MASTER OF MILITARY STUDIES

The Influence of Confederate Railroad Policy (1861-1864)
On the Outcome of the Civil War

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# THE INFLUENCE OF CONFEDERATE RAILROAD POLICY (1861-1864) ON THE OUTCOME OF THE CIVIL WAR

## Abstract

During the American Civil War, railroads represented a new technology, to which each belligerent was forced to adapt. Southern leadership was slow to perceive the profound influence that rail transportation would have on operational mobility. Fervent belief in the primacy of states-rights doctrine prevented key southern leaders from asserting the degree of federal control required to establish the southern railroad industry on a firm wartime footing. Instead, shortsighted rail management policies crippled the mobility of southern armies by the third year of the war and set the conditions for ultimate defeat.

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Executive Summary

Title: The Influence of Confederate Railroad Policy (1864) on the Outcome of the Civil War

Author: LCDR Ian R. Pollitt, United States Navy

Thesis: More efficient management of the Southern rail transportation system would have increased the Confederacy’s chances for a favorable negotiated settlement to end the American Civil War.

Discussion: In “modern” warfare, significant advantage accrues to the side best able to adapt its processes to emerging technologies. During the American Civil War, railroads represented a new technology, to which each belligerent was forced to adapt. Southern leadership was slow to perceive the profound influence that rail transportation would have on operational mobility. To win the war as an outmanned and outgunned belligerent, the Confederacy had to carefully husband her scarce strategic resources. However, Southerners’ fervent belief in the primacy of states-rights doctrine prevented the Richmond government from exercising the degree of federal control required in order to establish the railroad industry on a firm wartime footing. Instead, shortsighted management of the Confederate rail infrastructure crippled the operational mobility of Southern armies by the third year of the war and set the conditions for ultimate defeat. The preludes to the battles of Shiloh (April 1862) and Chickamauga (September 1863) dramatically illustrate the battlefield effects of years of sustained mediocrity in railroad administration.

Conclusions: Lackluster strategic direction of railroad policy by the Confederate Executive and Legislative branches doomed the railroads to a slow death. As the railroads literally and figuratively ran out of gas, so, too, did the hopes of the Confederacy for lasting independence.
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The First “Modern” War

*The construction of railroads has introduced a new and very important element into war.*

- General George B. McClellan, U.S.A., 04 August 1861

During the American Civil War, over six hundred thousand patriots died for their respective causes. In terms of lives lost in battle, the years 1861-1865 were the costliest in American history, eclipsing the cumulative toll of all other wars fought by the United States, before or since that time. The War of Rebellion’s insatiable appetite for men and materiel mark it as the first “modern” war of the Industrial Age.

“Modern” warfare is a dynamic, chaotic and unpredictable event, offering significant advantage to the side best able to adapt its processes to take advantage of fleeting opportunities whenever and wherever they present themselves. As the conduct of warfare became increasingly complex throughout the nineteenth century, entropy shaped the battlefield in unwelcome ways. General Josiah Gorgas, Chief of the Confederate Ordnance Bureau and one of the South’s foremost military thinkers, sagely noted in 1861 that “the great struggle in which we are now engaged disorganizes everything which is not energetically supervised.”[^1] The ability of a government to control, or at least manage, the destructive impact of battlefield “friction” through efficient management of its war machinery provided tangible benefits throughout the conflict spectrum.

The impact of what Gorgas termed “energetic supervision” in modern warfare is best illustrated by the contrasting management styles of the Union and Confederate rail transport systems during the war years. From 1861 to 1865, these two logistical support systems would

be tested to their respective limits. North of the Mason-Dixon line, the fundamental importance of the rail network as a sustenance tool for the war effort was immediately accepted, if not immediately understood. Proactive corporate and Federal management initiatives were enacted that identified the scope of the problems facing the system and generated workable solutions to those problems quickly. Because of this effort, the Union rail transport system was in a position to meet or often exceed every demand placed upon it during the war.

The Confederate rail management experience, on the other hand, was almost antithetical to its Northern counterpart. Southern leadership was slow to recognize how important the rail transportation system would become, and once the dangers of inaction were recognized, Richmond failed to implement controls in a timely or logical manner. “Friction” characterized the ill-managed and ill-equipped Confederate transportation system from the outset, and the system did not improve with age. In fact, when viewed in retrospect, the year 1861 represented the high-water mark of Confederate rail transportation because as the war progressed, "Confederate leadership did not take the most basic steps to achieve the crudest level of railroad efficiency."2 Southern management failed to recognize the urgent requirements that attrition warfare placed upon its supporting logistical infrastructure. Laissez-faire management practices and uninspired stewardship of resources literally and figuratively ground the Confederate transportation system to a halt.

The South did not have to win the war; it only had to avoid losing. Had the Confederacy managed to sap the North’s willingness to fight, a negotiated settlement recognizing Southern independence would likely have followed. As will be shown, three years of determined resistance against impossible odds placed the Confederacy within months, perhaps even weeks,

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2 Ibid., 88.
of achieving this objective. However, both the Southern infrastructure and her war machinery succumbed to the pressures of attrition warfare just as the Northern will to fight began to crumble. The South’s inability to effectively sustain armies in the field with men and materiel through the summer of 1864 can be directly traced to shortsighted management of their own rail network, which in the final months of the war crippled the mobility of Southern armies. More efficient management of the Southern rail transport system would have substantially increased the chances for a negotiated settlement favorable to the Confederacy.
The Iron Horse Goes to War

*In Dixie, the advantages of the through-freight car were only dimly perceived.*

- Robert Black, Civil War historian

The Southern railroad system of 1860 served its antebellum masters well. Train routes and schedules were carefully conceived to provide optimal support to a pre-industrial agrarian economy, and on the whole, the system worked. Designed principally as “hub-and-spoke” operations, major port cities such as Wilmington, Charleston and Norfolk served as the hubs, with branch lines extending inland to the agricultural basins as the spokes of the system. This arrangement, while optimal for carrying cotton and other bulk agrarian products from interior

Figure 1: Railroads of the Confederacy, 1861 (Greiss, 2)
regions to the sea, was particularly ill suited for personnel transportation. First, by design the lines were principally oriented east-west, rather than north-south. Second and more important, the hubs and spokes associated with many of the principal industrial and economic centers of the South typically did not interconnect.³

Southern railroad executives “avoided rather than sought interconnection, especially with their prime rivals, the port cities.”⁴ In many major cities of the South, including two of the three principal rail transport hubs (Petersburg and Chattanooga) physical gaps were deliberately maintained between the terminations of different roads within the same station, so that through-freight could not flow seamlessly from one road to another. Transfer of goods from the rails of one company to those of another involved a laborious and time-intensive shuttle via wagon train. This method, while grossly inefficient, preserved thousands of city jobs for stevedores, warehousemen, and even workers in the hotel and service industries.⁵

In the final analysis, “hub-and-spoke” rail operations, with their inherently regional, east-west focus, were more than sufficient to meet the transportation needs of the antebellum Southern economy. However, as this infrastructure attempted to transition from a peacetime to a wartime footing in the summer of 1861, these same road networks found themselves precariously positioned to support the needs of voracious Confederate armies, each of which clamored for unprecedented levels of strategic mobility and logistic resupply. As early as June 1861, General Robert E. Lee identified closure of the gap in the Petersburg railway terminus (where two rail lines of equal gauge met but were physically separated by a gap of some 600 yards) as critical to

³ In stark contrast to their Southern neighbors, Northern rail companies developed a complementary network of railroads that serviced ports, cities and even inland waterways with straightforward connections. Significant advantages would accrue from this foresight as the war entered its third year.
⁴ George Turner, Victory Rode the Rails: The Strategic Place of Railroads in the Civil War (Lincoln, NE: University of Nebraska Press, 1953), 29-30.
the flexibility of the entire rail transport system in the eastern Confederacy:

I consider it very important to the military operations within Virginia that proper and easy connections of the several railroads passing through or terminating in Richmond and Petersburg should be made as promptly as possible. The want of these connections has seriously retarded operations so far, and they may become more important.6

Despite the wisdom of the General’s argument, the military necessity of quickly bridging the Petersburg gap "was lost on the Petersburg hotel and business community, which saw great profit in the status quo."7 Although the Petersburg gap was eventually redressed, local ordinances stipulated that the offending connecting rails could only be used for military traffic and that they must be removed after the war.8 This seemingly innocuous vignette strikes at the core of one of the Confederacy’s greatest weaknesses. By placing the profit margin of the Petersburg hotel interests ahead of the “national” interests of the Confederacy, the Richmond government emasculated itself. While it was abundantly clear that “unconnected tracks, although acceptable for a sleepy antebellum southern economy, carried the seeds of disaster in war,”9 the Administration of President Davis ceded the initiative by kowtowing to business interests and failing to exercise even rudimentary levels of Federal authority.

