshall oversaw the conversion of all existing divisions, as well as the creation of eighty-three new divisions by the end of the Second World War. With the exception of the sixteen armored divisions and one cavalry division all of them were of the triangular design.⁵⁰

The GHQ Maneuvers

General Marshall assigned General Lesley J. McNair, who had been appointed GHQ chief of staff in July 1940, the task of converting divisions, corps and field armies from paper to combat-ready formations. McNair decided to focus initially on activating corps and field army headquarters, and then to delegate the task of, manning, training and converting divisions to the recently-authorized triangular organization, to the corps headquarters. General McNair designed a series of large-scale exercises in 1940 and 1941 to evaluate the progress of mobilization and training, and to give the newly minted corps and field army commanders and staffs desperately needed experience maneuvering large formations. These maneuvers would also serve as a testing ground for new concepts such as air-ground integration, the newly created armored divisions, and anti-tank unit organizations, as well as a vehicle for General Marshall to evaluate the combat potential of the existing division commanders.⁵¹

The first set of GHQ maneuvers, in 1940, pitted corps-sized elements against one another, and provided a venue for the newly converted Regular Army triangular divisions to be tested in a large-scale exercise. The initial plan for maneuvers in 1941 called for two major events, in the summer a massive two-phase maneuver that would pit Second Army against Third

⁵⁰Mansoor, 35. The armored divisions were triangular in the sense that they used the concept of three task-organized combat teams (called combat commands) organized around regimental headquarters. The administrative structure of the armored divisions however, with one armored brigade, one infantry regiment and artillery split between the echelons, did not resemble the triangular infantry division. 1st Cavalry Division retained the four-regiment table of organization, was reorganized to fight dismounted in the Pacific Theater of Operations during the Second World War.

⁵¹Gabel, 14-15.

Army in Louisiana, and then in late fall a second major exercise that would pose First Army against a reinforced corps to be conducted in the Carolinas. The smaller scale of the second exercise was due to General McNair's desire to gain lessons from an unevenly matched battle. Although none of the participants knew it at the time, the Carolinas Maneuvers of November and December 1941 would be the last peacetime training exercise the US Army would be able to conduct before being drawn into the Second World War.⁵²

The now famous Louisiana Maneuvers in particular provided GHQ with a unique opportunity to evaluate the relative effectiveness of the triangular division. Some of the National Guard divisions that maneuvered with Second and Third Armies in Louisiana had not yet converted and were still organized in the two-brigade square model. Moreover, complete motorization, a feature of the triangular organization, was not yet a feature of either the unconverted National Guard divisions, or of the newly full-strength corps and field army headquarters. Despite the misgivings of a few senior officers, the triangular infantry division, having been thoroughly tested in the previous decade, proved to be an agile and maneuverable base for the Army's larger formations and a dependable partner organization for the new armored divisions.⁵³

If there had been questions about the future of the triangular infantry division following the GHQ maneuvers of 1941, those questions were erased after Pearl Harbor. The National Guard divisions which had remained square during the maneuvers were quickly transformed to the triangular model. The only Regular Army division which the War Department allowed to retain the square organization was the Hawaiian Division, although the commander of the Hawaiian Department, Lieutenant General Walter C. Short, eventually requested that it be converted into

⁵²Gabel, 129.

⁵³Gabel, 186-7.

two triangular divisions, the 24th and 25th, by augmenting the four existing infantry regiments with two National Guard regiments.⁵⁴

In any case, the sudden entry of the United States into the Second World War brought many of the other lessons of the GHQ maneuvers into prominence. Air-ground integration, antitank doctrine, the structure and employment of armored divisions, mechanized reconnaissance, and command and control of echelons above division all became more important to US Army leaders in the months following Pearl Harbor than the largely settled question of infantry division organization. Army Ground Forces, under McNair's leadership, continued to make adjustments to the infantry division structure throughout the Second World War based on lessons from maneuvers and combat, as well as the tightening pinch of resource and manpower shortages later in the war. The basic structure of three infantry regiments and four supporting artillery battalions remained unchanged throughout the entire conflict.⁵⁵

Innovation from that point forward followed General McNair's model, inspired by General Pershing's ideas expressed in 1920, of pooling limited assets, tank destroyer battalions for example, at echelons higher than division, so that they could be massed or distributed at the discretion of operational level commanders. The next major test of these concepts came in November of 1942 as triangular US Army infantry divisions deployed to the Pacific and embarked for Operation Torch, the trans-Atlantic invasion of Axis-occupied North Africa, which would put the triangular infantry divisions of the United States Army, alongside their armored counterparts, into combat with the battle-tested German and Japanese armies for the first time. General Craig's strategic vision which included streamlined divisions able to deploy rapidly for regional forward defense, had produced a force which was agile enough to fight a global war.

