

# The US Army War College Quarterly: Parameters

---

Volume 13  
Number 1 *Parameters* 1983

Article 30

---

7-4-1983

## MOBILITY VERSUS FIREPOWER: THE POST-WORLD WAR I INFANTRY DIVISION

John B. Wilson

Follow this and additional works at: <https://press.armywarcollege.edu/parameters>

---

### Recommended Citation

John B. Wilson, "MOBILITY VERSUS FIREPOWER: THE POST-WORLD WAR I INFANTRY DIVISION," *Parameters* 13, no. 1 (1983), doi:10.55540/0031-1723.1337.

This Article is brought to you for free and open access by USAWC Press. It has been accepted for inclusion in The US Army War College Quarterly: Parameters by an authorized editor of USAWC Press.

# MOBILITY VERSUS FIREPOWER: THE POST-WORLD WAR I INFANTRY DIVISION

by

JOHN B. WILSON

© 1983 John B. Wilson

Russell F. Weigley argues in his study *Eisenhower's Lieutenants* that the American Army traditionally relied upon firepower rather than mobility on the battlefield. He cites the success of the "big, strong, resilient" infantry divisions employed during the Civil War and World War I over the mobile units that had to be substantially reinforced to win World War II. He further contends that after World War I the infantry division continued to emphasize firepower until the eve of the second world conflict. Without considering the validity of Professor Weigley's argument for the Civil War or World War II, a close examination of the infantry division in the wake of World War I may shed a different light on the reasons for the retention of the "square" unit during the interwar years.<sup>1</sup>

In organizing divisions for the 20th-century battlefield, armies have normally opted for one of two basic structures: two combat teams—to employ in column to penetrate and destroy the enemy—or three teams—one for attack, one for the envelopment, and one for a reserve to support the attacking or enveloping force. Option one generally stresses firepower at the expense of maneuver while the triangular option, with its inherent reserve, facilitates maneuver.

Firepower controlled the structure of the World War I infantry division so it could penetrate the German defenses and defeat the enemy. Four infantry regiments and two machine-gun battalions, organized into two

infantry brigades, buttressed by a three-regiment field artillery brigade and the appropriate combat support and service support units, made up the wartime combined arms team. That division numbered 28,000 men, not the 22,000 cited by Professor Weigley.<sup>2</sup>

After the Great War, the War Department asked General John J. Pershing, as AEF commander, to examine the records of the arms and services and draw any lessons that might be appropriate for the future. To conduct these surveys, at the suggestion of his staff, he convened a review panel—the Superior Board. In addition, he gave the board a second mission: to explore the broad organizational and tactical experiences of combat. Although the review function consumed part of the Superior Board's time, its primary concern was an examination of the infantry division. After two months of investigation, the board recommended retention of the World War I unit with modification—primarily, the addition of a machine gun company to each infantry battalion. The board members believed that the proposed division, some 29,000 strong, would have sufficient firepower and mobility to meet a variety of combat and terrain conditions encountered in a war of movement and yet have those resources customarily needed in battle.<sup>3</sup>

A look at the officers who sat on the board may help to explain the recommendation; many of them had spent considerable time working with organizational

questions. The officers were Joseph T. Dickman, John L. Hines, William Lassiter, Hugh A. Drum, Wilson B. Burt, George R. Spaulding, Parker Hitt, and Frederick Uhl, the latter serving as secretary. Major General Dickman had worked on the *United States Army Field Service Regulations* of 1905, which set the American Army on the road to making the infantry division the first echelon for combining arms. Later he had commanded the 3d Division and I Army Corps during World War I and Third Army during the early stages of the Rhineland occupation. Major General Lassiter, as a member of the General Staff, had helped to draft the Army's tactical organizational plan of 1912, in an attempt to correct a major failure of mobilization during the War with Spain. Furthermore, Lassiter was a student of foreign armies, having served as a military attaché in England immediately before the United States entered the war. He had eventually served as the chief of artillery for I and IV Army Corps. Major General Drum, selected by General Pershing to accompany him to France, had helped to outline the American Expeditionary Force's organizational position in the summer of 1917 and had sat on the AEF committee that drafted the Graves Report, the command's approved force structure of that year. His combat experience was as chief of staff of the First Army. Like Drum, Major General Hines had accompanied Pershing to France, having been chief of staff of the Punitive Expedition that had hunted Pancho Villa in Mexico. Hines later had commanded the 4th Division and III Army Corps in the St. Mihiel and Meuse-Argonne campaigns. Brigadier General Burt had observed the German Army between December 1914 and April 1915 and later had served as a member of the Punitive Expedition, the Air Service staff, and V Army Corps staff. Colonels Spaulding and Hitt were assigned to First Army as chief engineer and chief signal officer, respectively. Thus, in addition to knowledge of organizational matters, all members of the board had close professional ties with General Pershing and had witnessed from