Strategically even more significant than localized track interruptions were the larger gaps between the terminations of selected major rail arteries, which, if connected, could create new strategic lines of operation within the Confederacy. The most glaring deficiency of this type was the fifty-mile track interruption between Greensboro, North Carolina and Danville, Virginia.10 In November 1861, President Davis recommended completion of the connection, which would provide the Army of Northern Virginia with a third, independent rail connection south into

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Georgia, the breadbasket of the Confederacy. Money was wrested from a recalcitrant Confederate Congress for the purpose, and the Bureau of Railroads contracted the Piedmont Railroad to complete the spur in 1862.

Despite the pressing military necessity to close this strategic gap and increase redundant sources of supply for Lee’s army, the project required connecting the track of one railroad in Virginia with the track of a second railroad in North Carolina; in the realm of Confederate interstate commerce, this represented an enormous obstacle. Prominent North Carolina politicians, among them Robert Rhett, Robert Tooms and Governor Zebulon Vance raised the specter of state's rights to vigorously oppose the enterprise from its inception. Opponents decried the connection as “a monstrous threat to southern liberties” and argued that the project violated Article I of the Confederate Constitution, which forbade the government to “promote or foster any branch of industry.”

In an overt disregard of Executive authority, North Carolina plantation owners refused to allow their slaves to work on the line, causing construction to lag years behind schedule. Fortuitously for the Confederacy, work was finally completed one month before General U.S. Grant destroyed the other two rail lifelines to the South, thus preserving Lee's access to Georgia's ample food supply. "In the last year of the war a major portion of Lee's supplies moved north over the Piedmont Railroad" arguably extending the life of the Army of Northern Virginia and the hopes of the Confederacy by many months.

President Davis demonstrated poor strategic vision by failing to balance the competing requirements of his fledgling nation. With a limited industrial plant at his disposal, the President forced Southern manufacturing centers to increase output of combat arms at the expense of equally critical elements of logistical support. For instance, the mills of the Tredegar Iron Works

10 See Map, page 9.
11 Clark, To Strain Every Energy, 75.
in Richmond produced some of the war’s finest artillery pieces. However, in maximizing the production line of field pieces, Tredegar wholly neglected the production of rolling stock or replacement iron rail. With a scant supply of raw materials, a diminutive industrial base, and few resources dedicated to solving the railroads’ infrastructure problems, the South was poorly positioned to sustain the Rebellion.¹³

Despite these concerns, historian Robert Black has argued that the Southern rail network, underdeveloped and problem-strewn as it was, represented “an imperfect skeleton of interior lines.”¹⁴ This ragged framework had the potential to serve the Confederacy long enough to outlast the Union in a struggle of attrition, if (and this is an important qualifier) it made “sophisticated use” of what little infrastructure it had at its disposal. The rapid ascendancy of rail transportation east of the Mississippi prior to the outbreak of hostilities on both sides of the Mason-Dixon line revolutionized the Jominian concepts of “concentration at the decisive point” and “interior position.” The common argument in favor of the Confederate position ran that railroads, if properly managed, magnified the capabilities of the defense, enabling commanders to leverage interior position by deploying and employing troops at a faster pace than the opponent across the vast expanse of the deep South. This, however, is a specious argument. As William Preston Johnston so aptly noted, “interior lines are not determined by a scale of miles, but by the time required to convey troops over the intervals between commands. Facilities of transportation, more than distances, therefore, decide what these interior lines are.”¹⁵ During the Civil War, the substantive edge in mobility afforded to the Union by adept stewardship of its rail

¹³ Northern industrial facilities provided a caliber of support to the rail industry orders of magnitude greater than their southern counterparts. For instance, in 1861 the Union possessed a dozen established, well-supplied locomotive manufacturers; by contrast, in the Confederacy only two facilities could manufacture locomotives, if they had the critical low-density, high demand components (which they never did throughout the war.)
¹⁴ Clark, To Strain Every Energy, 41.
resources effectively nullified any Confederate advantage of interior position. The North’s ability to move forces quickly and in strength throughout the Confederate perimeter “shrank the Confederacy to a manageable—and vulnerable—size.”

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16 Clark, *To Strain Every Energy*, iii.
The Iron Horse Stumbles

Of all the difficulties encountered by the administrative bureaus, perhaps the greatest has been the deficiency in transportation.

- James A. Seddon, Secretary of War, C.S.A.,
28 April 1864

In 1861, the Confederacy owned one-third of the country's rail mileage yet employed less than one-fifth of the rail work force. During the 1850's, the Southern railroads hired a large number of Northerners to handle many of the mechanical functions of their business. Richard Current has ascribed this tendency to "the Southerners' traditional dislike for mechanical pursuits." Many of these expatriate employees were forced to choose sides in 1861. For most, the choice was not difficult. "The hardships of war, and the fear of conscription… induced many of this class to leave the Confederacy.” Conscripted compounded the impact of the personnel shortage because "the deficiency cannot be supplied as in ordinary times by the instruction of apprentices because the conscript law takes them for the army just at the period when they are learning to be useful" on the railroad. 18

Fortunately for the Southern cause, the first Chief of the Confederate Railroad Bureau, Colonel William Wadley, was a capable man. As a former president of the Vicksburg & Shreveport Railroad, he brought a keen understanding of the business to the job. Shortly after his appointment in December 1862, Wadley correctly identified shortfalls in men and materiel as the primary Southern critical vulnerabilities. "To some extent" he reasoned:

Government can give relief by permitting the iron foundries and rolling mills now engaged wholly on Government works to furnish them with the needed materials, and by permitting the detail of men already enlisted or exempting from conscription of such men as are necessary for the safe conduct of the railroads.19

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19 OR, Volume II, 272.
It took the Confederacy eighteen months on a war footing to create a Railroad Bureau, appoint an officer to manage its affairs, and identify the rail industry’s major systemic problems. Regrettably, this was not to be the industry’s last exposure to a ponderously slow bureaucracy. Translating Wadley's musings on the railroads’ vulnerabilities into meaningful reform was to take three more hard years of war, and even then would never achieve the degree of success enjoyed north of the Mason Dixon.

Throughout the war, the Railroad Bureau attempted to insulate railroad employees from conscription. But the Army’s appetite for new recruits was voracious, and in the face of the shrinking Confederate manpower pool, the Railroad Bureau eventually lost this manpower battle. A study of the various Conscription Acts passed by the Confederate Congress illuminates this point. The Act of 1862 treated railroad employees with a degree of circumspection, but the Act of 1864 trimmed the fat and kept cutting on through to the bone. Its key provision— that no road was permitted to have more employees than miles of track— freed thousands of railroad employees for the infantry, at the expense of creating a “hollow force” in the logistics arena. None of the rail companies could operate effectively with only one employee overseeing each mile of road. Freight throughput decreased, accident rates increased, and collectively the roads were perilously positioned to service the needs of the Confederacy.

The struggle for effective management of critical raw materials was even more desperate than the struggle for manpower. Conflict between the Navy and the Railroad Bureau over scarce iron assets led to the creation, in January 1863, of the Iron Commission. This commission was charged with exploring all possible avenues of obtaining scrap iron and prioritizing surplus supplies of iron rail within the Confederate States. General Orders, No 18 stated "Iron… being indispensable, and not within the reach of the Government through the
ordinary means” should instead be cannibalized from low-priority sources throughout the Confederacy. The Commission was to "examine and advise on what railroads in the Confederate States the iron on their tracks can best be dispensed with." While the order did not grant authority to rip up track, it nevertheless was indicative of the degree to which the Southern supply situation had deteriorated.

Throughout 1863, the Confederacy faced a familiar quandary: an identified problem, an identified solution, and a resolute unwillingness to adopt that solution for the greater good. “Railroads selected as sources would go to any length to retain their rail… and the Government hesitated to enforce the Commission’s findings.” The fact that "soon whole roads were being taken over so their rail could be used on more important routes" was more a function of dwindling options than of any change in policy. Faced with absolutely stark supply alternatives by 1864, private property concerns and state's-rights squeamishness gave way to cold, hard realpolitik. Had such draconian measures been adopted two years earlier (as they were in the North) instead of the half-measures that were adopted in their stead, the Confederate logistics position in the latter half of the war would have been infinitely stronger.