⁵⁴Wilson, 155; Marshall, *Biennial Reports*, 4-5.

⁵⁵Greenfield, Palmer, and Wiley, 217.

The Triangular Division

By July of 1941 the triangular division had taken the form in which it would fight the Second World War. The new division table of organization was not identical to General McNair's 1938 recommendation. The Modernization Board did not cut infantry units quite as deeply as McNair had recommended, and they continued to be concerned about the need for specially trained drivers and mechanics to operate the motorized transportation. They did not wholeheartedly agree with McNair that infantrymen and artillerymen should drive and maintain their own vehicles. The new tables published alongside the new *FM 100-5: Tentative Field Service Regulations* of 1939 were issued at a time when the modern rifles and howitzers whose higher rate of fire justified the reduction of personnel and units were not yet available to the entire army. As the new organizations were field tested alongside corps and army formations, and new equipment became available, the tables of organization changed multiple times during 1940 and 1941.⁵⁶

All Regular Army infantry divisions and, following Pearl Harbor, National Guard divisions ultimately transformed from the square table of organization to the table that was approved in June 1941 (see figure 5). With a total strength of 15,245 it was about fifty percent larger than McNair's original Proposed Infantry Division, but still only half the size of the 1918 square division. Infantry regiments increased by more than 1000 men each, primarily due to the increase in the size of infantry squads from 8 to 12 men by the Infantry Board, which retained authority to modify infantry regiment and below organizations until 1942. Heavy weapons companies increased in size as well because of the reintroduction of the caliber .50 machine gun, which had been replaced as an anti-tank weapon by the 37mm gun, but was reintroduced as a

⁵⁶Greenfield, Palmer, and Wiley, 283.

heavy machine gun. The 1941 table of organization fully implemented the four-battalion divisional artillery organization, authorizing 105mm howitzers for the light direct support battalions. It also added a battery of 37mm anti-tank guns to the general support battalion, providing the division commander with an organic anti-tank reserve. ⁵⁷

A new feature of the 1941 division was the divisional reconnaissance troop, a motorized cavalry organization that reintroduced cavalry to the infantry division for the first time since 1917. The 1941 triangular division retained the engineer and medical battalions as well as the signal and quartermaster companies from the Proposed Infantry Division, however all of these organizations increased in manpower. The only element of McNair's recommended division that decreased in size in 1941 was the military police platoon. The army finally had an infantry division structure that was tactically maneuverable, consistent with its fighting doctrine, and organized to make use of maneuverability and firepower of motorized vehicles and modern weapons such as long-range artillery and heavy machine guns. Although the army would continue to modify the size and composition of the triangular infantry division throughout the Second World War, it retained the same basic structure that General McNair recommended to the Modernization board in 1938.⁵⁸

⁵⁷Wilson, 144.

⁵⁸Organization of the AEF, 124; Greenfield, Palmer, and Wiley, 300.



Headquarters and Supply companies not shown in diagram.

Figure 5. The Triangular Division, July 1941.

Source: Derived from tables of organization reprinted in Greenfield, Palmer, and Wiley, *The Organization of Ground Combat Troops*, The Army Ground Forces, United States Army in World War II (Washington, DC: Historical Division, Department of the Army, 1947), 274-5; and Jonathan M. House, *Toward Combined Arms Warfare: A Survey of 20th Century Tactics, Doctrine, and Organization* (Fort Leavenworth, KS: Combat Studies Institute Press, 1984), figure 8.

The need to emphasize firepower over mass in order to preserve mobility, a hard-won lesson from the trenches of the First World War, was the overarching theme of the design of the triangular infantry division. Advancements in weapons technology allowed the Modernization Board to design an infantry division that was smaller and more mobile, but capable of occupying the same frontage as the square division. The M1 Garand semi-automatic rifle, the 155mm howitzer, the 81mm mortar, and the M1919 air-cooled medium machine gun became key factors in the successful reorganization of the infantry division. Together, these weapons systems allowed infantry formations to concentrate firepower without adding riflemen to the battle area or guns to the gun line.

