

28

Cary, R.W.

DUPLICATE

Copy No. 2

Vol. 4 - 3

NAVAL OPERATIONS OF THE CIVIL WAR

STAFF PRESENTATION

(Containing list of slides and Bibliography)

Naval War College
Newport, R.I.
8 February, 1938

NAVAL OPERATIONS OF THE CIVIL WAR

STAFF PRESENTATION

Naval War College
Newport, R.I.
8 February 1938

NAVAL OPERATIONS OF THE CIVIL WAR

This presentation includes joint operations as well as strictly naval operations. There are a number of general facts, some pertinent to the war as a whole, others only to the naval phases, that should be in mind. Colonel Wright's presentation on "Military Strategy of the Civil War" brought out some of these, but it seems desirable to refresh our memory by briefly reviewing those and mentioning others before proceeding.

POLITICAL FACTORS

(a) The political aim of the Federal government was the preservation of the Union; to establish once and for all that its sovereignty was supreme over that of the States' governments. Public opinion in the States that did not secede was not solidly behind this policy. There were a considerable number of people who believed that States had the right to secede and that the Federal government had not the right to coerce them. In the border States of Missouri, Kentucky, Tennessee, Maryland, and in the Western part of the then state of Virginia, this attitude was the strongest. The pro-Union element prevailed except in Tennessee, keeping the states in the Union but ^{they did} furnishing troops to both sides in the war. The pro-Union part of Virginia became a new state of West Vir-

ginia. In other parts of the Union too there was a division of sentiment on the question of slavery. It was not until the war had been in progress some time that public opinion became more united and the prosecution of the war more vigorous as a result.

(b) In the South there was greater unity of opinion. That states were supreme in their sovereign rights, and that the election of Lincoln foreshadowed action that would abolish slavery and promote the industrial interests of the North to the detriment of the South's welfare, was an almost unanimous conviction of the South. Their political aim was the formation of a Confederation of independent sovereign states whose common economic interests would form the basis for common political policies.

(c) The external relations of the North were affected by the interference of the blockade with the export of Southern products upon which the important industries of several European nations, particularly England, depended for their prosperity. The South as the principal source of cotton for the English mills, relied upon suspension or reduction of its exportation to bring about intervention by England. This commercial relationship between England and the Southern states was the basis for a strong political sympathy for the Confederacy while the growing industries of the North, a potential threat to the foreign markets for English manufactured products, weakened their attachment toward the North.

(d) The war, while politically a civil one, was unlike any other civil war in previous history in that the division of sentiment was along geographical lines, giving the war the characteristics of a war between two hostile nations.

ECONOMIC FACTORS.

(To be rewritten)

PSYCHOLOGIC FACTORS.

(To be rewritten.)

THE THEATER OF WAR AND OF NAVAL OPERATIONS.

(a) The theater of war was divided by the Appalachian mountains into an Eastern theater and a Western theater. In The Eastern theater freedom of movement in a North and South direction was hampered by the Potomac River and numerous other rivers and streams with a generally Easterly course, in the northern part of this Eastern theater. In the Western theater complete freedom of movement in an East and West direction was hampered by the Mississippi River which also separated three of the Confederate States from the remainder of them.

ATLANTIC COAST.

At the Northern end of the theater lies Chesapeake Bay and Hampton Roads into which empty the Potomac River, the James and Elizabeth Rivers. From a little South of the Chesapeake Capes to Wilmington is a double coast, the outer one consisting of a long narrow belt of sand jutting out in three headlands, Cape Hatteras, Cape Lookout, and Cape Fear, and enclosing two extensive sheets of water, Pamlico and Albemarle Sound, upon which tributary waters lie a number of important towns. This sand belt is broken at intervals by shallow inlets. Below Wilmington the coast sweeps in with a long curve at the end of which lies Georgetown, S.C. in a deep recess. From here the coast begins to assume the insular character, so well defined below Charleston, S.C. From Charleston to Fernandina, the northern edge of Florida, it forms a series of low swampy islands, separated by narrow rivers and arms of the sea, making an intricate network

of water courses. At intervals the groups of islands are broken by large estuaries at the mouths of rivers. There are five of these between Charleston and Savannah - Stone Inlet - North Edisto - St. Helena - and Fort Royal. Below Tybee Roads the same formation continues with six important sounds - (W²ash, Ossabaw, St. Catherine, Sapelo, Doboy, and Altamaha.) Brunswick, Ga. is the only important town in this region with an entrance at St. Simon's Sound. From St. Simonds the islands and sounds continue including St. Andrews, Cumberland Sound at Fernandina, St. John's and St. Augustine. Below this point the coast of Florida consist of narrow reaches of sand enclosing long lagoons, broken only by small and infrequent passes.

