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THE OPERATIONAL ARTISTRY OF ADMIRAL DAVID GLASGOW FARRAGUT

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Admiral David Glasgow Farragut was a practitioner of operational art, while in command of the Western Gulf Blockading Forces, and as one of the operational commanders charged with seizing control over the Mississippi River, during the American Civil War. His adherence to the principles of war and consideration for the fundamental elements of operational art, are examined in order to support the premise and validate concepts that operational commanders recognize today as essential to success. The lessons Farragut learned with regard to force employment, phasing, and technical innovation, are as appropriate today as they were during warfare in the 1860's.

FARRAGUT, RIVER CAMPAIGN, VICKSBURG, OPERATIONAL ART, ELEMENTS, PHASING, PORT HUDSON
Abstract of

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Today's operational commanders are faced with the challenges of a battlefield characterized by enormous change. The evolution of warfare in the modern world has brought with it an increased reliance on technical innovation, the emergence of joint warfare doctrine, a need for greater geo-political awareness, and an ever increasing level of complexity. As modern commanders view these changes and their impact on warfare, so too did the commanders of the past look upon their own battlefields in much the same light. However, today the tools to cope with these changes have been quantified, and are becoming more institutionalized as time progresses.

The concept of Operational Art, and the tools it provides the operational commander, are not exclusive to the modern era. Their use has been well documented in history, and are again demonstrated through the exploits of Admiral David Glasgow Farragut, during the American Civil War. As theories and concepts associated with warfare as an art were being formulated, Farragut was engaged in the conflict of his generation, putting into practice that which forms the basis of these concepts and theories. His methods, seemingly primitive by today's standards, serve to reinforce the concept of Operational Art, and highlight lessons that are appropriate to today's modern warfare.
Preface

For those aware of the exploits of America's First Admiral, uttering the name of Farragut typically evokes an image of the audacious and courageous naval hero who remarked, "Damn the torpedoes!" at the battle of Mobile Bay. Indeed, his triumphs at New Orleans, Port Hudson, and Mobile are among the most famous naval actions documented during the Civil War, or throughout America's maritime history. However, Admiral Farragut's impressive achievements are only a reflection at the tactical level, of a commander planning and executing warfare at the operational level.

This project, and the research associated with it, deals with the operational level aspects of Admiral Farragut's involvement in the Civil War. By design, it omits detailed discussions of planning and actions that occurred at the tactical level, in order to facilitate analysis at the operational level.
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INTRODUCTION

"War has such principles; their existence is detected by the study of the past, which reveals them in successes and in failures, the same from age to age. Conditions and weapons change; but to cope with the one or successfully wield the others, respect must be had to these constant teachings of history in the tactics of the battlefield, or in those wider operations of war which are comprised under the name of strategy."

"The battles of the past succeeded or failed according as they were fought in conformity with the principles of war; and the seaman who carefully studies the causes of success or failure will not only detect and gradually assimilate these principles, but will also acquire increased aptitude in applying them to the tactical use of the ships and weapons of his own day."

Alfred Thayer Mahan

In discussions concerning the nature of war, Joint Pub 3-0 identifies three levels of war within which all military commanders will operate; strategic, operational and tactical. Others expand the number of levels trying to grasp an idea that doesn't lend well to precise definition or boundaries, but regardless of the level at which the commander operates, sound leadership and due consideration to the principles of war are the foundation upon which success during war depends. Here, the three level view provides a framework sufficient to address the concept of Operational Art, and how it applied to Admiral David Glasgow Farragut during the American Civil War.

Operational Art is defined as "the employment of military forces to attain strategic and/or operational objectives through the design, organization, integration, and conduct of strategies, campaigns, major
operations, and battles. It provides the link between the national-strategic objectives and the tactical forces required to obtain them.

Did Admiral Farragut practice Operational Art as we define it today? There is no denying that as a leader Farragut was exceptionally successful, but did he practice warfighting by adhering to the same principles that today's operational level commanders recognize as essential for success on the modern battlefield? By analyzing his role in support of the Union as Commander, Western Gulf Blockading Forces, and as one of the primary operational commanders charged with seizing control of the Mississippi River, an insight into the depth and scope of Farragut's consideration for these principles can be gained. The focus of this project then, will be to detail Farragut's approach to warfighting within the context of what Joint Pub 3-0 outlines for us as the fundamental elements of operational art.