In accordance with General Craig's guidance and the Modernization board's recommendations, the new infantry division would be unencumbered by the large trains and logistical infrastructure that had made the square division incapable of rapid maneuver. For example, reduction of the medical regiment represented a major change from the way divisions had operated in World War I. Triangular divisions would maintain the capability to triage and evacuate casualties, but hospitals were pooled at corps level and above. The quartermaster battalion would focus on motor transportation and maintenance, while the more static logistical units that represented the remainder of the square division's quartermaster regiment would also be pooled at a higher echelon. All of this was designed to allow the division to move quickly over wide expanses of terrain and bring the firepower of its modern weapons to bear.⁵⁹

Post-WWII Assessment

The triangular infantry division became the workhorse of the United States Army in the Second World War. The basic division structure that General Pershing recommended in 1920 for maneuver warfare in North America proved to be adaptable to warfare on a global scale. From the deserts of North Africa to the jungles of the South Pacific to the hedgerows of Western France, the US Army triangular infantry division proved to be both agile and resilient. Afteraction reviews of the Second World War by the General Board, an organization similar to Pershing's Superior Board of 1919, recommended retention of the infantry division organization,

⁵⁹Wilson, 127; Christopher R. Gabel, *The US Army GHQ Maneuvers of 1941* (Washington, DC: Center of Military History, United States Army, 1991), 10. Ingles, 525.

with minor changes to account for improvements in weapons and technology between 1939 and 1945.⁶⁰

In subsequent years, tanks and antiaircraft artillery were added back in to the infantry division and the size and structure of other supporting arms changed several times. None of this was an indictment of the triangular division model, in fact, it can be seen as a validation of the basic philosophy of streamlining, task organizing, and pooling that Generals Craig, Connor, Marshall, and McNair learned in the AEF under General Pershing. Changes to the size or composition of supporting arms within the division simply reflect lessons learned or opinions revised about what assets a division needs all the time and what can be attached from a higher echelon pool when necessary. The basic triangular structure of US Army infantry divisions remained unchanged until 1955 when it was replaced by the Pentomic Division. When the Pentomic Division was itself replaced by the Reorganization Objective Army Divisions in 1962, the triangular structure returned, albeit based on brigades rather than regiments. In fact the basic organizational concept of combat teams, built on a base of ground maneuver forces and artillery, and task organized with pooled assets from higher echelons, remains the foundation of US Army combat units today.⁶¹

CONCLUSION

Unlike the more famous officers who both preceded and succeeded him as Chief of Staff of the Army, there are not likely to be shelves of books written about General Malin Craig. He seems to have been a humble, goal-oriented leader who effectively communicated his vision to

⁶⁰United States Forces European Theater, General Board, Study Number 15: "Organization, Equipment and Tactical Employment of the Infantry Division", January 1946, http://usacac.army.mil/cac2/cgsc/carl/eto/eto-015.pdf (accessed April 2, 2014), 16.

⁶¹United States Army Command and General Staff College, Combat Studies Institute, "Sixty Years of Reorganizing for Combat: A Historical Trend Analysis", CSI Study No. 14 (Fort Leavenworth, KS: USACGSC Combat Studies Institute, 1999), 7, 26.

various audiences, placed talented people in positions to achieve results, and allowed others to take the credit for success. His ability to cultivate cooperative rather than adversarial relationships with civilian strategic leaders, key members of Congress, and branch chiefs allowed him to contribute more to the US Army's eventual victory in the Second World War than many historians have acknowledged. General Craig worked quietly, and sometimes unnoticed to increase the military readiness of the United States during his four-year term as Chief of Staff of the Army. He engaged in what must have been a frustrating struggle to reconcile his convictions about how to prepare the Army and the nation for the next war with the priorities of public opinion, the White House, the United States Congress, and his fellow Army officers. Transformation of the infantry division table of organization was only one of several interconnected initiatives General Craig promoted during his tenure as Chief of Staff, but it was among the most important.