GULF COAST.

The Gulf coastline from the southern tip of Florida to the Rio Grande is about sixteen hundred miles long although a straight line between the two points is about 840 miles and runs almost East and West. It is everywhere low and sandy, or marshy with an occasional bluff of moderate height. A large proportion of the coast line is skirted by low sandy islands sometimes joined by narrow necks to the mainland. These form inland sounds of considerable extent which are generally inaccessible to all but very light draft vessels. They as well as numerous bays and the mouths of many small rivers can be entered by light vessels acquainted with the ground.

During the war small steamers and schooners frequently escaped from them carrying valuable cargoes of cotton, probably others entered with much needed supplies for the Confederacy. There is but little rise and fall of the tide in the Gulf, from one to two feet, but the height of the water is much affected by the wind.

The principal ports on the Gulf at the time of the Civil War were: New Orleans, Mobile, Galveston, Tallahassee, and Apalachicola. Pensacola Bay was the best harbor but at the time was not of much commercial value due to its lack of communication with the interior.

MISSISSIPPI RIVER.

That portion of the Mississippi River in which we are interested in this discussion is from Cairo south. Cairo is situated at the junction of the Mississippi and Ohio Rivers and became the base and arsenal of the Federal Flotilla operating in the Mississippi. From Cairo the Mississippi flows in a generally southerly direction but its course is so tortuous that by river it is a distance of about 1100 miles while by air it is about 450 miles to its mouth.

The river and its tributaries are subject to great variations in height dependent upon the rains and melting snows in their basins. The greatest average height is attained in the late winter and early spring months, with another rise in early

summer. The lowest water occurs in August, September, and October, followed by a rise from the autumn rains. These rises and falls were factors in the operations of both the Army and Navy.

At a few points on the banks high land is encountered. On the right, or Western bank there is only one, at Helena, Ark., between three and four hundred miles below Cairo. On the left bank such points are more numerous. The first is found at Columbus, 21 miles below Cairo, then follow in order, the bluffs at Hickman, Ky., a low ridge (extending to the right bank) below New Madrid, rising from 1 to 15 feet above overflow; the four CHICKASAW Bluffs in Tennessee, on the southernmost of which is Memphis; and finally a rapid succession of bluffs at intervals, extending from Vicksburg to Baton Rouge, of these latter named those at Vicksburg, Grand Gulf, and Fort Hudson were the most important during the war. These positions afforded excellent sites for fortifications for control of the Mississippi and were all located in Confederate States except Columbus and Hickman. They were all including Columbus and Hickman seized and fortified by the Confederates.

NAVAL FORCES

FEDERAL

We knew that "the successful strategical employment of the Fleet depends upon the availability of naval vessels suitable in design and adequate in number", and that "the basis for effective strategic deployment is the provision for tactical power adequate for the performance of minor tasks by the distributed units, and for the performance of the major task ^{by} of the Fleet as a whole"

On March 4, 1861 the naval forces of the United States consisted of the following:

<u>Class</u>	<u>In commission</u>	<u>Available not commissioned</u>	<u>Unser-viceable</u>
<u>Sailing vessels</u>			
Ships of the line	---	1	9
Frigates	2	5	3
Sloops	11	9	---
Brigs	---	3	---
Store ships	<u>3</u>	<u>6</u>	<u>4</u>
TOTAL	16	16	16
<u>Steamers</u>			
Screw frigates	1	5	1
Screw sloops, 1st cl.	5	1	---
Side wheelers, 1st cl.	3	1	---
Screw sloops, 2nd cl.	8	---	---
Side wheelers, 2nd cl.	---	---	1
Screw steamers, 3rd cl.	5	---	---
Side wheelers, 3rd cl.	3	1	---

Forces continued:

<u>Class</u>	<u>In commission</u>	<u>Available not commissioned</u>	<u>Unserviceable</u>
Tenders	1	1	---
Permanent store ships	---	---	2
Floating battery	<u>---</u>	<u>---</u>	<u>1</u>
TOTAL	26	9	5

The sailing ships were of very little value except to show the flag on foreign stations and to act as receiving and store ships.

Of the forty steamers shown above, two of the five un-serviceable ones were still on the stocks and the other three useless except as receiving ships. Two others were tugs and with the MICHIGAN, stationed on the Great Lakes. Eight others were laid up in ordinary. Of the remaining twenty four steamers two were in Southern ports, three in Northern ports and the remainder on foreign station.

