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The Southern Connection

by Maj. Gen. John E. Hoover, US Army retired

It is always difficult to gain acceptance for a new system or concept in the Army. When Albert J. Myer, an Assistant Surgeon, attempted to introduce his new system of "signalizing" to the US Army, he encountered a host of difficulties.

It was 1860 and Myer was a surgeon with only six years experience in the Army. At 32, he was a major who had been promoted over senior captains with much greater experience, some of whom had been on active duty for as long as Myer had been alive. He was also the first and only Signal Officer in any army.

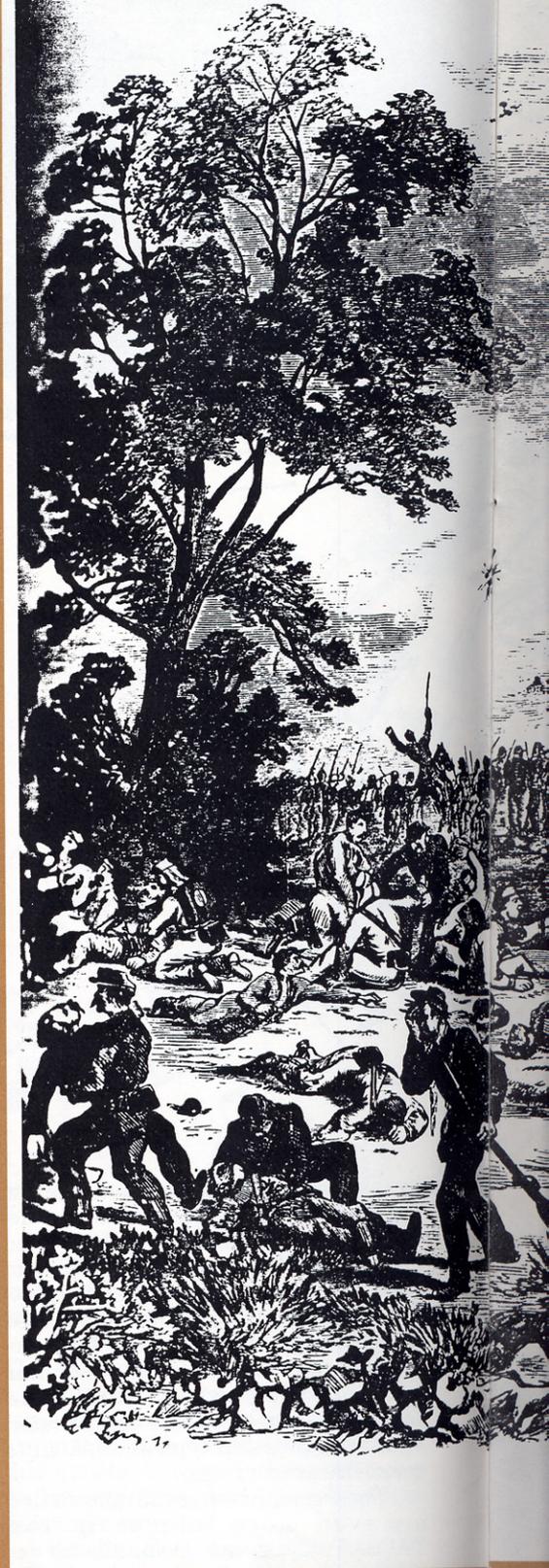
The tiny US Army, which was run by a handful of ancient men with a lifetime of service, was not exactly fertile soil for new ideas and new systems. These complications were further compounded by the "Southern Connection." By a remarkable turn of events, during the period 1854-60 when Myer was developing and testing his system, he came in contact almost exclusively with officers soon destined to provide leadership to the Confederacy. During this time, the record shows that his work came to the attention of only one officer who was to attain senior rank in the Union Army.