various positions the "success" of the heavy infantry division used during the war.<sup>4</sup>

The Superior Board completed its task on 1 July 1919, but General Pershing delayed forwarding its findings to the War Department for a whole year because he disagreed with them. He believed that the board undertook its assignment too soon after the close of hostilities and that special conditions on the western front had unduly influenced the work. He thought that the division should comprise an infantry brigade of three regiments, an artillery regiment, a cavalry squadron, and combat support and service support units. Stressing maneuverability, he wanted each infantry regiment to consist of three battalions; each battalion, one machine gun and three rifle companies. Pershing's division called for 16,875 men. As organized, it would not be able to meet all situations, but he believed that the unit would have sufficient mobility and flexibility to meet a variety of tasks, particularly in North America. This continent, with limited road and railway networks, lent itself to the smaller division.<sup>5</sup>

Although Pershing withheld the Superior Board report, officers within the War Department proceeded to work on the organization of units needed for a future mobilization. Until such work was completed, no realistic calculation for military requirements could be made. Lassiter, reduced in grade to colonel because of demobilization, now headed the War Plans Division, which recommended that the nation should be prepared to field 2 million men. Having greater freedom than ever before to

---

John B. Wilson is a staff member of the United States Army's Center of Military History, serving in the Organizational History Branch since 1968. The study of the evolution of divisions and higher commands is his primary area of interest. He is a graduate of Duquesne University, where he received his Masters Degree in American history in 1966.



design the types of units the Army wanted (in the past Congress had dictated regimental structures but lifted the restriction in the 1920 amendments to the National Defense Act), the War Plans Division proposed a 24,000-man infantry division.<sup>6</sup>

Officers at the Infantry School who wanted a smaller, more mobile division than that used during World War I or that recommended by the Superior Board influenced the size and composition of the proposed division. They suggested that the 155mm howitzer regiment be eliminated because of its lack of mobility and that all other divisional elements be reduced in size except for the infantry units.

Along with the recommendation to cut the size of the division, infantrymen outlined new supporting doctrine for their arm. One sentence revealed the thrust of their argument: "The infantry of an army must be recognized as the basic arm and all other arms must be organized and made subordinate to its needs, functions, and methods."<sup>7</sup> To perform the infantry mission, the officers envisaged the arm employing a combination of position and open warfare on the battlefield. Because the United States did not have natural barriers to operations as did Europe, large units—armies and corps—would be the elements of maneuver, and divisions would penetrate and defeat the enemy. Armies and corps were each to consist of three major elements—armies, three corps; and corps, three divisions. Divisions were to comprise two major infantry elements—brigades—for disorganization and destruction of the enemy. Ultimately, either in position or open warfare, infantry would carry the attack, and that arm had to be organized to sustain a decision in battle. The officers believed that a square division of four infantry regiments, smaller and more mobile than that of World War I, would permit such a capability.