The global war that the United States fought from 1942 to 1945 was very different from the defensive scenario General Craig envisioned. In fact, General Marshall had to completely rewrite war plans and change the force structure several times after the Pearl Harbor attacks changed the strategic priorities of the nation from defense of the homeland and supporting allies to complete mobilization of military forces for combat on a global scale. However, had it not been for General Craig's efforts to alert the Congress and the institutional Army to the pressing need for modernized land forces, including reorganizing the outdated square infantry division, the Army would not have been able to implement the rapid expansion and deployment of land forces that occurred in 1942 and 1943. General Malin Craig worked tirelessly to lay the foundation of strategically mobile land forces from 1935 to 1939, and he deserves much of the credit for setting the conditions for the US Army to fight and win its first truly global war.

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BIBLIOGRAPHY

"Arms Before Men," Time. Army and Navy. August 22, 1938.

- Clay, Lieutenant Colonel (Ret.) Steven E. *The Arms: Major Commands and Infantry Organizations vol. 1 of US Army Order of Battle 1919-1941.* Fort Leavenworth, KS: Combat Studies Institute Press, 2010.
- Craig, Malin. "A Message to the Cavalry." Cavalry Journal 33, no. 137 (October, 1924), 391.
- Gabel, Christopher R. *The US Army GHQ Maneuvers of 1941*. Washington, DC: Center of Military History, United States Army, 1991.
- General Board, United States Forces, European Theater. Organization, Equipment and Tactical Employment of the Infantry Division. Washington, DC: US Government Printing Office, 1945.

"General Malin Craig." Cavalry Journal 33, no. 135 (July 1924), 329-30.

"General Malin Craig". Pittsburgh Post-Gazette. Obituaries. July 26, 1945.

- Greenfield, Kent Roberts, Robert R. Palmer, and Bell I. Wiley, *The Organization of Ground Combat Troops*, United States Army in World War II: The Army Ground Forces. Washington, DC: Center of Military History, 1947.
- House, Jonathan M. Toward Combined Arms Warfare: A Survey of 20th-Century Tactics, Doctrine, and Organization. Fort Leavenworth, KS: Combat Studies Institute Press, 1984.
- Ingles, Harry C. "The New Division." *Infantry Journal* 46, no. 6 (November-December 1939), 521-9.
- Kauffmann, J. E. and H. W. Kaufmann. *The Sleeping Giant: American Armed Forces Between the Wars*. Westport, CT: Praeger, 1996.
- Kedizor, Richard W. "Evolution and Endurance: The US Army Division in the Twentieth Century." Santa Monica, CA: RAND Corp., 2000.
- Mahon, John K., and Romana Danysh. *Infantry Part I: Regular Army*. Army Lineage Series. Washington, DC Office of the Chief of Military History, United States Army, 1972.
- Mansoor, Peter R. The GI Offensive in Europe: The Triumph of American Infantry Divisions, 1941-1945. Lawrence: University Press of Kansas, 1999.
- Marshall, George C. Jr. "*The Soldierly Spirit*": *December 1880 June 1939*. Vol. 1 of *The Papers of George Catlett Marshall*. Edited by Larry I. Bland and Sharon R. Ritenour. Baltimore: Johns Hopkins University Press, 1981.

——. "We Cannot Delay": July 1, 1939 – December 6 1941. Vol. 2 of The Papers of George Catlett Marshall. Edited by Larry I. Bland, Sharon R. Ritenour and Clarence E. Wunderlin Jr. Baltimore: Johns Hopkins University Press, 1986.

-. Biennial Reports of the Chief of Staff of the United States Army, 1 July 1939 – 30 June 1945. Washington, DC: Center of Military History, United States Army, 1996.