These contacts with Southerners began soon after Myer's first assignment in 1854 to Fort Duncan, Texas, near Eagle Pass on the Rio Grande.¹ In those days the Texas frontier was a challenging place to be. The Indians were on the rampage, the Army was trying to fight mounted Indians primarily with Infantry, and most Army units were sadly understrength. At Fort Chadbourne, Texas, Company C of the 2nd Dragoons had an average of

twenty men present for duty, and they were commanded by the Post Surgeon.²

After only a month at Fort Duncan, Myer set out for Fort Davis near El Paso. The route led to the northwest through Fort Clark where it appears that Myer first met Lt. J.E.B. Stuart, soon to be a Confederate major general. Myer spent almost a year at Fort Davis, much of that time in the field with the troops on scouting expeditions. He returned to Fort Duncan in December 1855, where among other duties, he again accompanied scouting parties into the field. It was from Fort Duncan, on 1 October 1856, that Myer wrote Secretary of War Jefferson Davis, querying the War Department as to its interest in his system of military signals.³

For those who have encountered the myth that Myer got the idea for his system from watching the Indians signaling to each other, remember this: as a medical student and apprentice telegrapher, Myer had developed the concept for a system of communications for the deaf by 1851. In effect, he translated the dots and dashes of the electrical telegraph to motions of the finger or hand to the right or left of a reference point, thus providing a visual communications system. He also pointed out that the same results could be attained by touching the top of a table for a short or longer interval. Furthermore, the system could be used in the dark by varying the length of time that pressure was applied to the surface of the skin. Even at this early date, Myer made enquires about the military applications of his system.⁴ Clearly, it took a man with an innovative mind and considerable imagination to make this sort



of conversion and application. For such a man, the advantages of his signaling system to those infantrymen chasing mounted Indians over the high plains of Texas must have been fairly obvious.

At about the time of Myer's return to Fort Duncan, the Second Cavalry was deployed to Texas from Jefferson Barracks Missouri. This regiment, off-



The first Battle of Bull Run was important and bloody, and Army signalmen under the command of Lt. E. Porter Alexander played a critical role in the outcome. They were members not of the US Army but of the Confederate Army.

cered by men hand-picked by Jefferson Davis, was known as "Jeff Davis's Own." It was to be distributed widely over the Texas frontier during the next several years. While encounters there between the officers of the Second Cavalry and Myer do not appear in the record, certainly he must have met some of them. In any event, they shared

the same sort of combat experience in the Indian warfare on the Texas frontier. The original roster of the Second Cavalry included four of the eight men destined to be full generals in the Confederate Army: Albert Sidney Johnston, Robert E. Lee, E. Kirby Smith and John Bell Hood. Initial assignments to the regiment also in-