Although the elements of operational art were not yet quantified during the time of Admiral Farragut, his basic approach to waging war can be reviewed by concentrating on some of these elements as they are recognized today. Specifically, the assessment of enemy critical factors, and Farragut's force employment, and phasing, will be analyzed, in order to illustrate how these elements related to the principles of war.
Admiral Farragut assumed command of the Western Gulf Blockading Squadron on the 20th of January, 1862, charged with leading an expedition against New Orleans, the opening engagement in a campaign designed to deny the South of the resources it needed to prosecute the war. The Union's strategic objectives that applied directly to Admiral Farragut's operational theater were twofold; (1) to establish a blockade of the Confederate ports, and (2) to open the Mississippi River to Union forces to deprive this major line of communication to the Confederacy.

Prior to his assignment, the port of Pensacola had been isolated by the seizure of Fort Monroe, and a general blockade of the Gulf coast had been established from the Rio Grande to Apalachicola, Florida (Mobile proving to be the exception). Southern forces were in possession of the cities along the Mississippi River and Gulf coasts, most notably Vicksburg, with rail lines linking them to the eastern regions of the Confederacy. To the north, General Grant's armies were engaged in securing the upper Mississippi with the intention of driving south along the river toward Memphis, while Admiral Davis', and later Porter's, river fleet supported those actions.

Farragut's orders directed him to seize New Orleans after first destroying the forts protecting the city, then "push a strong force upriver to seize defenses in the rear." This order was intended to ensure Admiral Farragut would capitalize on any success, and attempt to drive up the river to meet General Grant's armies pushing south. New Orleans was selected as the scene of the first action because it was the largest of the
southern commerce and trading centers, was well equipped with the facilities and skilled labor for making war materials, and regarded to be impervious to attack. The loss of the city would not only deprive the Confederacy of great resources, but would deal a severe blow to morale as well.\textsuperscript{11}

Such was the situation that preceded the initiation of the river campaign, and efforts to tighten the stranglehold on ports vital to sustaining the South. The remainder of this discussion will be concerned with the manner in which Admiral Farragut incorporated the practice of operational art into the planning and execution of his campaigns. In order to do so, a summary of the sequence of tactical actions and their outcomes is necessary. As stated earlier, the first tactical action occurred at New Orleans, with Farragut's naval force bypassing Fort(s) Jackson and St. Philip, then pushing upriver to seize the city. After which, possession of the city was transferred to General Butler's ground forces to enable Farragut to continue upriver. The advance was almost exclusively a naval enterprise, with only a small contingent of troops embarked, or in company.

Farragut's fleet was able to advance as far north as Vicksburg, even bypassing the forts there, but Grant's progress to the south had not kept pace. For reasons later discussed, Farragut elected to withdraw to New Orleans, with the intention of subsequently resuming actions in the river. In the interim he worked on strengthening the blockade until several incidents occurred to highlight the need to retake the initiative, which he did as soon as conditions were favorable.

Upon resumption of the river campaign, naval and ground forces systematically seized Baton Rouge, Port Hudson, and the Red River junction,
before advancing further upriver to support Grant's forces then in a position to attack Vicksburg. Once Grant's armies controlled Vicksburg, the bulk of Farragut's forces were redeployed to the gulf to facilitate completing the blockade, with the seizure of Mobile Bay the last engagement within the theater of operations.

ELEMENTS

Integral to the success of any warfighting endeavor, is the ability to accurately assess the enemy's strengths and weaknesses, and determine how to leverage those identified as vulnerabilities. Once the analysis of critical factors is complete then plans may be formulated to exploit the vulnerabilities, as a means of attacking the center of gravity. After identifying the operational objectives, the proper disposition and sequencing of forces is essential to achieving those objectives without incurring undue risk. To illustrate how Admiral Farragut incorporated this process into his warfighting approach, an examination of his assessment and force employment is necessary.