Men and materiel were what the railroad industry needed most. They were also what the Confederacy could least afford to give up. These critical vulnerabilities, identified early on by Wadley, continued to sour the government-railroad relationship until the last days of the war. Near the end, Sims reaffirmed his longstanding belief that the solution to the railroads’ problem rested on increases in manpower and resources. "There is but one way in which it can be improved, and that is by liberal details of machinists from the Army…. They must go

permanently into the workshops and have material to work with. I have asked for them and they have not been granted…. It is a short-sighted and ruinous policy that looks to any other source for relief."  

Shortages in men and materiel slowly strangled the Southern rail transportation system. By the spring campaigning season of 1864, the situation had become so untenable that Army operations were adversely affected in every theater. Major-General Carter L. Stevenson noted in his field report on the Tennessee Campaign, "the breaking down of the railroads and the utter inadequacy of transportation put our armies on starvation rations, even when there were enough in the depots to supply them." One month later, Quartermaster-General Lawton, in a more politic if no less accurate assessment, noted "the supply of grain and long forage in the country is believed to be quite enough to supply the public animals, but no distinct opinion can be hazarded as to the ability of this bureau to supply it to the armies."  

Major S. B. French of the Commissary Department placed blame for the difficulties in food distribution squarely on the shoulders of the railroad executives. Following an inspection tour through the Carolinas and Georgia, he reported to the Commissary-General, "[E]ncouraging accounts are given of the latter State to meet our needs fully… if the required reforms in the management of railroad transportation are at once adopted." He went on to report, "Government is deprived of many facilities by the cupidity of railroad companies and the corruption of agents and employes, [sic] who regard their personal interests as paramount to all other considerations." H. K. Burgwyn echoed this sentiment, complaining that “in view of the

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24 *OR*, Volume III, 93.
26 *SHSP*, Volume II, Number 3, 113.
27 *OR*, Volume II, Number 3, 113.
28 *SHSP*, Volume III, 89.
late enormous advance and still advancing rates of railroad fares and freights… there seems to have been no check or even opposition to the unbounded rapacity of these companies.” Major French’s stinging indictment concluded, "[U]nless the most stringent regulations are adopted for the management of transportation and the interests of Government receive full and constant protection from the abuses practiced by those in charge, it would be idle to expect any improvement in our condition."²⁹ Wadley’s successor as head of the Railroad Bureau, Lieutenant Colonel Fredrick W. Sims, conducting his own inspection tour of Southern rail facilities soon after taking office, concurred. In a cable to General Lawton he lamented, “There seems to be a desire to work for the road’s interest, rather than to sacrifice all convenience for the country’s cause.”³⁰

The Confederate transportation system had decayed to such an extent that the needs of the various armies in the field were provided for on a day-to-day basis. This "just-in-time" supply architecture-- so much in vogue in today's logistics parlance-- paralyzed the armies of the Confederacy by tying them down to their respective railheads and restricting operations in any strategic depth. With often less than three days’ rations at hand, offensive Army operations patterned on the Gettysburg campaign model were unthinkable. In late 1864 Major French postulated, "It is impossible to foresee how forward movements can be made by the Army of Northern Virginia in the spring if we continue to be pressed for the current demands, and no increase is made from the only source to which we can confidently look."³¹ In fact, the reality was even bleaker than this forecast painted it to be: the Tidewater region was agriculturally ravaged after three hard years of war on its soil. Without adequate rail support to infuse his army with supplies from points south and west, in all probability General Lee would have been driven

²⁹ Ibid., 616.
³⁰ Black, The Railroads of the Confederacy, 226.
from Virginia in 1865, with or without a Union army opposing his front, simply for lack of food and forage.

Without fundamental changes in the way the Confederate government and the railroad industry interacted, it is highly unlikely that an infusion of resources would have been sufficient to achieve meaningful change. Sims, for all his dedication, lacked the authority to reinvent the government-industry relationship, and early in his tenure lacked the necessary long-term vision as well. In response to Major French’s caustic appraisal of the government-railroad relationship, Sims replied, “It is certainly not the policy of the Government to confine railroads to government work exclusively. It is to be hoped that this is not one of his 'required reforms.'”

Ironically, "out-of-the-box" thinking (such as federalization of railroad assets in time of war) was exactly what was required to remedy the South’s transportation ills. Instead, the government wholly abdicated its supervisory relationship with respect to the railroad industry. Until this dysfunctional relationship could be placed in proper balance, no amount of resources thrown at the problem could save the rail transportation system of the South.

Attempts to streamline the in-transit mobility of troops and supplies remained ad hoc throughout the war. Local government agents, rail executives, and commanders in the field routinely commandeered trains for their own purposes. These well-intentioned patriots failed to appreciate the behind-the-scenes choreography needed to maintain seamless and safe rail operations. In the best cases, this interference resulted only in excessive train delays and inefficient handling of supplies. For instance, John D. Whitford, the government agent in Goldsborough, cabled Sims on 25 September 1863 that "On Monday, Western & Atlantic train

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31 Ibid., 89.
32 Ibid., 93. By contrast, the Federal Government immediately placed their rail assets on a wartime footing, as evidenced by the early development of the United States Military Railroads (USMRR) and rapid codification of strict regulations governing military transportation by the civilian-run roads.
went to Weldon at General Fremont's request for artillery, where it has remained since, waiting its arrival at that point… what has become of it?"\(^{33}\) Far too often, however, well-intentioned agents or generals, operating in the "national interest" but without the benefit of any understanding of the mechanics of the rail transport system, sent multiple trains down the same track, with appalling consequences. The resulting losses of Confederate property and lives—both of which were already in critically short supply—led Wadley to urge Secretary of War James Seddon to provide legislative relief. The Inspector-General’s General Orders, Number 2 of 03 January 1863 attempted sorely needed reform. "Recognizing the necessity of officers of the Railroads having full control of their business… military officers are prohibited from interfering with the control and management in any way of Railroads."\(^{34}\)

Unfortunately, this stricture (like so many others) was widely ignored. “Officers, including the Commander-in-Chief, meddled with trains throughout the war.”\(^{35}\) Railroad companies claimed, with some justification, that government "management" of their rolling stock adversely affected not only corporate profits but the efficiency of government transportation as well. R. L. Singletary, the government agent in Charleston, lamented to Sims on 22 December 1863, "The whole business of Government has been checked by the seizure of our cars and engines at Wilmington."\(^{36}\)

Despite repeated attempts to codify the management of Southern railroads, and however sound Confederate regulatory action might have appeared on paper, in the end these regulations did not survive translation into action in the field. Out on the various rail lines of the South,

\[^{33}\] J. D. Whitford to F. W. Sims, “Transport of Troops and Supplies by Railroad” in MSC 46, Collected Papers Relating to Railroads, Valentine Museum, Richmond, VA. (Hereafter cited as Collected Papers, VM.)

\[^{34}\] C.S.A. Inspector-General, General Orders, Number 2, January 3, 1863, in Crandall 927, Confederate Collection, Boston Athenaeum, Boston, MA. (Hereafter cited as Confederate Collection, BA.)

\[^{35}\] Clark, To Strain Every Energy, 75.

\[^{36}\] J. D. Whitford to F. W. Sims, “Transport of Troops and Supplies by Railroad” in MSC 46, Collected Papers, VM.
mayhem prevailed at the operational level. "At present no department has control over the railroads except so much as has been yielded by contract or courtesy."37 This was no way to run a railroad.

37SHSP, Volume II, Number 3, 113.
Reining In the Iron Horse

The necessity for some legislation for controlling military transportation on the railroads... forces itself upon the attention of the Government.

- Jefferson Davis, President, C.S.A., in address to the Confederate Congress, 18 August 1862

In April 1861, with the guns of Fort Sumter still ringing in their ears, thirty-three railroad presidents met in Montgomery, Alabama, to discuss ways to streamline the business of Confederate rail transportation. Secretary of War L. P. Walker opened the session by asking the assembled railroad barons for their cooperation. "I... ask your assistance in arranging a plan for the transportation of troops and material of war... having entire confidence in the disposition of each of you to aid this Government with all the means in your power." Walker's subservient tone set the pattern for government interaction with the powerful railroad lobby for the remainder of the war. In a fit of patriotic fervor, the assembled delegates agreed to establish government fares of two cents per mile for troops and half-rate fares for war materiel. The executives deliberately shied away from the truly thorny issues before them, such as coordination of through-transportation, prioritization of cargo, and transfer of rolling stock from one railroad to another. The honeymoon, such as it was, between business and Government would not last. By October, another convention held in Chattanooga modified the rate structure upward, and the tariffs continued to rise from that point forward (with little or no government opposition) in response to a mix of legitimate inflationary pressure and illegitimate corporate greed.