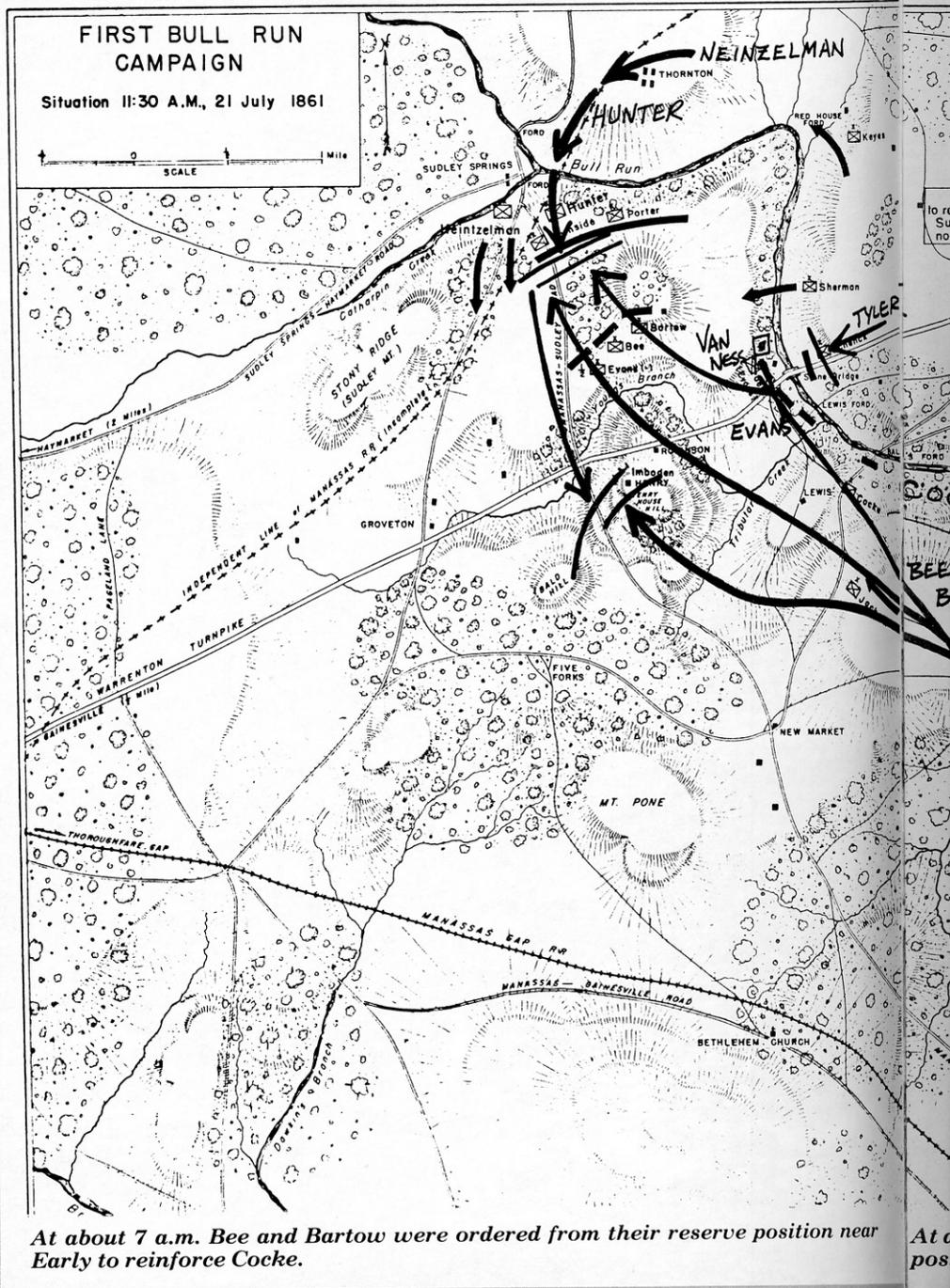
cluded William J. Hardee, later lieutenant general, C.S.A.; Earl Van Dorn and Charles W. Field, who became Confederate major generals; and three others destined to be brigadier generals in the C.S.A.⁵

Secretary of War Davis did not look with favor on Myer's proposal in 1856, but he left the cabinet after the election of that year. And in 1857, Myer managed to get his proposal presented to the new Secretary of War, John B. Floyd, late Governor of Virginia and soon to be a major general in the Confederate Army. Floyd was very receptive. He kept Myer, who was in the East on leave, on the East Coast through the remainder of 1857 and 1858, allowing him time to prepare for the presentation of his ideas to a board of officers.⁶

On 28 February 1859, Col. Samuel Cooper, the Adjutant General, notified the appointees to — and issued instructions for — a board of officers to examine Myer's proposal for a system of military signaling. Cooper, who had been commissioned in the Army in 1815, was to become the senior general in the Confederate Army and serve for the duration of the war as the Adjutant and Inspector General. The board was composed of Lt. Col. Robert E. Lee of the Second Cavalry (also on leave from Texas), Maj. Benjamin Huger of the Ordnance Department, and Capt. Israel C. Woodruff of the Topographical Engineers.⁷ While Lee needs no introduction, Huger, who is less well known, was also to become a major general in the Confederate Army.

The board's report on Myer's proposal recommended that experiments be carried out to validate the operation of the system. Cooper advised Myer that he was to work directly under the War Department, taking his instructions from Cooper during the conduct of the tests.⁸

After completing some initial testing at Fort Monroe, Virginia, Myer proceeded to New York City. One of the officers who assisted him there was Lt. Cadmus Wilcox, who would soon be commanding a division in the Confederate Army.⁹ Later he found a young officer at West Point, Lt. E. Porter Alexander, who agreed to help him with further tests. Alexander was born in Washington, Georgia, and was to



At about 7 a.m. Bee and Bartow were ordered from their reserve position near Early to reinforce Coker.