CRITICAL FACTORS

The assessment of Confederate strengths centered around the general theme that the enemy's posture was defensive in nature. Confederate forces controlled the cities along the river and coast, interior positions that enabled them to identify and defend likely lines of approach. These forces had considerable time to establish and fortify their positions, and the
consensus among much of the Union leadership, was that the majority of these fortified positions were nearly impregnable as far north along the river as Memphis. Specifically, forts and gun emplacements that had been erected along the river protecting the cities of New Orleans, Baton Rouge, Port Hudson and Vicksburg, were believed to be impassable and would need to be reduced and held by ground forces, before the cities themselves could be gained.

Another recognized strength was the ironclad, with its superior firepower and survivability. Although not confined to use by the Confederates, or fielded in such numbers as to constitute parity of forces, the potential presence of such technically superior vessels in Farragut's theater was considered a significant threat to the fleet of wooden vessels at his disposal. This was especially true if his ships were restricted in their ability to maneuver, stating;

"These rams are formidable things; but, when there is room to maneuver, the heavy ships will run them over."

Taken in toto, the Confederate forces had established excellent lines of communication along the river and coast, and introduced a technological development into the arena that merited special consideration. They had also made the most of the time available, to erect a series of fortified positions protecting the cities, and the approaches to them.

Although the Confederate forces had been afforded the time to strengthen their defenses, Farragut viewed fixed positions as exploitable weaknesses. Having witnessed the siege of Veracruz, and the insignificant effect that bombardment had on reducing that fort, Farragut
was convinced that the better way to deal with the issue of fixed defenses was to use maneuver to bypass them, and to allow supporting ground forces to secure them. This is illustrated by his general order issued at New Orleans:

"...the forts should be run, and when a force is once above the forts to protect the troops, they should be landed...then our forces should move up the river, mutually aiding each other as it can be done to advantage."\[8

The lack of sufficient naval force operating in the river was another Confederate weakness. The disparity in number, and the limited ability to oppose Union ships operating between Vicksburg and the Gulf, was a critical vulnerability upon which the greatest focus was drawn until the contest for the river was settled. The Confederate center of gravity for the river campaign was Vicksburg,\[19 and as a result, Farragut planned to gain control of the water between there and New Orleans, specifically the decisive point at the junction of the Red River.\[20

The Confederates lacked sufficient force to oppose the blockade as well. The majority of the western gulf ports were isolated, with the exception of Mobile. Mobile Bay, a safe haven for blockade runners, would pose a significant threat until Farragut could assemble enough ships and troops to neutralize it. The city itself was considered too strong to attack with the number of troops assigned, but control over Mobile Bay was the objective, with the Confederate center of gravity being the naval forces operating in the bay, and the ground forces occupying the forts that protected the approaches. Farragut's interest in Mobile Bay was heightened when reports concerning the Confederate ram Tennessee began to indicate construction of the vessel in Mobile was nearing completion. This
development could very well have tipped the balance more in favor of the
defenders, and threatened the integrity of the blockade.\textsuperscript{21}

\textbf{FORCE EMPLOYMENT AND PHASING}

Farragut first began to arrange his operations, in order to determine
the best way to employ his forces. The individual engagements during the
campaigns were tactically oriented, and will not be addressed, except to
say that the actions were sequential, and designed to build on each
tactical success until the seizure Vicksburg was assured.

Farragut's orders implied from the outset, that the priority of
objectives would be to gain control of the river first, before completing
the blockade. The river campaign was the focus of main effort, while the
effort to complete the blockade was relegated to an economy of force role.
An aspect not necessarily agreeable to Farragut, but one that he was
obliged to comply with, given the lack of flexibility in his orders. His
chief concern was that, after taking possession of New Orleans, he would
have to continue upriver without supporting ground forces, and adequate
resources to sustain the advance.\textsuperscript{22} The dissenting opinion he had offered
to Secretary Welles, was essentially disregarded in the belief that the
loss of New Orleans, and a rapid advance upriver, might enable Farragut to
join with General Grant's forces pushing south.