The Quartermaster Department, initially under the direction of Colonel Abraham C. Meyers, was nominally responsible for the execution of all government transportation. Meyers deputized Major William S. Ashe to consult with the various railroads and expedite the business of government over the rails. In this effort, both Meyers and Ashe were spectacularly
unsuccessful. Wracked by inefficiency, waste, and even corruption, the performance of the
Department warranted additional oversight. In January 1862, a Special Committee of the
Provisional Confederate Congress was chartered to examine its efficiency. After an exhaustive
review, T. N. Waul, the Committee's capable secretary, submitted a detailed and highly
controversial report advocating military control over the primary rail routes of the Confederacy,
especially those routes leading to the headquarters of armies in the field. Furthermore, these
roads “should be placed under the direction of an efficient superintendent, free from local
interests, investments, or connection with special railroads.” The Committee went on to identify
“a deficiency of rolling-stock on the most used and important railways… which could be
remedied under a proper administration and distribution of stock, taken from roads where there is
a superabundance…. With proper management the capacity of the principal routes can be
increased [from two] to six trains per day.”

The recommendations of the Committee were exceptionally prescient, and had they been
adopted into law by the Congress, the management woes of the Confederate rail system might
have been in large measure resolved in 1862. The committee’s sweeping proposal, however,
was “too much for the southern legislative mind. It too seriously violated fundamental
shibboleths concerning the evils of centralized government.” The Provisional Congress was
content to let the report die on the vine. Hamstrung by a weak legislative foundation, the
Quartermaster Department was powerless to improve the management of Confederate logistics.
All Major Ashe could do was continue to monitor the defective system, make suggestions for
improvement to the railroad executives, and call for more meetings.

38 OR, Volume I, 238.
40 OR, Volume I, 885.
41 Black, The Railroads of the Confederacy, 96.
One such meeting (which was to demonstrate a tremendous amount of unrealized potential) was convened in Richmond on 05 February 1862. The Fontaine Supply Committee’s expressed purpose was to address ways to improve access to raw materials within the Confederate rail system. The delegates drafted a series of innovative resolutions calling for government construction of new iron works, government consolidation of overseas imports of critical supplies, and the release of skilled railroad laborers from the Army. In an almost revolutionary step, the members put forward the argument that “an immediate supply of iron could be provided by tearing up secondary lines as designated by the Secretary of War.” These revolutionary and potentially rewarding resolutions were quietly scrapped by President Davis but are nonetheless significant in the way they reveal widespread recognition of the problems inherent in the Confederate rail system and identify viable solutions to those problems.

Fontaine was not the only member of the Confederate elite to develop a novel approach to the problems of Southern logistics. As the war progressed, General Robert E. Lee developed a radical conception of a national rail transport system. As articulated in his General Orders, No. 1, “it is absolutely necessary that the movements of railroad trains should be under one individual control…and all orders for transportation of any kind, and the movement of every train, will be directed through him.” Lee’s perceptions were colored by the extreme difficulties he encountered early in the war while trying to coordinate logistics movement by rail. In the first year of the war, “everywhere, local quartermasters entered into local arrangements with local railroads in the apparent belief that the doctrine of laissez-faire could be successfully applied to the problems of military transportation.”

Unfortunately, laissez-faire policy could not hope to meet the growing transportation

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42 Ibid., 101.
43 General R. E. Lee, General Orders, Number 1, n.d., in Crandall 927, Confederate Collection, BA.
needs of a voracious Confederate war machine. Consequently, following his appointment to
Chief, Railroad Bureau, Colonel Wadley’s first official act was to convene another railroad
convention. The presidents and superintendents of each road gathered in Augusta in mid-
December to explore a host of outstanding interstate transportation issues. As a former Southern
railroad executive, Wadley recognized the pitfalls inherent in the current management system
and attacked the issues with zealous determination. To his immense frustration, short of
appointing a number of ineffectual fact-finding committees, the Convention accomplished
nothing of substance. Two days after the meetings concluded, "[h]aving failed to agree upon a
definite plan for carrying on Government transportation, and deeming it of the first importance
that some system should be agreed upon", he beseeched the railroad executives to agree to the
following interim plan:

- Your Superintendent to act as my assistant, without compensation, in conducting Government
  transportation upon your road;
- It being his duty to receive... orders for transportation, and to order and conduct such
  transportation;
- To report to me at least once a week;
- To make immediately a full and accurate report of the amount and condition of his rolling stock
  and general condition and wants of his road.\textsuperscript{45}

Wadley's plan was by no means revolutionary, seeking as it did to work \textit{within} the
confines of the existing power structure. Wadley asked only for the cooperation of the railroads,
not for control over them. Nevertheless, their collective response to this tentative foray into the
execution of centralized authority was tepid at best. The reply of Brentley D. Hassell, President
of the Charleston and Savannah Railroad, was representative of the typical viewpoint:

\textit{Although the officers of this Road will take pleasure in cooperating with you, to the fullest extent;
yet it is not intended thereby to place the control of the road in other hands, than where the
Charter, and the voice of the Stockholders have signified such management should be held--
namely, in the President and the Board of Directors.}\textsuperscript{46}

\textsuperscript{44} Black, \textit{The Railroads of the Confederacy}, 63.
\textsuperscript{45} W. M. Wadley to Superintendents of Railroads in C. S. A., 17 December 1862, in MSC 46, \textit{Collected Papers}, VM.
The Confederate rail system thus jolted along throughout the first half of 1863 without a coherent management plan to guide it. But time was not on the system's side. Failure to regulate the industry as a whole led to inefficiencies across every facet of railroad operations. "By the middle years of the war, wood for cross ties and fuel grew scarce… Often train crews made frequent stops on their routes to gather wood."\(^{47}\) As fuel sources in the immediate vicinity of the tracks were exhausted, these pit stops often turned into major expeditions. Later in the war, troops were routinely disembarked and sent on laborious, time-consuming searches, just to gather enough fuel to reach the next station. The Confederate rail system was figuratively and literally running out of gas.

Worse, other renewable resources were also in acutely short supply. "Aside from iron there are copper, pig tin, steam gages, cast steel, files, etc, without which it is impossible to maintain engines. They are as necessary as iron. Heretofore a small supply has been had through Wilmington, but with that port closed, we are cut off entirely except by trading with the enemy."\(^{48}\) For much of the war, the Union blockade of Confederate ports was anything but watertight. Of 1300 attempts to run the blockade gauntlet during the war, a full thousand succeeded. Unfortunately, blockade-runners tended to place profits before patriotism, thus reducing their contribution to the war effort. For instance, Tredegar Iron Works bought shares in a venture to import sorely needed machine-tool repair parts from England. The mission’s blockade-runner successfully returned to port, but when she docked, her inventory contained a few machine tools, and a vast assortment of ladies’ hosiery and fine cigars. The Davis government could have stepped in to \textit{regulate} the blockade-running industry by prioritizing needed supplies, providing escorts to the steamers, and stamping out profiteering. Instead, in a

\(^{48}\) \textit{SHSP}, Volume II, Number 3, 122.
refrain echoing his government’s relationship with the railroad industry, Davis determined it was “not the proper function” of government to “support private enterprise.”

General Lawton, who succeeded Meyers as Quartermaster-General, astutely recognized the Confederacy’s fundamental logistics problems. Without an influx of new supplies and in the absence of regulatory controls, inevitably the railroads would reach their culminating point, when network demand would exceed capability. The issue came to a head in the summer of 1863. As the vital Piedmont Railroad spur neared completion, the reserve of replacement iron rail had dwindled to such an extent that not enough track iron could be identified within the entire Confederacy to complete the all-important connection with Danville. Finally faced with the imminent collapse of the entire railroad system for want of critical supplies, Congress and the President were forced to take decisive action.

The Impressment Act of 01 May 1863 authorized the Secretary of War to compel railroads to conduct government business on a priority basis, transfer rolling stock among different railroads, and seize any road that did not comply. Significantly, buried within the fine print, the act also empowered the Secretary to remove rail from one company and distribute it to the roads of another, if deemed in the national interest to do so.