Upon completion of his work on the proposed organization of the new infantry division, Lassiter sent the proposed tables of organization to the commandants of the Infantry School, the General Services Schools at Fort Leavenworth, and the General Staff College in Washington, as well as to General

Pershing's headquarters. On 16 June 1920 Pershing stated his objections in a detailed comment prepared by Colonel Fox Conner of his staff. Two days later representatives from the General Staff and Pershing's headquarters attempted to iron out their differences. The conference failed, and on 22 June, at the direction of Secretary of War Newton D. Baker, a special committee met to solve the Army's organizational problems.<sup>8</sup>

Similar to the Superior Board, the Special Committee drew upon the talents of officers tied to the AEF. From the General Staff, in addition to Lassiter, came Lieutenant Colonel Briant H. Wells, Major John W. Gulick, and Captain Arthur W. Lane. Majors Stuart Heintzelman and Campbell King represented the General Staff College; Major Hugh Drum, the General Services Schools; and Colonel Charles S. Farnsworth, the Infantry School. Colonel Conner and Captain George Marshall spoke for General Pershing. All except Farnsworth, who had commanded the 37th Division during combat, had held corps, army, and General Headquarters staff positions; and they possessed firsthand knowledge about how divisions and higher echelons had operated in the AEF. In addition, Wells had helped draft the initial proposal for the square division adopted during the war; Conner had been a French interpreter for the General Staff in 1917 when that work was done; and Heintzelman had edited Pershing's report of operations in France.<sup>9</sup>

**M**eeting between 22 June and 8 July 1920, the committee examined three questions. Was the World War I division too large? If so, should the Army adopt a smaller division comprising three infantry regiments? Finally, if a division of four infantry regiments were retained, could it be reduced to fewer than 20,000 men, a figure acceptable to General Pershing? A division of that size could be deployed from a column on a single road in a few hours and, when moved by rail, could assemble on a single railroad line within 24 hours. To answer these questions, the committee reviewed all previous studies and recommendations; became acquainted with all

views held by officers with the General Staff, departments, and operating services of the Army; and informed itself about the conclusions developed since the end of the war by instructors and students at the service schools concerning the organization of the Army. Approximately 70 officers appeared before the committee, including Colonel William (Billy) Mitchell of Air Service fame; Brigadier General Samuel D. Rochenback, the chief of the tank corps; and Major General Charles P. Summerall, a future Chief of Staff of the Army.

From the evidence, the committee concluded that the wartime infantry division was too large and unwieldy; it was an army corps without the proper organization. In combat, the division's size had complicated the problems of supervising all activities, of moving the unit by road and railroad, and of entering and withdrawing from battle.

With that conclusion, the committee examined two alternative organizations. The argument for three (versus four) infantry regiments in the division centered on where it was assumed the division would be employed—North America. War in Europe was deemed unlikely, and officers doubted that the Army would again encounter combat like that conducted in France. They believed that stabilized and highly organized lines and flanks resting on impassable obstacles were a part of the past, because of developments in artillery, machine guns, and other armaments, along with advances in aviation. On the other hand, future enemies would most likely organize their forces in depth, and the Army had to be prepared to strike and overcome that challenge of the battlefield. The committee believed that a division of four infantry regiments, while not having the mobility of Pershing's suggested unit, would have sufficient mobility (if support troops were reduced) and great striking power. Furthermore, retention of the square division preserved the organizations for corps and army that had been developed during the war, with which most officers were familiar. On a more mundane level, general officers' billets became a consideration for keeping the square division. Artillery, organized as a brigade, required a brigadier general, and

that slot provided a way for a field artillery officer to rise from second lieutenant to general officer within his specialty. Concluding the discussion, the committee decided that a field commander could more readily modify the square division to oppose a lesser enemy than to strengthen a smaller organization to fight a major power.

The third question remained: could the square division be cut in size to increase mobility? Recommendations to achieve this end included a reduction in the number of platoons in the infantry company and the number of companies in the battalion from four to three, realignment of the ratio between rifles and machine guns, elimination of the 155mm howitzer, and removal of all unnecessary support troops. The division could obtain additional troops, when needed, from pools of combat support and service units located at the corps or army level. With these suggestions, the Lassiter Committee determined that the square division could be cut in size and yet retain much of its firepower while increasing mobility.<sup>10</sup>