Farragut's ships advanced to a position above Vicksburg, but Grant
was still engaged to the north, and the contingent of troops embarked was
too small to contend with the Confederate forces holding the city. The
calculated risk of continuing the advance rather than assembling a properly
balanced force, didn't pay off, and Farragut came dangerously close to reaching his culminating point\textsuperscript{23} for the sake of a rapid advance. His exposed lines of communication were nearly severed when the Confederate ram \textit{Arkansas} raided his fleet, at a time when his deeper draft vessels were experiencing major difficulties as a result of receding water levels. Realizing the danger of the situation, Farragut withdrew until seasonal conditions were more favorable, and adequate forces were available to do more than patrol the river. Farragut related this to Secretary Welles, in his report on the action;

"...the dangers and difficulties of the river have proved to us, since we first entered it, much greater impediments to our progress..." also that, "...[the river] was now beginning to fall, and I apprehended great difficulty in getting down should I delay much longer."\textsuperscript{24}

After withdrawing, Farragut reevaluated the situation to determine how to recover from the setback. By reassigning assets, he increased the strength of the river forces with some of the ships engaged in blockade duties. He also requested ground forces to seize and hold Baton Rouge, and increased the movement of supplies (namely coal) from Ship Island near the mouth of the Mississippi.\textsuperscript{25} His aim was to resume the advance and extend the operational reach toward Vicksburg, but only after concentrating his forces and safeguarding his lines of communication. In a letter to Secretary Welles, Farragut reinforces this point by stating;

"It will take at least five thousand troops to take Port Hudson...I am ready for anything, but desire troops to hold what we get."\textsuperscript{26}

The delay between advances on Vicksburg allowed Admiral Farragut to correct a plan initially void of consideration for phasing of forces. The
first advance was premature, failing to ensure a rapid buildup of ground and naval forces to provide mutual support. The revised plan addressed that oversight, and took into consideration the need to coordinate actions regarding speed of advance, control over territory gained, and actions to occur after each tactical objective was achieved. The second excursion produced significantly different results. It was characterized by properly sequenced actions that produced the synergistic effects sought during the first advance, and by bringing sufficient force to bear on the decisive point at a time when General Grant’s forces were in a position to advance on Vicksburg.

Executed in three phases, the plan called for first extending the base of operations to Baton Rouge. Naval forces were assembled and reinforced with assets previously engaged in blockade duties, ground forces occupied the city and logistics assets were positioned to sustain the advance. Next, joint forces advanced upriver securing Port Hudson with ground troops, and gaining control of the river between Port Hudson and Vicksburg, specifically the junction of the Red River, placing them in position to support operations to the north. Farragut’s general orders to his captains specifically stated:

"Bear in mind the object is, to run the batteries at the least possible damage to our ships, and thereby secure an efficient force above, for the purpose of rendering such assistance as may be required of us by the army at Vicksburg...if they succeed in getting past the batteries, the gunboats will proceed up to the mouth of Red River, and keep up the police of the river between that river and Port Hudson..."

During this phase, Grant’s forces had indeed, advanced to a position from which they could attack Vicksburg, eventually seizing it. The final phase was signified by transition of the river forces to patrolling vice direct
support operations, and marked the terminating point for Farragut's actions in the river. Although not delineated in such terms, the three phases closely equate to the *lodgement, decisive combat and stabilization, and follow-through* phases outlined in Joint Pub 3-0.²⁹

After successfully opening the river and satisfying the first of his objectives, Farragut's focus shifted to redeploying his forces to complete the blockade. Forces in the river that weren't necessary for patrol or constrained by draft, were transferred to Ship Island in order to ready them for action against Mobile. Paying heed to past lessons, efforts against Mobile were delayed until adequate forces were available. Farragut was determined to offset the advantage the ironclads held over wooden hulls, by bringing overwhelming force to bear on the *Tennessee* and her accompanying ships. To that end, he had requested that Union ironclads be transferred from another theater for his use.³⁰

Farragut proceeded with the attack, after ensuring the concentration and mutual support between naval and ground forces was adequate to the task. The action resulted in Union forces completing the blockade, and achieving the second operational objective. The action at Mobile Bay marked the last decisive engagement within the theater during Farragut's command.