Exercising this proviso, the Railroad Bureau was granted authority to impress the required material to complete the Piedmont extension and looked to fill the order from seven neighboring lines. However, as Wadley’s on-scene deputy, Captain Myers, tried to execute the impressment order “each taking of private property was resisted with stubbornness… the

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50 See Map, page 9.
Roanoke Valley long sheltered its disused track with a court injunction."\(^{53}\) Legal maneuvering became commonplace as railroads jealously hoarded scarce supplies. Railroad tycoons, whose number included some of the most powerful men in the South, used their influence to petition state governors and even members of the Davis Administration to intercede on behalf of their interests. Late in 1863, James E. Allen, Superintendent of the Chatham (North Carolina) Railroad, petitioned Secretary Seddon for a redress of grievances relating to commandeered supplies. Seddon replied in exasperation, “Your application for a protection of the supplies… of the Chatham RR has been received, together with a letter from Governor Vance on the same subject…”\(^{54}\) These appeals for protection played right into the fervent states-rights beliefs of many Southern governors, most notably Governor Vance of North Carolina and Governor Brown of Georgia; the role of these powerful personalities in shaping the opinions of the weak and vacillating Davis Administration cannot be overstated.

In fairness to Wadley, the terms of his orders placed severe limitations on what he could hope to accomplish in his post. He was, in fact, totally reliant on the goodwill and cooperation of the railroad executives. Once it became clear to him that this goodwill had finite limits, and that no further support from the Legislative or Executive branches was forthcoming, he had no alternative but to accept the status quo. After the debacle with the Piedmont connection, he focused the attention of his Bureau on representing the interests of Government within the framework of the existing railroad relationship. If he was not to be given the tools to do his job correctly, he “preferred that the railroads should stay in the hands of the railroad men.”\(^{55}\) Following successive failed attempts to enlist the support of both his own superiors and the railroads themselves, Wadley formally ceded the initiative in his internal, bureaucratic war. In

\(^{53}\) Ibid., 155-156.
\(^{54}\) James A. Seddon to James E. Allen, n.d., in MSC 46, *Collected Papers*, VM.
mid 1863 he issued the following statement to agents across the Confederacy:

As there has been great destruction and loss of cars resulting from the policy of running them over roads to which they do not belong, transshipment is earnestly recommended. It is believed with proper arrangements, transportation will be facilitated by each road retaining its own rolling stock, and to that end I desire all to cooperate.56

Exactly what the Colonel meant by “proper arrangements” is unknown, but it is clear that this pronouncement marked the end of his long struggle against the policy of laissez-faire. Confederate compromise on the proprietary control of rolling stock and the resulting requirement for transshipment (necessitating the reloading of all through-traffic at the terminus of each line) conferred disastrous long-term consequences on the Confederate logistics system. Wadley entered the Confederate rail arena early enough in the war for his policies to have had a pronounced impact. Regrettably, this crucial compromise (representing a major victory for state’s-rights advocates and the rail interests) postponed any serious debate on transforming Confederate railroad management. A critical watershed opportunity was allowed to pass, and Government rail traffic continued to operate at the discretion of the individual rail carriers rather than the will of the government.

The succession of Lieutenant Colonel Sims into Wadley’s position in June, 1863 represented possibly the best opportunity to date to effect substantive change in Confederate rail management policy. Armed with a new Bureau Chief, backed with the (potentially) powerful hammer of the Impressment Act, the moment for defining change was at hand. Regrettably, within weeks of assuming office, Sims reverted to the state’s-rights approach and steadfastly avoided confrontation with the powerful railroad lobby. In correspondence drafted shortly after assuming office he wrote:

The government does not design interfering in the management of railroads, but it claims preference in the transportation of its troops and freights… nor is the Government willing that this privilege shall be disturbed by the transfer of cars or engines from one road to another.  

Significantly, this policy was not reflective of Sims’ personal beliefs on the subject, which clearly evolved as he gained experience in the position. His private thoughts were made evident in a personal letter to a friend, dated 08 January 1864, in which he outlined the proper role and function of the Railroad Bureau:

- A railroad bureau should be a coordinated branch of the Quartermaster's Department, but independent of the Quartermaster General to give its chief greater latitude of action and a more direct responsibility to Government.
- The chief of the railroad bureau should therefore have the power to enforce schedules, distribution of rolling stock from the strong to the weak, and sending trains through from one road to another.
- He should organize a system for transportation protecting Government for stores in transition, yet just to railroad companies, and should control all offices of Government connected therewith.

The differences between the public policy of the Railroad Bureau and Sims’ own private beliefs are striking. By 1864, Sims clearly recognized what changes were necessary to transform the Bureau into a workable entity. He yearned to implement those changes within his organization but he was powerless to do so.

Instead, the strict provisions of the Impressment Act were never put to the test. The railroads constantly tested the limits of their power and influence in their relationship with government. The railroads pushed; government rarely, if ever, pushed back. “The carriers themselves realized that Davis dared not crack the whip, and they cooperated only when self-interest, or a transient patriotic impulse, motivated them.”

The South's continued failure to achieve meaningful reform is evident in a letter from W.

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56 W.M. Wadley to Railroad Agents of the C.S.A. Quartermaster Dept, 1863, in Crandall 927, Confederate Collection, BA.
57 F.W. Sims to Railroad Agents of the C.S.A. Quartermaster Dept, 1863, in Crandall 927, Confederate Collection, BA.
58 F.W. Sims to Mr. Cruger, January 8, 1864, Compiled Service Records of Confederate Generals and Staff Officers, Record Group 93, M331, Microfiche Roll 226, National Archives Records Administration, Washington DC.
59 Black, The Railroads of the Confederacy, 226.
M. Burwell to Secretary Seddon in the spring of 1864, lamenting the "want of organized transportation and the inability of the railroads to affect the domestic commerce of the country." His proposed remedy for the transportation ills of the Confederacy struck a recurring chord. Having served as chairman of the Committee on Roads and Interior Navigation in the Virginia State Legislature, he had become intimately familiar with the failures of the rail transport system, at least within his own state. He was aware of the persistent deficiencies in rolling stock, the failure to complete railroad extensions on major lines to establish through service, and the parochial refusal to facilitate express shipment of cars on different roads of the same gauge. These are the very same problems that Ashe and Wadley had tried to address, two years earlier. Burwell proposed a solution analogous to several offered previously. First, he argued for the military possession of the roads, to the degree that this possession insured seamless through freights and close connections. Second, he advocated the organization of locomotive factories, with a detail of all available former railroad men in the Army to provide for the repair needs of all the roads. He readily acknowledged, "this plan involves labor and responsibility, but it is submitted in the belief that it will affect much to facilitate the military operations and the internal commerce of the country."

Secretary Seddon likewise recognized the need for a complex overhaul of the Confederate transportation system, albeit not until the end of April 1864, too late to have a tangible effect. In his annual report to the President, he advocated precisely the sort of increased centralization of authority the Quartermaster Department (and some railroads, for that matter) had been seeking all along. "The roads should be run under unity of management" he wrote, "without reference to their local limits or separate schedules, and with the rolling-stock possessed by all… there should be also the power of at once taking possession of and removing

60 OR, Volume III, 226-227.
the iron on roads which must be sacrificed to maintain or construct others more essential.”\(^{61}\)

The problems of Confederate railroad transportation were clear-cut. The solutions were understandable and attainable. Both private industry and government acknowledged the many weaknesses of the existing system. Yet meaningful legislation that incorporated strong enforcement powers was not forthcoming from the Congress until the fall of Atlanta and rumors of Sherman’s march through Georgia spurred the passage of comprehensive transportation legislation. On 15 February 1865, Congress passed an act that federalized virtually all railroad employees. “When the Secretary of War shall take charge of any railroad… line, the officers, agents and employees of such company shall be considered as forming part of the land forces of the Confederacy.”\(^{62}\) At a stroke, the Southern railroads effectively became part of the Army. One can only imagine what effective, proactive managers like Wadley and Sims could have done with such an Act, three years earlier. Significantly, Davis did not ratify this monumentally important (and monumentally overdue!) legislation for a full two weeks after it was presented for his signature. Regardless, by this time the end was already in sight; no piece of legislation would lift the unrelenting pressure of Grant’s armies.

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\(^{61}\) Ibid., 339-340.

The Battlefield Impact of Confederate Railroad Management

_Railroads are at one and the same time the legs and the stomach of the army._

- J. H. Trapier, Brigadier General, C.S.A.,
  26 December 1861

The abject management failures of the Confederate rail transportation network were perhaps best illustrated by the performance of that network when called to duty in time of crisis. Twice in the early years of the war, Southern railroads were called upon to perform strategic lift on a scale unprecedented in the history of warfare. During these moments of national urgency, the true weaknesses of Confederate railroad management came into sharpest focus. The Confederate rail transportation system did as much as could reasonably have been expected of it in the weeks preceding the battles of Shiloh (April 1862) and Chickamauga (September 1863), concentrating troops and war materiel where they could do the most good. However, these two movements also vividly demonstrated the severe handicap under which the Confederate logistics system operated. The South’s “imperfect network of interior lines” was called upon to provide corps-level mobility and sustainment; in retrospect, this was a degree of support for which it was patently unsuited and ill prepared. The preludes to Shiloh and Chickamauga provide snapshots in time into the inner workings of the Confederate logistics system, showcasing both the impressive capabilities and strict limitations of the Southern rail transportation network, and graphically highlighting the tactical impact of years of sustained mediocrity in railroad administration.