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By October, Myer had reported to Col. T.T. Fauntleroy, another Southerner, who commanded the Department of New Mexico with headquarters in Santa Fe. There, he again ran into Cadmus Wilcox. He was immediately ordered to Fort Defiance, Arizona, where he joined a column commanded by Capt. Lafayette McLaws, another soon to be division commander in the Confederate Army. McLaws' column was a part of the force commanded by Lt. Col. E.R.S. Canby, which had been committed against the Navajo Indians (Canby seems to be about the only officer who became familiar with Myer and his system who was destined for senior rank in the Union Army). Canby assigned Myer the necessary officers

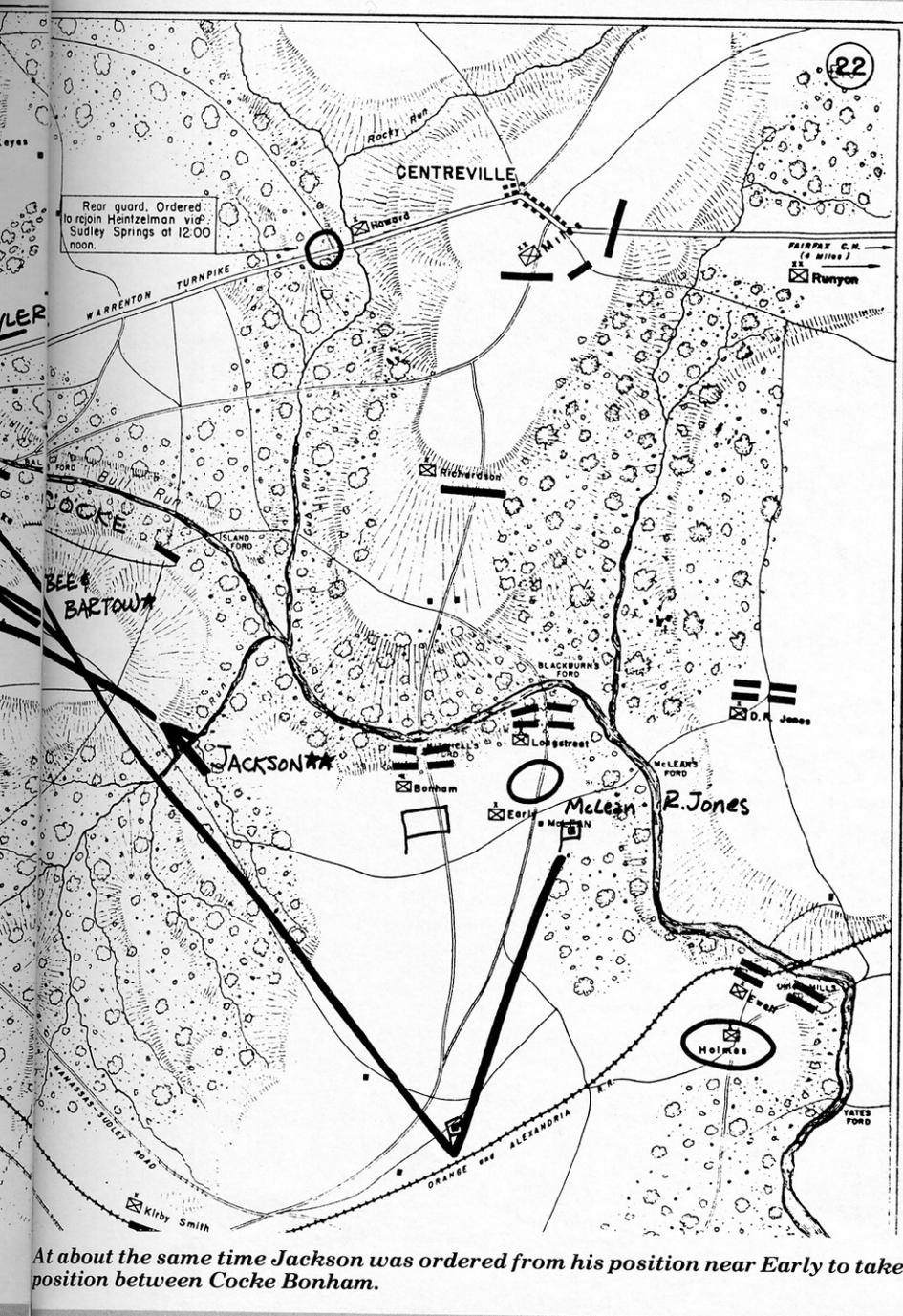
and men for training, but Myer had difficulty retaining the officers detailed for this duty. This problem initiated a correspondence with the Assistant Adjutant of the Department, Dabney Maury, another future Confederate major general.¹⁴ Despite his problems, Myer was able to field an effective Signal party when Canby took the field on 25 November 1860. This was the first employment of Myer's system in actual operations in the field. According to Canby, this first trial of the system was a complete success. He reported to departmental headquarters that he had "discharged his guides and spies," and that Myer's Signal party was so well organized and effective that it would not be necessary to replace them.¹⁵