**PRINCIPLES**

The preceding discussion of Farragut's approach to warfighting illustrates consideration for the elements of operational art, but doesn't address the scope of his approach. How did this approach support the
First, with regard to **objective**, it is evident that Admiral Farragut maintained sight of what his ultimate goals were, and planned accordingly. Strangling the Confederacy by denying them use of the Gulf ports, and seizing control of the Mississippi River to cut them off from the Western resources, were the strategic objectives that remained his primary focus. All efforts at the operational level, regardless of initial setbacks, were aimed at achieving the strategic objectives by way of first attaining the operational objectives. The capture of Vicksburg was key to controlling the Mississippi, and control of Mobile Bay was essential to completing the blockade.

Farragut attempted to capitalize on the success of the New Orleans expedition by advancing upriver to Vicksburg under less than ideal conditions. However ill-advised it may have been, it was an obvious attempt to maintain the offensive. Unsuccessful because of inadequate protection for extended and exposed lines of communication, the decision was made to withdraw until more favorable circumstances permitted. The undue delay and the feeling that the opportunity may have been lost, were cause for concern and prompted Farragut to resume the river campaign in order to regain the offensive. Farragut illustrates this with a journal entry stating;

"I am now going up the river to meet Foote-where, I know not- and then I shall assume my duties on the coast, keep moving, and keep up the stampede I have upon them."  

Admiral Farragut's concerns over advancing upriver without adequate ground forces to maintain the security of his lines of communication, or sufficient escorts for his resupply vessels, demonstrated his understanding
of the concept of mass. At the outset of the initial advance upriver, he indicated his reluctance to proceed without the concentration of forces necessary. His orders compelled him to make the attempt, however the objections he raised clearly indicate he was acting against his better judgement. In each subsequent action Farragut planned to employ forces in superior numbers wherever possible. The redistribution of forces, specifically those withdrawn from blockade duties in support of operations in the river, is evidence to the attempt at consolidating overwhelming force to achieve relative or absolute superiority over the opposition.

Farragut also seemed well acquainted with the concept of economy of force. When operations in the river had to be deferred because of the unfortunate inadequacies alluded to earlier, he elected to redistributed his forces to strengthen the blockading units for several months, until resumption of the river campaign could occur. He also elected to withdraw unnecessary units from the river once that contest had been decided, to support seizure of the final holdout among the ports then subject to blockade.

Although it could be argued that adherence to the principle of maneuver generally occurred at the tactical level, the basic strategy to support Grant's forces in the north by attacking from the south along the river, serves as an example at the operational level. Also, the consistent practice of bypassing the fixed emplacements throughout the campaign, attests to Admiral Farragut's recognition of the advantage he held over what he determined to be an enemy weakness.

Maintaining direct control over the naval forces assigned to the blockade and river operations, afforded Farragut the flexibility to employ
forces where necessary when having to contend with competing resources within the theater. He was able to determine which force would be relegated to that of an economy of force role, and which would be the focus of main effort. Early in the campaign, unity of command was weak because ground forces were not assigned in direct support of his operations. However, during the delay in river operations, Farragut requested ground forces to secure Baton Rouge, resulting in the assignment of forces in direct support. Farragut could then dictate when and where the Confederate forces would be engaged within the theater.

Several examples are available to indicate Farragut’s continuous concern over the principle of security, in particular, maintaining the security of his forces and their progress toward achieving the operational objectives. The need to maintain the integrity of his lines of communication with New Orleans resulted in the seizure of Baton Rouge by ground forces when naval forces had already successfully bypassed the city. Also, the requirement to position forces adjacent to the junction of the Red River was considered critical to the success of the action at Vicksburg in order to cut off any potential reinforcement or resupply. Finally, the potential for the ram Arkansas to oppose the Union naval forces in the river resulted in attempts to disable her in the Yazoo River before she entered the Mississippi. These attempts proved unsuccessful and the Arkansas was a source of concern for Farragut until her demise.