_Concentration at Corinth_

Unlike in the east, where the Army of Northern Virginia experienced some modest successes early in the war, the Western theater of operations was a disaster for the Confederacy almost from the war’s inception. Confederate General Albert Sydney Johnston was nominally in
charge of a loose amalgamation of forces stretching from Kentucky south to Mississippi along a thousand mile front. Though revered by President Davis as a pillar of martial wisdom, Johnston nonetheless violated a fundamental tenet of land warfare by failing to concentrate the meager forces available under his command. In blindly supporting Davis’ strategic concept of a loosely-fortified defensive line in the West, Johnston failed to achieve a favorable force ratio anywhere along his front and stood vulnerable to Federal attack in any number of vital areas. Correctly sensing the Confederacy’s lack of strategic depth throughout the Kentucky-Tennessee-Alabama corridor, Union commanders quickly seized the initiative in early 1862 to launch an offensive designed to split the Confederacy in two and isolate the Mississippi Valley from the remainder of the Confederacy.

The defensive collapses at Fort Henry and Fort Donelson in mid-February 1862 served as a wake-up for Johnston and his staff. Middle and western Tennessee now stood open to Federal advance along any of several avenues of approach. To his credit, Johnston was quick to appreciate the folly of the status quo. In a hastily drafted letter to the President he observed that “Considering the peculiar geography of this state and the great power which the enemy’s means afford them… the force under my command cannot successfully cover the whole line. I am compelled to elect whether he shall be permitted to occupy middle Tennessee, or turn… open the valley of the Mississippi. To me the defense of the valley seems of paramount importance…”63 The urgent mandate for concentration was seconded by General Beauregard, who advised Davis, “We must give up some minor points and concentrate our forces to save the most important ones, or else we will lose all of them in succession.”64 Davis finally agreed to abandon the ill-conceived cordon defense, conceding the “folly of trying to defend all the frontier, seaboard and

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inland in favor of force concentration. Corinth, Mississippi, a quiet town of twelve hundred just south of the Tennessee border, became the focal point of this Confederate concentration due to its strategic location astride the intersection of the Memphis and Charleston and Mobile and Ohio Railroads. While some units traveled by foot, horse, wagon, or steamship to meet the rendezvous, the preponderance of forces came to Corinth by rail. Proximity to the iron horse put this sleepy town on the map in the spring of 1862, as units throughout the western Confederacy heeded the call to arms and converged on Corinth with a speed unthinkable ten years earlier.

Johnston’s reinforced corps, numbering nearly twenty thousand men, slogged south from Nashville and Murfreesboro to Huntsville, Alabama, connecting with the westbound Memphis

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and Charleston line. Fifteen thousand more troops under General Leonidas Polk straggled south on the Memphis and Ohio after evacuating Columbus, Kentucky. Braxton Bragg and the ten thousand troops of his Second Grand Division headed north on the same line from Pensacola and Mobile. General Beauregard, freshly reassigned from the Eastern Theater as Johnston’s second in command, took control of the Army of Mississippi and raced northeast from New Orleans. General Ruggles brought five thousand more men from New Orleans. All told, some fifty-six thousand Confederate soldiers were transported from all corners of the western Confederacy in a little more than a month.\(^{66}\)

The concentration of men and materiel at Corinth represented the largest single gathering of troops in the short history of the Rebellion— an inconceivable accomplishment without the iron horse. These successes notwithstanding, the failure of Confederate leadership to address the serious underlying command and control issues saddling the Southern railroads had a significant, adverse impact on efficiency. Translated to the field of battle, the cumulative effects of these inefficiencies had a tangible impact at the tactical and operational levels of war.

Strategically, the fall of Forts Henry and Donelson in quick succession in early 1862 rendered the whole of central Tennessee indefensible. However, Johnston's decision to abandon Nashville to the Federals without a fight caught the citizens of that Confederate capital off guard. As one of the Confederacy's principal logistics hubs, Nashville's warehouses were stocked with food, clothing, and munitions of vital importance to the army, and the citizens of the city expected a stout resistance. When Federal troops under General Don Carlos Buell bore down on the capital unopposed, disbelief quickly spread to panic. Looting and rioting of government stores became the order of the day. Only the timely arrival of Nathan Bedford Forrest's cavalry regiment on 22 February restored a semblance of order in the city. All the available rolling stock

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in the city (both rail and wagon) was pressed into service to evacuate supplies. However, the entire rail network was in deplorable condition; lines within the city alone contained no less than twelve hundred broken rails, and those tracks that were serviceable were so worn that train speeds were limited to no more than a crawl.

Under the circumstances, Forrest did a creditable job, considering the state of anarchy that prevailed at the managerial level on his arrival. All but one of the Commissary and Quartermaster's Department representatives had already fled the city, leaving no one in charge of government rail operations. Operating in a leadership vacuum and with "the railway…taxed to its utmost to carry away the stores of most value," it is small wonder that the majority of supplies were squandered. The logistical ramifications of the fall of Nashville, brought on partly through gross negligence and mismanagement of the city's rail infrastructure, were to have operational and strategic repercussions for the entire Confederate war effort in the western theater.

The fallout from the Nashville debacle did not end with the city’s surrender. Inability to effectively employ rail transport south of Nashville in the days following the evacuation influenced the mobility of Johnston's corps, struggling to reconstitute south of the Tennessee River. To reach Corinth from Murfreesboro, Johnston could have entrained his men on the Nashville and Chattanooga line, connecting with the Memphis and Charleston in Stevenson, Alabama. As early as 02 March, in fact, Beauregard dispatched a letter to Johnston begging him to take this very step in order to hasten the concentration of the two wings of the Confederate army. Johnston understood this dire imperative perhaps better than anyone, but found that

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“circumstances dictated a deliberate march.” The General opted to march his men overland through swampy terrain due south, eventually to meet the Memphis and Charleston railroad at Decatur. This decision cost him dearly in terms of time, troops and morale, but was necessary due to the abominable condition of the rails. As General Gilmer attested after the war, transport by rail

was simply impossible without sacrificing the supplies and munitions on which the army depended... the entire transportation capacity of the railroads was taxed to the utmost... the movement was made over the roads leading to Shelbyville, Fayetteville and Huntsville as expeditiously, considering the number of troops to be transported, as it could have been done by rail, with the imperfect organization of the railroad, as it then existed.71

This passage speaks volumes to the condition of the southern rail network. Johnston's choice of wagons over rails is a telling indictment of the status of the Confederate rail system in the west. Historian Charles Roland, one of the foremost authorities on Johnston and his short but illustrious Confederate career, confirms this opinion. He noted, “Johnston knew time was precious, but he had with him great quantities of artillery, ammunition and provisions that could only be moved by rail. Wanting the facilities to transport troops and supplies together, he decided to march the troops and ship the supplies.”72

Once Johnston's corps finally reached the line of the Memphis and Charleston, his logistics difficulties did not end. Because only one hundred and sixty of the four hundred cars required to transport his corps west on the Memphis and Charleston were available, it took nearly a week to transport his corps the last one hundred miles of their journey to get them to the fight.73

By 25 March, Johnston had assembled all his forces at Corinth, with one notable exception. General Van Dorn's corps still struggled eastward from Arkansas, hampered by

incomplete rail routes and the natural obstacle of the Mississippi River. For nearly two weeks
Johnston bided time waiting for Van Dorn, feeling that the addition of his corps to the forces
already arrayed at Corinth could be decisive. Although cautioned in a telegram from General
Lee the next day to "deal a blow at the enemy in your front, if possible, before his rear gets up
from Nashville," Johnston still delayed as long as possible to give Van Dorn more time to
complete his movement. Only when intelligence indicated that Buell's army was approaching
the eastern bank of the Tennessee opposite Pittsburgh Landing did Johnston commit his force—
by which time, of the twenty thousand soldiers under Van Dorn's command, only one regiment
had managed to reach Corinth. Had Van Dorn's entire force been successfully committed to
the battle, the rout of Federal forces on Shiloh's first day might have been complete. The war in
the west from that point forward would have taken a far more favorable turn.