- Matheny, Michael R. *Carrying War to the Enemy: American Operational Art to 1945*. Norman: University of Oklahoma Press, 2011.
- McFarland, Keith D. and David L. Roll. *Louis Johnson and the Arming of America: The Roosevelt and Truman Years*. Bloomington: Indiana University Press, 2005.
- McGrath, John J. *The Brigade: A History, Its Organization and Employment in the US Army*. Fort Leavenworth, KS: Combat Studies Institute Press, 2004.
- Parks, Floyd L., Papers. Eisenhower Presidential Library and Museum, Abilene, KS.
- Pershing, John J. The Final Report of Gen. John J. Pershing, Commander-in-Chief, American Expeditionary Forces. Washington, DC: US Government Printing Office, 1920.
- ------. "Wrapper Indorsement (Forwarding Report of A.E.F. Superior Board on Organization and Tactics to the Secretary of War)." 16 June 1920.
- Pogue, Forrest C. *George C. Marshall: The Education of a General 1880-1939.* New York: Viking, 1963.
- Roosevelt, Franklin D. *Complete Presidential Press Conferences of Franklin D. Roosevelt.* New York: Da Capo Press, 1972.
- Sayen, John J. Jr. US Army Infantry Divisions 1942-43. Battle Orders 17. Oxford: Osprey 2006.
- Stewart, Richard W., ed. *The United States Army in a Global Era*, 1917-2003. Army Historical Series: American Military History vol. II. Washington, DC: Center of Military History, 2005.
- Superior Board, American Expeditionary Forces. "Report of Superior Board on Organization and Tactics." 1 July 1919. US Army Military History Institute.
- "Texas Preview". Time. Army and Navy. November 22, 1937.
- United States Army Command and General Staff College, Combat Studies Institute. "Sixty Years of Reorganizing for Combat: A Historical Trend Analysis", CSI Study No. 14. Fort Leavenworth, KS: USACGSC Combat Studies Institute, 1999.
- United States Congress. House. Committee on Appropriations. *Hearings before the Subcommittee* of the Committee on Appropriations on the Military Establishment Appropriation Bill for 1938. 75th Cong. 1st sess. March 15, 1937.

-. House, Committee on Appropriations. Hearings before the Subcommittee of the Committee on Appropriations on the Military Establishment Appropriation Bill for 1940.76th Cong., 1st sess. January 17, 1939.

- ——. House. Committee on Appropriations. Hearings before the Subcommittee of the Committee on Appropriations on the Supplemental Military Appropriation Bill for 1940 76th Cong., 1st sess. May 16, 1939.
- United States Department of the Army. FM 1-02: Operational Terms and Graphics. Washington DC: Government Printing Office, 2004.
- United States Department of the Army, Historical Division. Organization of the American Expeditionary Forces. Vol. 1 of United States Army in the World War 1917-1919. Washington, DC: Government Printing Office, 1948.
- ------. The Occupation of Germany. Vol. 11 of United States Army in the World War 1917-1919. Washington DC: Government Printing Office, 1948.
- United States Forces European Theater. General Board. Study Number 15: "Organization, Equipment and Tactical Employment of the Infantry Division". January 1946. http://usacac.army.mil/cac2/cgsc/carl/eto/eto-015.pdf (accessed April 2, 2014)
- United States War Department. A Manual for Commanders of Large Units (Provisional). Washington, DC: Government Printing Office, 1930.

----. Field Service Regulations, United States Army 1905. Washington, DC: Government Printing Office, 1923.

- ——. *Field Service Regulations, United States Army 1910.* Washington, DC: Government Printing Office, 1910.
- -----. Field Service Regulations, United States Army 1923. Washington, DC: Government Printing Office, 1924.
- ——. FM 100-5: Tentative Field Service Regulations, United States Army 1939, Operations. Washington, DC: Government Printing Office, 1939.
- ------. *Report of the Secretary of War to the President: 1922.* Annual Reports, War Department. Washington, DC: Government Printing Office, 1922.
- ------. *Report of the Secretary of War to the President: 1935.* Annual Reports, War Department. Washington, DC: Government Printing Office, 1935.
 - ——. Report of the Secretary of War to the President: 1936. Annual Reports, War Department. Washington, DC: Government Printing Office, 1936.

-----. *Report of the Secretary of War to the President: 1937.* Annual Reports, War Department. Washington, DC: Government Printing Office, 1937.

- —. *Report of the Secretary of War to the President: 1938.* Annual Reports, War Department. Washington, DC: Government Printing Office, 1938.
- Watson, Mark S. Chief of Staff: Prewar Plans and Preparations. The War Department. United States Army in World War II. Washington, DC: Historical Division of the Department of the Army, 1950
- Weighly, Russell F. *Eisenhower's Lieutenants: The Campaign for France and Germany 1944-45*. Bloomington: Indiana University Press, 1981.
- ———. *History of the United States Army*. New York: Macmillan, 1967.
- Wilson, John B. *Maneuver and Firepower: The Evolution of Divisions and Separate Brigades.* Washington, DC: Center of Military History, 1998.