Five distinct measures were immediately adopted for the increase of the naval forces, in addition to immediately making ready for service, those vessels laid up in Navy Yards.

1. To buy everything afloat that could be made of service.
2. The immediate construction of sloops of war, 14 of which were started in 1861.
3. Contracts with private parties for the construction of small heavily armed screw gunboats. Twenty three were built.

4. Building of 33 paddle wheel steamers of three or four hundred tons and of light draft for use in the rivers, and narrow sounds. These were "double-enders with a bow and rudder at each end.

5. The construction of ironclads.

These five types of vessels, converted merchantmen, sloops, double-enders, gunboats and ironclads represent the additions to the seagoing Navy during the War. In addition there was gathered for the operations on the Mississippi, a fleet of river steamers, ironclads, tinclads, rams, and mortar-boats.

I do not think that it will be profitable to devote time to a detailed description of these various types except perhaps the vessels built by Eads for use on the Mississippi, which formed the backbone of the Western flotilla. It will be sufficient to consider the requirements of the services for which they were employed.

In the river service where the Navy acted largely in co-operation with the Army in the reduction of fortifications and in maintaining the lines of communication and for inside blockade duty, it required small handy, light draft vessels capable of approaching the shore and of passing through narrow and shallow channels. In the ocean service for the pursuit of Confederate cruisers and vessels engaged in illegal trade it required primarily speed and sufficient armor for

defense, and armament for offense to make them effective against Confederate raiders. The outside blockade service required vessels of speed, light draft, seaworthiness, and sufficient protection and gun power to resist the occasional raids that the Confederates made against them in the hope of raising the blockade. In the service against fortified harbors heavy guns for offense and heavy armor for defense were required.

The type of vessel designed for service in the Western Rivers being different from other types of naval vessels then in existence, it is of interest to investigate their characteristics.

This particular type was designed by James B. Eads of St. Louis, ^{THEY} ~~and~~ were named CAIRO, CARONDELET, CINCINNATI, LOUISVILLE, MOUND CITY, ST. LOUIS, PITTSBURG. Their dimensions were: length, 175 ft., beam, 50 ft., draft, 6 ft., tonnage, 512, speed 9. The hull flat was bottomed with sides inclined at an angle of 45 degrees and projecting 1 ft. above water. On top of the hull was a casemate 8 ft. high with inclined sides. The forward end of the casemate carried 2½ inch armor backed by 24 inches of heavy oak. The rest of the casemate did not carry armor except abreast the engines, and there without the oak backing. This left the stern, and side forward and abaft the engines, vulnerable. Over the casemate forward was a conical shaped pilot house, built of heavy oak and

protected on the forward side with $2\frac{1}{2}$ inch iron; on the after side with $1\frac{1}{2}$ inch. These ships were propelled by paddle wheels, housed within the casemate in an opening 60 ft. long from stern and 18 ft. wide dividing after body into two parts which was joined abaft the wheel by planking thrown from side to side. This part was known as the fantail". Boilers and engines were high pressure and altho the boilers were dropped into the hold as far as possible the light protection offered by the casemate exposed these boilers to the possibility of penetration and a boiler explosion during action.

The casemates were pierced for 13 guns; 3 forward, 4 on a side, and 2 at the stern. The guns they actually received "was determined by the exigencies of the time, such guns as were available being picked up here and there and forwarded to Cairo." (1) Each boat carried 4 old Army rifled 42 pdr., 6 naval 32-pds., and 3 VIII-inch naval shell guns.

These ships together with the Benton may be called the battle line of the Western Flotilla. The Benton and Essex were the same general type but larger. The Benton was a converted snag-boat; ^{mounted} 16 guns and was the strongest of the Flotilla, but made ^{only} 5 knots. The remainder of the gunboats of this Flotilla consisted of a heterogenous collection of river boats converted for the purpose by tearing off the upper works and installing a wooden rampart to protect the guns and machinery. They carried a battery of from 2 to 7 guns.

CONFEDERATE.

At the beginning of the War, as we know the South had no armed vessels of any description. Having no merchant marine from which to draw vessels for the purpose of converting them she was forced to seize what vessels were within her reach and to purchase from abroad any that could run the blockade. To offset this situation the President of the Confederacy early in 1861 issued a proclamation offering letters of marque to anyone who desired to engage in privateering. Some vessels were fitted out as privateers but their results were so meager that most of them eventually abandoned it and took up the more lucrative occupation of blockade-running.