Although no minority report accompanied the committee's proposal, all members did not favor the square division. Conner and Marshall still preferred the small triangular division suggested by General Pershing. Marshall pointed out to Conner years later, "If poor old Tommy [Stuart] Heintzelman and Campbell King had not been quite such kindly characters we might have put over the smaller division."<sup>11</sup> Drum pushed for the larger unit and carried the day.<sup>12</sup>

**F**ollowing the report, the Lassiter Committee worked out tentative tables of organization for the infantry division, which Major General Peyton C. March, the Chief of Staff, approved on 31 August. The division totalled 19,997 officers and enlisted men and in march formation covered about 30 miles of road space. To arrive at that strength and size, each of the four infantry regiments lost 700 men. The regiment consisted of three battalions, and supply, howitzer, and headquarters companies. Each battalion comprised three rifle and one machine-gun company. Within the

regiment considerable pooling of resources took place, making it a lean and streamlined unit. For example, howitzer companies drew together the 3-inch mortars and 37mm guns. The assignment of a machine-gun company to each infantry battalion simplified command and control of those weapons, and the realignment of the guns created a substantial savings in personnel. Machine-gun units were eliminated from the infantry brigades, and a tank company replaced the divisional machine-gun battalion. The change conserved personnel spaces and increased mobility, but it did not diminish firepower. Pershing suggested that the tank company should serve as a divisional mobile reserve. He was aware, however, that it could not mount an attack on a stabilized front; tanks for that type of operation would have to come from the army level. As recommended by infantry officers and others, the committee dropped the 155mm howitzer regiment with the stipulation that it be put back into the division when its weapons possessed the necessary mobility for use on the North American continent. The engineer regiment and train were to be combined and reorganized as a battalion because of the belief that the division would not require large numbers of engineers in mobile warfare. Furthermore, during World War I many engineers had served as infantry rather than in their technical specialty. The chief of engineers and others, however, were extremely vocal in recommending that the regiment be retained for mobility, the training of lieutenant colonels and above, and the opportunity for officers of those higher grades to serve at least one year in five with the troops. Acceding to these desires, General March retained the regiment, but directed that it be considerably smaller than the war unit—845 men versus 1831.

Within the divisional services, substantial reduction and realignment of resources took place. The committee cut the size of the ammunition train from 1333 to 165 men and changed its mission. The train would serve only the field artillery brigade. Ammunition resupply for all other divisional elements became the responsibility of the quartermaster train and the tactical units.

The train consisted of half motorized and half animal-drawn transportation to accommodate the potential theater of operations in North America. To provide laborers for the division quartermaster, a service company was added. Ordnance personnel formerly attached to the various regiments and the mobile repair shop were grouped as an ordnance company, centralizing all ordnance maintenance. A signal company replaced the signal battalion, with those troops having responsibility for message traffic between division and brigade headquarters. Within the regiments, men from the combat arms handled all communications. The new division abandoned the train headquarters and military police organization because no need existed for a separate command to control the rear elements in a division, but it retained a separate military police company. With the many small separate companies (division headquarters, signal, tank, service, and military police) in its structure, the division included a new headquarters for special troops, which handled administration and discipline. The committee substituted a medical regiment for the sanitary train and revamped all health services above the regimental level. Three hospital companies replaced the four used during the war, and three ambulance companies replaced the wartime four. The addition of a sanitary battalion, comprising three companies, corrected the need for litter-bearers that had often been taken from combat units. Veterinarians, formerly assigned throughout the division, now formed a veterinary company. Laboratory and supply sections, along with a service company, completed the new regiment, which called for 24 fewer men than the World War I train.