become a brigadier general in the Confederate Army. During October, November, and December 1859, the testing of the system was completed in the New York Harbor area.¹⁰

In February 1860, Secretary of War Floyd wrote Senator Jefferson Davis, who had become Chairman of the Military Affairs Committee, recommending the adoption of Myer's system and the appointment of a Signal Officer to the staff of the army. Floyd indicated that Myer and Alexander were available to testify before the Committee, and they did so on 23 February 1860.¹¹

Senator Davis recognized the value of Myer's system and was not opposed to its introduction into the Army. However, he did oppose adding a Signal Officer to the Army Staff because he felt that it would ultimately lead to a new branch of the service. He felt that the supervision of the system should be given to some established branch or office. Furthermore, Davis believed that if the Signal Officer position were established (the rank of major was being considered), Myer would probably get it. He was strongly opposed to the relatively young Myer being promoted over the heads of all the senior captains in the army. Despite this opposition by Davis, the Senate finally passed the Army Appropriation Bill which included authorization for the addition of a Signal Officer to the staff of the Army.¹²

Myer was appointed to the post, and a few months later he got a most interesting letter from Lt. J.E.B. Stuart, now stationed in the Kansas Territory. In view of the contents of this letter, it is interesting to speculate as to what ideas and experiences these two lieutenants (Assistant Surgeon Myer's rank was equivalent to a first lieutenant) must have shared when they were together in the vicinity of Ft. Clark, Texas, some six years before. Among other things, Stuart's letter predicted just what Senator Davis feared — a separate Signal Corps in the Army, which was to happen some three years later! Stuart wrote that he wanted to be put on the list of applicants for the Signal Corps (then non-existent), which he felt had to be increased to include a colonel, a lieutenant colonel, two majors and eight captains.¹³



At about the same time Jackson was ordered from his position near Early to take position between Cocke Bonham.

With the outbreak of the Civil War, Myer was ordered back to the East. After his return, he began training Signal personnel at Ft. Monroe, Virginia.¹⁶ In the meantime, when Georgia seceded, Lt. Alexander, who had been Myer's original principal assistant, resigned from the US Army and made his way to Richmond where he was commissioned a Captain of Engineers in the Confederate Army.¹⁷

Jefferson Davis, who had been the Secretary of War to whom Myer initially submitted his proposal, was now the President of the Confederacy. As Chairman of the Senate Military Affairs Committee, he had been involved in the debates on the establishment of a Signal Officer in the Army;

he had studied Myer's proposal and was thoroughly familiar with the testing of the system. He clearly understood its value and took immediate steps to capitalize on Alexander's expertise. Despite a severe shortage of engineer officers, Alexander was directed to set up a small factory in Richmond for the manufacture of Signal apparatus. When this task was completed, he was ordered to report to General Beauregard at Manassas, where he was to establish a Signal Service in support of Beauregard's army.¹⁸