Some of the exceptions to the above were the iron-clad ram TENNESSEE which took such an active and aggressive part in the defense of Mobile Bay; the LOUISIANA of the River Defense Fleet, similar in type to the Union iron-clad BENTON; the cruisers FLORIDA, ALABAMA, RAPPAHANNOCK, GEORGIA, and SHENANDOAH.

LOGISTIC SUPPORT.

(a) Some logistic factors have been mentioned. The South had no Navy Yards and only small shipyards. They captured the Pensacola and Norfolk Navy Yards almost at the outset of the War but lost them before they had been of much use to them as Navy Yards. In the capture of the Norfolk Yard they obtained a great deal of modern ordnance with which to supply many of their forts and their ships. The capture of this Yard also gave them the sunken MERRIMAC which they raised and converted into an iron-clad that made history. For their ordnance manufacture they depended principally on the Tredegar Iron Works at Richmond, from which, as well as the iron mills at Atlanta, they obtained most of the plating for their vessels built or converted in the Confederacy.

For supplies required by their population for its daily needs and comfort, and a large part of their war munitions, they were dependent on that brought from abroad by blockade runners, or via Mexico and the Confederate frontier, thence across the Mississippi. This latter channel was closed when the river came under Federal control. The South was able to support itself in food until the latter part of the war. ^{AT THAT TIME} Many of the slaves ^dhaving deserted their plantations, which combined with the large number of able-bodied men away with the Army, reduced the area under cultivation, and the food supply became deficient.

(b) The North had no comparable logistic difficulties. They were self-sustaining in food; their industries met most of their ordinary daily requirements and their wartime need, and their ports were open to foreign trade.

COMMAND.

The matter of command of joint expeditions has been a controversial subject from time immemorial in military services. In the Civil War the question of command does not seem to have caused as much difficulty in the operations along the coasts as did the matter of cooperation, because the orders issued on this subject were clear. I quote from a letter dated October 12, 1861, from the Secretary of the Navy to Flag Officer S.F. Dupont:

"By a recent order of the President, a copy of which has been forwarded to you, flag officers rank as major generals; but no officer of the Army or Navy whatever may be his rank, can assume any direct command, independent of consent, over an officer of the other service, excepting only when land forces are expressly embarked in vessels of war to do the duty of marines.

"The President expects and requires, however, the most cordial and effectual cooperation between the officers of the two services in taking possession of and holding the posts and positions on our Southern

coast, which are designated in these instructions, and will hold any commander of either branch to a strict responsibility for any failure to procure harmony and secure the objects proposed."

Instructions of a similar tenor were addressed to Brigadier General T.W. Sherman by General Scott on October 14, 1861. These letters seem to lay down a definite policy but of course they do not say how the human frailties are to be overcome in obtaining the cooperation mentioned.

The command situation on the Mississippi during the early operations when the Flotilla was under the War Department, made it very difficult for the naval commander of the Flotilla, ^{JOHN RODGERS} with the rank of Commander, to render effective service to the Army. Apparently his forces were ordered around by any colonel that happened to be in their vicinity. When the commander was given the rank of Flag Officer, the situation was improved but was not entirely relieved until the Flotilla was placed under the Navy Department.

Cooperation, depending as it does on the personalities of the commanders involved, is not a satisfactory solution. What is?

FORMS OF NAVAL WAR AND STRATEGICAL EMPLOYMENT.

Before going into the general strategic plans of the North and South let us consider briefly the strategic employment of the fleet as previously presented to the class.

First we have, in the forms of naval warfare, "operations for securing command of sea areas" whose broad correct objectives are "containing and destroying forces of the enemy". Second, we have "operations in sea areas not under command" whose broad objectives are (a) defense of lines of naval communications; (b) inflicting loss on enemy lines of naval communications, enemy naval forces, and enemy positions by raiding - the latter may be either a naval or a joint operation; (c) capture of enemy territory with amphibious expeditions preliminary to establishment of an advance base for extending command over a sea area; (d) destruction of enemy trade. Third, we have "operations in sea areas under command" whose objectives are (a) naval defense of coasts and critical sea areas; (b) blockade of enemy ports for prevention of enemy trade; (c) capture of enemy territory with amphibious expeditions; (d) support of military operations along the coast.

It has been pointed out in a previous presentation, that although the attainment of the objectives of containing and destroying the enemy naval forces will be more likely to enable us to carry out our war aims, "there may be many other objectives that it will be to our interest to attain immediately, either for

the general purposes of the war, or in the creation of situations that will facilitate a more direct action against the enemy".