The Longstreet Movement

Unlike the concentration at Corinth, which developed ponderously over a span of months,
the prelude to Chickamauga evolved quickly. Although fewer troops were required, they were
needed much more quickly and had to travel farther to reach their objective, so the degree to
which the rail system was taxed was roughly equal in each case. By this time, however, the
Bureau of Railroads had been established to exercise at least nominal control over the process.
Theoretically, a year's worth of wartime lessons learned (including the painful lessons of
Corinth) together with the implementation of an overarching bureaucratic control mechanism
should have led to substantial improvement in the processes of Confederate rail transportation.
Indeed, the short-notice transfer of some twelve thousand troops, together with twenty-six pieces
of supporting artillery, more than nine hundred miles in ten days, was a noteworthy

73 Martin, The Shiloh Campaign, 58.
74 Ibid., 110.
accomplishment. But, just as had been the case over a year before, the logistics required to conduct corps-level movement from the outskirts of Richmond to the battlefields of Chickamauga stressed the rail system to the breaking point. Despite the best efforts of Lawton, Sims and their entire supporting cast of agents from Virginia through the Carolinas and into Georgia, only five of the ten regiments of infantry arrived in time to participate in the battle’s first day, and some units (including all twenty-six guns of General E. Porter Alexander’s artillery) did not arrive at Chickamauga until after the last shots of the battle were fired.

In fairness, Lawton and Sims performed Herculean feats considering the small quantity and quality of rolling stock at their disposal and the loose, advisory nature of their control. Although by this time they had the authority (technically) to commandeer trains, this authority was never exercised. Instead, Sims went to each railroad individually, with hat in hand, asking for cooperation. For example, he telegraphed the president of the Cheraw and Darlington line, "Do you need all your engines? I want two good ones for a month or so. Can you let me have them?"76

Sims knew neither the exact number of soldiers to be moved, nor the route they were to take, until the day before the first troops were to board in Virginia. Under these conditions, the telegraph lines in and out of Richmond buzzed with activity, though much of it at cross purposes due to lack of centralized authority or a workable logistics plan. The haphazard nature of the Confederate reinforcement of General Braxton Bragg’s army has been attributed to many factors, but the principal concerns that continually resurface were the lack of centralized control and poor communication.77

Analysis of the surviving documentation relating to the Longstreet movement confirms

75 Force, From Fort Henry to Corinth, 108.
76 Clark, To Strain Every Energy, 101.
this view. Troops were transferred on their circuitous route west without any definitive plan for how they were to reach their destination. Instead, Lawton, Sims and the government agents along the way generated solutions to problems as they arose. Their plans, such as they were, made little attempt to coordinate troops and trains to maintain unit integrity so that by the time they reached Dalton, Georgia, reestablishing unit cohesion proved impossible. W. M. Drane, railroad superintendent in Wilmington, wired Sims on 14 September 1863 with the following news: "I have train now here to carry two thousand six hundred men. They will all get off tonight. This embraces Wofford's Brigade and some four hundred scattering from various commands, together with stragglers."78 In this atmosphere of chaos, troops jumped off the train and rushed into battle, often forming up on the nearest colors they could find.

Due to lack of planning, the movement proceeded in fits and starts rather than in an orderly, “time-phased” progression. Often, troops sat idly by awaiting trains, or vice-versa. The next night, 15 September, Drane cabled Sims, "Sent forward Gen Longstreet and staff today. No troops here, only a few horses which can go tonight. I have trains idle, waiting."79

In the absence of a master plan, individual agents attempted to ease troop congestion at their level by rerouting trains on their own authority, in whatever manner they thought best. S.S. Solomon, railroad superintendent in Charleston, cabled Sims, "We are now engaged in bringing troops to Charleston from Wilmington and aiding Drane in removing those for Georgia via Kingsville… did you receive telegram from me about troops coming via this city for the West?"80 Confusion reached its zenith the next day. H. T. Peake, government agent at

77 Ibid., 128.
78 W. M. Drane to F. W. Sims, “Transport of Troops of General Longstreet's Corps”, September 14, 1863, in MSC 46, Collected Papers, VM.
79 W. M. Drane to F. W. Sims, “Transport of Troops of General Longstreet's Corps”, September 15, 1863, in MSC 46, Collected Papers, VM.
80 S.S. Solomon to F. W. Sims, “Transport of Troops of General Longstreet's Corps”, September 15, 1863, in MSC 46, Collected Papers, VM.
Charleston, cabled Sims in exasperation:

I have yours of the 9th instant ordering transportation for twenty thousand (20,000) troops from Kingsville and Columbia. To be certain there should be no delay I immediately stopped all our trains and sent all trains to Columbia and Kingsville. Yesterday I rec [sic] a telegram from Quarter Master here to furnish transportation from Charleston... I ordered down two (2) trains and then I am told the troops will go via Savannah to relieve our road. This is rather an embarrassment than a relief.  

In his memoirs, General E. Porter Alexander echoed this sentiment. “The movement of our corps, considered in the light of modern railroading, was very slow.... Our entire journey by rail had been about 852 miles in about 182 hours.” In other words, the rail system of the Confederacy, in its hour of greatest need, was reduced to the pace of a very slow jog.

If Lawton, Sims, and the Quartermaster Department did the best that could be expected of them under the circumstances, the same cannot be said for Jefferson Davis. After meeting with General Lee and deciding to reassume the offensive in the West, Davis took nearly two weeks to translate this new strategic vision into marching orders for Longstreet’s First Corps. The President’s hesitant response to the growing threat posed by Rosecrans in the Tennessee Valley was demonstrative of the Confederacy’s lackluster war management and vacillating leadership. The crisis “demanded... prompt and decisive action to meet it. Spending two weeks to decide a course of action qualifies as neither prompt nor decisive.” Had Davis given the order to transfer the troops with more alacrity, five additional regiments, together with all of General Alexander's artillery, would have reached Georgia in time for the opening salvos of the battle.

Union and Confederate planners confronted a similar logistics problem when faced with the prospect of corps-level movements by rail. Not even the most affluent line in the northern system had enough rolling stock to seamlessly transfer armies on this scale. North of the Mason-

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81 H. T. Peake to F. W. Sims, “Transport of Troops of General Longstreet's Corps”, September 16, 1863, in MSC 46, Collected Papers, VM.
Dixon, innovators such as Prescott Smith seized on the expedient solution, borrowing stock from neighboring tracks. In the Confederacy, failure to heed warnings early in the war to build the necessary connections meant that neighboring lines were physically unable to provide the necessary support. Had lines of communication with the western Confederacy been streamlined by connecting disjointed track sections, additional track line and rolling stock off subsidiary roads that could have been brought to bear. Together, these actions would have shortened the journey in terms of both time and distance to such an extent that, despite Davis’ procrastination, all of Longstreet’s troops and equipment could have still taken the field in time to fight.

The impact of the Chickamauga movement is a matter of perspective. Miracles in Confederate rail transportation got six thousand men to Chickamauga in time to have a decisive influence on the outcome of the battle and drive the Federals from the field in disarray. On the other hand, failures in Confederate rail transportation prevented an additional six thousand more men from making it to the fight in time. Had their weight been added to Bragg’s in a timely manner, Rosecrans’ army might not have survived long enough to retreat to Chattanooga. The strategic picture in the West, and the Confederacy’s fortunes in the war, might then have taken on an entirely new complexion. Under those conditions, the Confederacy’s prospects for a favorable negotiated settlement could have loomed significantly brighter. “The heroic efforts necessary to accomplish the Longstreet movement do not obscure the cumulative results of bad decisions.”84 Though none could have known it at the time, those bad decisions quite possibly spelled the end of the Confederacy.

Railroads in the Civil War were a pivotal supporting component to the war effort of each belligerent. Union leadership was quick to appreciate the significance of well-organized mass

83 Clark, To Strain Every Energy, 34.
84 Ibid., 14.
transit, and optimized its transportation apparatus accordingly. By as early as 1862 the Northern states successfully fielded a rail network that functioned as "a smoothly running machine, directed by able technicians, delivering what was needed promptly and without lost motion."\(^8^5\) (italics added) Arguably, these three criteria represent valid measures of effectiveness in modern warfare. When compared against these very same standards, the Confederate rail system failed utterly. None of these terms characterize the daily operations of the southern roads; in fact, the opposite might be said. Even when placed on full alert, with the greatest efforts of their government brought to bear (as was the case during the Johnston and Longstreet movements) inefficiency remained rampant. The frantic exertions of the Confederate rail system, while remarkable in their own right, met few, if any, of the criteria that characterize a machine of modern warfare.

\(^8^5\) Ibid., 311.
The End of The Line

You can get farther with a kind word and a gun than with a kind word alone.