Alexander's activities were certainly not inhibited by the fact that the senior general in the Confederate Army was soon to be Samuel Cooper, the former Adjutant General of the US

Army, who had been directly involved in all of the War Department activities concerning the testing and evaluation of Myer's system. He had become a firm believer in the system and a strong advocate. As a matter of fact, by the fall of 1861, he had a "Department of Signals" functioning under his supervision as the Adjutant and Inspector General of the Confederate Army.¹⁸

Another influential person in Richmond in those days was Gen. Robert E. Lee, who was soon to become the Military Advisor to President Davis and then Commander of the Army of Northern Virginia. Lee, of course, had served as the President of the Board of Officers which had reviewed Myer's system for the US Army. He and Myer had served on the Texas frontier at the same time, and they probably shared a common appreciation of the value of Myer's system as applied to the Indian warfare in that area.

With this sort of appreciation and support at the highest levels of the Confederate government and Army, Alexander encountered very little difficulty in accomplishing his mission. He got his Signal factory established in a very short time and then reported to Beauregard at Manassas. There he recruited and trained his Signal personnel, reconnoitered the ground, and chose his Signal stations to support the Confederate position. He deployed his men before the battle, now known as the First Battle of Bull Run, or Manassas, depending on your point of view. Alexander was ready on the morning of the 21st of July when the attack began, and he played a critical role in the outcome.²⁰

As Alexander, from his Signal station on the Wilcoxon farm east of Manassas (see sketch)²¹ observed through his glass the flag of the station near the Van Ness house on the left, he stated "... the sun being low in the east behind me, my eye was caught by a glitter in this narrow band of green. I recognized it at once as the reflection of the morning sun from a brass field piece. Closer scrutiny soon revealed the glittering of bayonets and musket barrels."²²

Thus, at about 8:45 in the morning, Alexander had discovered McDowell's turning movement around the Confed-

erate left. Within a few minutes he had notified Evans, the commander on the extreme left, and Generals Beauregard and Johnston, the senior Confederate commanders on the field (an utterly impossible feat prior to the introduction of the new signal system). The simultaneous arrival at Evans' headquarters of a courier with Alexander's warning and a member of his own picketing force reporting enemy forces at Sudley Springs convinced Evans that he was in serious trouble. On his own initiative, he redeployed his forces to meet this threat.²³ Beauregard had already set some of his reserves in motion to strengthen his position behind Bull Run. He also took immediate action to redirect those forces to the left to counter the Union attack.²⁴ Without the signaling system, it undoubtedly would have been hours later before Evans or Beauregard would have begun to take action to meet the threat on their left, and the outcome of the battle might have been quite different. As it was, the Confederate victory was a very near thing.

On the Union side, War Department orders for Myer to join General McDowell's forces were not issued until the 17th of July, only four days before the battle began.²⁵ Myer did not arrive at Bull Run until the day of the battle. Having no signaling capability available, the Signal Officer of the Army served as an aide to General Tyler for the remainder of the day.²⁶ The situation facing Myer, which was a sharp contrast to the one facing Alexander, was aptly described by Capt. Samuel T. Cushing, one of Myer's most able assistants, at a meeting at the old Signal Camp of Instruction at Georgetown, D.C., in September, 1892:

"... The system was the invention of a doctor—a non-combatant—and the Corps was officered by lieutenants of volunteers without prestige. It was experimental, unknown to students of war. Previous use of signals had involved myriads of flags or cumbersome machinery, and it was not easy to convince the authorities that the simple processes and equipments adopted in this system would be either useful or successful. The thought of detaching from the fighting forces of the army a number of officers and men to 'flop

flags' was not, at first, favorably considered. The allotment of money was made in the most penurious manner, and it required super-human energy to obtain recognition for the Corps until the enemy had shown, by using signals at Bull Run, that it was prepared to adopt the system. . ."²⁷