Regarding surprise, again the argument might be made that the principle was only adhered to at the tactical level, given the limitations that operations along the river placed on force dispositions and maneuver. There are however, two examples that illustrate Admiral Farragut’s
consideration for surprise; (1) the use of ocean-going vessels of deeper
draft not normally capable of operating in the shallow waters of the river,
and, (2) the previously mentioned bypassing (typically at night) of fixed
defenses and emplacements that were generally viewed as impassable by
opposing forces.\textsuperscript{38}

It is difficult to find suitable evidence to support Farragut's
concern for the principle of simplicity, given the geometry of the theater
and the relatively primitive aspects of 1860's warfare compared to today's
standards. Undeniably, the limitations placed upon maneuver and surprise,
also played a part in ensuring that plans remained simple, so as not to
provide the enemy with an unforeseen advantage. To that end, Admiral
Farragut went to great lengths to prepare plans and orders that concisely
conveyed his intent, and sought to eliminate any undue confusion or
misunderstanding.\textsuperscript{39}

The degree to which Farragut adhered to the principles was dependent
upon the situation as it unfolded. For example, the tradeoff that occurred
between attempting to maintain the offensive and the security of his lines
of communication, was a calculated risk that could have exacted an extreme
price. This was a direct result of the lack of latitude given him in
orders that dictated he take the risk. Also, the theater geometry and its
effect on the principle of surprise, required Farragut to compensate by
relying more on mass and maneuver to achieve his objectives. To whatever
degree he adhered based on the situation, his understanding of the
principles is evident.
CONCLUSIONS

First, it should be readily apparent that, whether quantified or not, Farragut was certainly a practitioner of operational art. The incorporation of the fundamental elements in his approach to warfighting, and his adherence to the principles of war, both serve to validate the precept, even though his practice may not fit exactly with current convention.

Secondly, Farragut's brand of operational art offers some lessons that serve to reinforce the significance of fundamental planning considerations and the impact they have on the success of a campaign. These include: (1) the importance of the use of ground and naval forces in mutually supporting roles, particularly in littoral warfare. This is especially appropriate to today in the era of "From the Sea;" (2) concern over extending a base of operations without sufficient forces to maintain the security of lengthening lines of communication, is as valid a concern for the modern operational commander as it was back then; (3) that failure to incorporate phasing into campaign planning impacts operations severely by denying the operational commander an opportunity to adequately think the plan through to a logical end; (4) that technological advances leveraged correctly can have a significant impact on the manner in which an opponent conducts war with regard to planning and execution; and (5) that a continuous estimate of the situation, and progress toward achieving the objectives is necessary to identify planning shortfalls early enough to react to situational changes.

In closing, Admiral Farragut never lost sight of what the strategic
objectives were, even when confronted by setbacks and delays. All of his focus was on achieving objectives at the operational level that were directly linked to the strategic objectives of denying the Confederacy the resources of the West, and further strangling them by means of blockade. When it seemed that one or the other of these objectives were in doubt because of the changing fortunes of war, Farragut correctly reassessed the situation and modified plans to ensure a favorable outcome. Mahan eloquently summarizes this point for us when he states of Admiral Farragut:

"The faculty of seizing upon the really decisive points of a situation, of correctly appreciating the conditions of the problem before him, of discerning whether the proper moment for action was yet distant or had already arrived, and of moving with celerity and adequate dispositions when the time did come— all these distinctive gifts of the commander-in-chief had been called into play..."

Whether Admiral Farragut used the terminology associated with Operational Art is irrelevant, but through practice he serves as another example of an operational commander successful in applying it.
NOTES


7 Ibid., p. 18.


12 Joint Pub 3-0, III-20.


17 Mahan, *Admiral Farragut*, p. 76.


20 Ibid., v. III, p. 564.
21 Ibid., v. IV, p. 380.
22 Lewis, *David Glasgow Farragut: Our First Admiral*, p. 28.
23 Ibid., p. 121-123. The arrival of the *Arkansas* on the scene, and no ground forces available to commence operations against Vicksburg, made his position untenable.
27 *Battles and Leaders*, v. III, p. 566.
28 Joint Pub 3-0, III-19.
30 *Battles and Leaders*, v. IV, p. 379.
31 Joint Pub. 3-0, Appendix A.
33 Mahan, *Admiral Farragut*, p. 181. "Of all these considerations Farragut was fully sensible; and, while he obeyed his orders, he showed in his dispatches to the Department, and in private letters of the same period, how much against his judgement were operations conceived on such erroneous military principles and undertaken with such inadequate force."
35 *Battles and Leaders*, v. III, p. 590.
38 Ibid., v. III, p. 485.
BIBLIOGRAPHY

BOOKS


GOVERNMENT PUBLICATIONS


PERIODICALS