Attesting to the greater depth envisaged for the battlefield, the committee provided for rather novel reconnaissance assets. It assigned an air squadron of 13 airplanes to serve as the "eyes and ears" for the division; the division included no organic ground reconnaissance element. As under the wartime configuration, resources for ground reconnaissance were to be attached as needed. Thus, as redesigned, the post-World War I

division had little resemblance to the 1918 unit.<sup>13</sup>

In the fall of 1920, the Army began to reorganize divisions under the new structure, and General Pershing "witnessed" the completion of the reorganization during his tenure as Chief of Staff. The question arises as to why he did not replace the square division with one more compatible with his concept of battlefield mobility. Part of the answer may be found in the fact that the infantry portion of the unit was reorganized along the lines he suggested. Additionally, as his aide, future Chief of Staff George C. Marshall, pointed out, the basic recommendation for keeping the square division came from Pershing's staff officers, who were members of both the Superior Board and the Lassiter Committee. To disavow their advice would have been an embarrassment.<sup>14</sup>

Professor Weigley's argument that firepower was the overriding issue in retaining the square division after World War I just cannot be sustained. The wartime and post-World War I divisions had little similarity to one another. During combat the wartime unit required 28,000 men, while the peacetime unit had fewer than 20,000 at full strength. In reducing the size of the division, mobility played a key role: the Lassiter Committee reduced the size of the division to attain greater mobility. A need to pare the division led to the pooling of those resources only occasionally required, a concept that later dominated the structuring of the World War II triangular infantry division. Designed for the North American continent, the square division answered an entirely different set of terrain and transportation problems than those faced by either the World War I or World War II divisions. While a desire to generate great combat power influenced the decision to go with four rather than three regiments, an existing familiarity with the brigade structure and a large number of general officer positions in the square organization proved important in the recommendations of the Lassiter Committee.

Recounting the development of the infantry division in the wake of World War I makes an interesting footnote to history and is not intended as an attack on Professor Weigley's fine work. It does point out that in 1920, as today, officers had to deal with a projected future battlefield and existing technology to design the types of organizations they required.

#### NOTES

1. Russell F. Weigley, *Eisenhower's Lieutenants* (Bloomington: Indiana Univ. Press, 1981), p. 22.
2. *Ibid.*; TOE 1 *Infantry Division*, 26 June 1918.
3. SO 98, AEF, 1919; Report of the Superior Board, AEF, on Organization and Tactics, 1 July 1919.
4. General Officer Files, HRC 201, Center of Military History; George W. Cullum, *Biographical Register of the Officers and Graduates of the US Military Academy at West Point, New York*, Supplement VII, 1920-1930 (Chicago: Donnelley and Sons, 1930).
5. Wrapper Indorsement (Forwarding Report of the AEF Superior Board on Organization and Tactics), AEF Headquarters, 16 June 1920.
6. Memo, War Plans Division, subject: Committees for Working Out Army Reorganization, 5 June 1920; memo for Commandant, General Staff College from OCS, subject: Army Organization, 14 June 1920; Arthur L. Lane, "Tables of Organization," *Infantry Journal*, 18 (May 1921), 486-503.
7. "Infantry Organization," *Infantry Journal*, 16 (June 1920), 1029. Discussion of the infantrymen's views on organization is based on this article, see pages 1029-38.
8. Memo for the Commandant, General Staff College from OCS, subject: Army Organization, 14 June 1920; Wrapper Indorsement (Forwarding Superior Board), 16 June 1920; "Notes on Organization" with Fox Conner's initials, undated, AWC course material, 52-21, Military History Institute, Carlisle Barracks, Pa.; memo for Commandant, General Staff College, from OCS, subject: Army Organization, 15 June 1920; memo for The Adjutant General of the Army, subject: Special Committee on Reorganization of the Army, 21 June 1920. Following World War I, the Army War College was reorganized as the General Staff College; in 1921 it was redesignated as the Army War College.
9. Report of Special Committee appointed by the Director, War Plans Division, to define the general plan of organization to be adopted for the Army of the United States provided by the Act of June 4, 1920, 8 July 1920; General Officer Files, HRC 201, Center of Military History; Cullum, *Register*, Supplement VII, 1920-1930.
10. Lane, pp. 489-90.
11. Letter to Fox Conner from George C. Marshall, 7 January 1938.
12. Letter to William Spencer from George C. Marshall, 18 March 1938.
13. Memo (no subject but reference to the special committee's report), 31 August 1920; TOE 1 W. *Infantry Division*, 4 May 1921.
14. Letter to Walton H. Walker from George C. Marshall, 21 December 1937.