- Willie Sutton, bank robber

Disconnects between rail lines, mismatches in gauge, and single-minded railway executives bent on personal and corporate gain were not challenges unique to the South. But the singularity of purpose with which Lincoln, his Cabinet, and closest advisors dealt with these issues had no counterpart in the Richmond government. To state, as John Clark has done, that "the Union addressed and overcame its problems, by simply overriding the objections of the aggrieved" is to overstate the case. Northern railroads were, in fact, offered and accepted a lucrative partnership with their government, and many issues were resolved through an unparalleled degree of close personal and business cooperation. Nevertheless, there is also a grain of truth to Clark's argument. Unlike their counterparts in Richmond, Union leadership never hesitated to exert Federal authority for the good of the nation. Each railroad executive understood the nature of his relationship with government and the consequences of both cooperation and resistance. In the North, "the necessities of sudden conflict and the gathering of armies forced cooperation from the reluctant companies at the same time as the business of the government was bringing prosperity in its wake." By offering favorable terms to the railroads for all forms of government business, the Lincoln Administration proffered the carrot, but by the same token it made no effort to conceal the stick. Where, it might logically be asked, were the carrot and stick in the Davis government?

86 Ibid., 180.
The carrot was never proffered to the railroads by the Richmond government. Tariffs negotiated at the Montgomery Convention of 1861 were favorable to government, not to the railroads! Rate increases negotiated at subsequent Conventions were indeed steep, but by then, so was Confederate inflation. By mid-war, the only way Southern railroads could remain profitable was by charging far higher rates for their civilian traffic. To greater or lesser degree, all railroads in the Confederacy split their business between cut-rate government traffic and more lucrative civilian work to maintain their bottom lines. Inflationary Confederate fiscal policy exacerbated the tariff problem. John P. King, President of the Georgia Railroad, lamented of his road that "the more business it does, the more money it loses, and the greatest favor that could be conferred upon it-- if public wants permitted-- would be the privilege of quitting business until the end of the war!"88 In this kind of operating environment, establishment of business priorities favoring civilian, rather than military transportation should come as little surprise.

During an 1864 debate within the Quartermaster Department on how to best achieve smooth rail connectivity with the vital blockade-running port of Wilmington, F. W. Sims proposed an alternative management method, closely mirroring the Federal model. In a letter to General Lawton, he noted:

> The necessity of more rapid communication with Wilmington has long been felt, but has failed of accomplishment from a want of harmony with the railroad officers… we can expect no lasting improvement until the three roads between this city and that are under one management and worked as one corporation… this can never be done if the wishes of the present officers are consulted.

Only by addressing the problem in a novel way, he reasoned, was a solution likely. “I recommend that the six officers of these roads above named be convened, and the wishes of the Government be unfolded to them, assuring them that the temporary amalgamation was a military necessity and must be complied with… The terms should be liberal, as the end, if attained, is

Regrettably, this forward-leaning recommendation, hinting of a strong centralization of authority coupled at the same time with a pro-railroad rate structure-- the favorable mix of “carrot” and “stick” already in place in the north-- was forwarded to the Secretary of War without action.

As these two examples demonstrate, the Federal government had both the vision and the means to co-opt the Northern railroads with favorable tariffs for the transport of government business; the Davis Administration lacked the means to proffer the carrot to Southern roads and lacked the will to wield the stick. In the final analysis, the Confederacy’s obstinate refusal to challenge the supremacy of state’s-rights doctrine and establish at least a measure of centralized control over the railroad interests doomed the Southern transportation system to mediocrity and a slow, agonizing starvation.

Late in the war, Secretary of War Seddon eloquently framed the central argument of state’s rights versus national power during a debate on the legal aspects of government impressment of private property. In a letter addressed to John Milton, Governor of Florida, he crafted the following compelling argument:

Taking iron from the less valuable roads in order to repair those more necessary is an imperious necessity. The Department cannot sustain armies in the field without resort to this expedient. One would think that honor would dictate a proffer to the country of property of the kind in such an emergency… the Department has not, for the most part, had its expectations filled in this particular. Injunctions and other forms of delay have been resorted to. The question arises, by what authority does a circuit court in one of the States issue an injunction against the officers of the Confederate Government, who are performing a duty under an act of Congress [?]…. Are the generals in the field subject to an injunction whenever they establish a camp on private property [?]… Can the department of Foreign Affairs be enjoined from negotiating treaties that confer commercial advantages? Can the Postmaster-General be inhibited or restrained from selecting a particular route for his post road [?]… *The power to take private property for public use is one of the great powers of Government…. The Department has in a multitude of cases yielded to the exercise of authority by State judicial authorities.*

The last two sentences of this letter strike at the crux of the matter. The Confederate

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89 *OR*, Volume III, 258.
90 Ibid., 561-562.
government’s profound belief in the primacy of the State doomed it from taking powerful steps in the name of the Nation. Within the Confederacy, “too many endeavored to wage a constitutional war, wherein private interests were to remain inviolate.” Senator Louis Wigfall of Texas sagely opined, “people do not properly realize the fact that their interests are identical with those of their Government.” President Davis, who in the years before the war had been one of the strongest advocates for the completion of the transcontinental railroad, surely appreciated the monumental role railroads stood to play in a protracted war of attrition. He had the authority to reshape the transportation industry, and his Railroad Bureau had worked tirelessly to push tough railroad legislation through Congress. By the summer of 1863 he was in a position to shake up the industry and get the trains through, if he chose to expend the necessary political capital. But having gone to war to rid the South of an overbearing Federal influence, Davis was loath to implement measures that smacked of strong central authority. In a speech before Congress late in 1861, his views on the subject became starkly apparent. “It is indispensable,” he argued, “that the means of transporting troops and supplies be furnished, as far as possible, in such a manner as to not interrupt the commercial intercourse between our people.”

The President’s unwillingness to infringe on individual or corporate rights, when the law was on his side and the nation’s continued existence hung in the balance, lends credence to Paul Escott’s view that Davis failed to generate a spirit of Confederate nationalism. As John Clark has noted, “The secessionists… launched a revolution in creating the Confederacy. They had to take revolutionary steps if they intended to win the war.” The Confederate Congress conferred upon President Davis a surprising degree of autonomy and established the framework for a

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91 Black, *The Railroads of the Confederacy*, 64.
strong centralized government. This government’s unwillingness to exercise the power entrusted to it doomed the Confederacy to a slow death. Robert Black has argued persuasively that commitment to individual and state’s rights left the Confederate government “smitten with a fatal hesitation” in decisively organizing for war. With respect to the railroad industry, this hesitation was manifested by Richmond’s abject failure to enlist the wholehearted cooperation of the railroad industry, or failing that, to exercise police power and place it under military control.94

Jefferson Davis had the power and recognized the need to wield it for the good of the Rebellion. His closest advisors and subordinates-- from the Commissary and Quartermaster Departments, to his Secretary of War, to the generals in the field-- all implored him to take action. Yet, despite all of these indicators pointing in the same direction, he skirted the issue. Why? One plausible explanation is that he sincerely felt "railroad men could run the railroads better than government personnel." Viewed in this light, federalizing the industry or exercising wartime police powers would only make a bad situation worse. Since the strong centralization of power was anathema to the concepts of state's-rights and individual liberty, the argument follows that the best hope for the Confederacy lay in securing the cooperation of the existing corporate management. That Davis failed miserably to do so may be due, in part, to his personality. By all accounts, the President was a tremendous micromanager, a perfectionist and procrastinator with a "distressing tendency to bury himself in the minutiae… his procrastination corresponding directly with the seriousness of the problem" at hand.95

The majority of Southern railroad men, long accustomed to the antebellum modus operandi, lacked the vision to adapt to the call of their new nation and to meet the urgent

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94 Ibid., 74 and 80.
95 Ibid., 86-87.
logistics demands of modern warfare. They wanted to run the railroads as they had always done. But the roads were now being asked to support an industrial, not an agrarian base, and to make this shift required fundamental changes to the status quo. Northern railroad men, by contrast, had in fact spearheaded the shift toward an industrial economy in the north. Accustomed as they were to industrial innovation, when war broke out the Union’s railroad barons happily served as catalysts for positive change within their industry.

Finally, the Southern Executive and Legislative branches were so concerned with the impact of their laws on the people they were governing, that they forgot to govern. Modern warfare, especially for the underdog, requires visionary stewardship of scant resources. The lackluster direction provided by these pivotal branches of government left the military in general, and the railroad industry in particular, to muddle along for the duration of the war as best it could without any meaningful strategic guidance. In the final analysis, one could argue with great justification that "The iron horse had not failed. Fortune and the vagaries of Southern leadership had failed the iron horse."96

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