Endnotes

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2. Colonel Harold B. Simpson, *Cry Comanche, The 2nd US Calvary in Texas, 1855-1861*, Hill Jr. College, Press, Hillsboro, Texas, 1979, p. 58.
3. Scheips, pp. 122-156.
4. Scheips, pp. 75-79.
5. Simpson, pp. 19-21 and pp. 172-176.
6. Scheips, pp. 159-181. the enemy had shown, by using signals at Bull Run, that it was prepared to adopt the system. . ."²⁷
7. *Scheips*, pp. 182.
8. *Scheips*, pp. 188.
9. J. Willard Brown, *The Signal Corps, U.S.A. in the War of the Rebellion*, Arno Press, New York, 1974, pp. 29.
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11. *Scheips*, pp. 242-243.
12. *Scheips*, pp. 243-254.
13. *Scheips*, p. 274.
14. *Scheips*, pp. 294-295.
15. Brown, pp. 25-32.
16. Paul J. Scheips, editor, *Military Signal Communications*, Vol. I, "Report of the Chief Signal Officer, US Army, 1861, Washington, November 30, 1861." Arno Press, New York 19 , p. 694.
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18. Alexander, pp. 13-14.
19. Alexander, p. 52.
20. Alexander, pp. 14-16.
21. The sketch is adapted from Colonel Vincent J. Esposito, Chief Editor, *The West Point Atlas of American Wars*, Federick A. Praeger, New York, 1959, Vol. I, Map 22; from the map in Alexander, p. 12; from the discussion in Douglas Southall Freeman, *Lee's Lieutenants*, Charles Scribner's Sons, New York, 1954, Vol. I, pp. 52-58; and from United States War Department, *The War of the Rebellion: Official Records of the Union and Confederate Armies*, Washington, Government Printing Office, 1880-1901, 128 Vols. Series 1, Vol. 2, pp. 317-519.
22. Alexander, p. 30.
23. Alexander, p. 31.

24. Alexander, pp. 30-31; Official Records, Series 1, Vol. 2, pp. 446 and 474; and Freeman.

25. OR, Series 1, Vol 51, Part 1, p. 421.

26. OR, Series 1, Vol. 2, p. 323.

27. Brown, p.7.

Maj. Gen. Hoover received his BS from the US Military Academy in 1947, his MA from Georgetown University in 1955, and did further graduate work at Columbia University from 1955 to 1957. He is a graduate of the Signal Officer Advanced Course (1957), the Command and General Staff College (1959) and the US Army War College (1963).

He retired in 1978 and had then served for over three years as the Director, Joint Tactical Communications (TRITAC) Office, OSD, supervising a joint program involving all four military services and NSA and some 18 separate system acquisition programs with the expenditure of over \$100M in RDT&E funds annually. Before this assignment, he was the Deputy Commander of the US Army Communications Command, a worldwide command of some 30,000 personnel responsible for Army non-tactical communications and the Army portion of the DCS. Earlier he served as the Deputy Assistant Chief of Staff, Communications-Electronics, Department of the Army.

In previous assignments, Hoover commanded a 4000 man Signal Group in Vietnam, providing all DCS communications in that country; he served as the Chief Communications Planner for CINPAC and the Senior US Communications Planner for SEATO; he spent three years as a staff officer in the Office of the Assistant Sec. of Def. (ISA) and two years as the Chief Signal Planner at US Army Europe; he commanded a Signal Battalion in Europe responsible for supporting Theater Army Headquarters in the field and served as the Operations Officer of the Signal Group responsible for providing communications support to the NATO Central Army Group.

He also spent three years as an instructor at the US Military Academy at West Point and two years on the plans and operations staff of a Signal Training Center; he was a platoon leader and company commander in the Signal Company of an Infantry Division in Korea and in Japan before the Korean War, and he served as an Infantry Regiment Communications Officer in Japan. In WWII he was an enlisted Signal Corps cryptographer.

Hoover is a member of the Association of the US Army and the Armed Forces Communications-Electronics Association. He is listed in Who is Who in America.