With these thoughts in mind let us consider the forms of naval warfare and the objectives that were appropriate in the situation that existed during the Civil War.

The South did not have a fleet with which it could contest the command of any sea area and it did not have a merchant marine. The North had command of the sea throughout the war. Therefore, considerations of these forms of naval warfare with their objectives are not of interest from the Federal point of view. The objectives of destroying or containing Confederate naval forces became minor aims of broader objectives under the third form. Under the second form, the Confederate naval forces undertook the destruction of trade by cruiser warfare, attaining a high degree of success, and raided Northern blockading forces with unimportant results. It is probable too that their hope of building a fleet in foreign ports gave them dreams of the objectives of the first form but their failure to realize the hope eliminates their further consideration.

The objectives under the third form of naval warfare were all important to the Federal forces. It does not appear that much concern was felt about the naval defense of coasts and critical sea areas except during the panic created by the short but potentially threatening career of the MERRIMAC, unless we

classify some of the operations on the inland waters as having an objective of this category. These latter appear to be analogous in some respects. The vital importance to the South of being able to export its crops and to receive from abroad the supplies necessary to the prosecution of the war made it imperative for the North to prevent this trade as a means of putting pressure on the South. As the South was dependent on foreign bottoms for carrying this trade, the North could only attain its objective by a complete blockade of the South. To make this blockade effective it was necessary to create favorable conditions for conducting the blockading operations by the capture, with joint expeditions, of appropriately located bases for the blockading force. These bases were analogous to advance bases. Also to assist the Army's advance into enemy territory, the Federal Navy was able to lend its support in inland waters, and along the coast in a minor way.

Well, what objectives could the Confederacy have under this form of naval warfare? Since they did not have command of any sea area it seems clear that they could have no objectives. But here we revert again to the analogy between naval operations along a seacoast and those in inland waters. Unquestionably from the beginning of the war until the fall of Vicksburg the Confederacy controlled a diminishing part of the lower Mississippi and its tributaries, and this control was an effective blockade

against its use by the territory in the upper part. Definitely, in the Mississippi and its tributaries, the Confederate naval forces, such as they were, attempted to defend New Orleans, Galveston, and other lesser points against the Federal naval forces, and supported the operations of the Confederate Army along these shores, and in isolated instances were part of small joint expeditions against Federal occupied positions. It seems proper then to include the objectives of this form as appropriate for the Confederate naval force.

There is another factor that affects naval warfare and that is the influence of geography. The principal geographical influences on the naval operations of the Civil War were:

(a) The long coast line of the Confederacy from Northern Virginia to the Rio Grande.

(b) The configuration of this coast line with its numerous bays, inlets, intercommunicating inland sounds, bayous and river mouths.

(c) The position of these features with relation to each other and to their natural and artificial accessibility from the hinterland.

(d) The Mississippi River as a barrier to communication between the principal part of the Confederacy and the three Confederate States west of it; and its importance as a means of North and South communication in the western part of the Confederacy.

(e) The foreign frontier of the Confederacy west of the Mississippi.

(f) The proximity of neutral positions in the Bahamas, Bermuda and West Indies as bases for blockade running.

STRATEGICAL PLANS.

The only general strategical plan for the conduct of the war by the North, so far as can be determined, was that given to you in Colonel Wright's presentation. This plan provided for the blockade of the coast and for gaining control of the Mississippi River, hoping thereby to put economic pressure on the Confederacy that would force her to abandon the struggle with less loss of life than otherwise might occur. That this plan was carried out successfully, we know.

In the South, the plan seemed to be one of a strategic defensive. No details, if there were any, are known.

EXECUTION OF THE PLANS.

On April 19, 1861, President Lincoln issued his proclamation declaring the coast from North Carolina to Texas blockaded, and on the 27th extended it to include North Carolina and Virginia.

In May or June, the Secretary of the Navy convened a board consisting of Captain S.F. Dupont, USN, Major J.G. Barnard, Engineer Corps, USA, Superintendent A.D. Bache of the Coast Survey, and Commander C.H. Davis, USN to consider and recommend measures

which they considered advisable for the most efficient means of carrying out the blockade on the Atlantic Coast. Concisely stated, the minutes rendered by this board to the Secretary of the Navy contained the following recommendations:

(a) That a naval station be established on the southern part of the Atlantic Coast to be used as a base by vessels engaged in blockade duties in that more remote section in order that they might be absent from their blockade station a shorter time when driven off by weather, or required to leave to refuel or obtain other supplies. Capture of a suitable position was, of course, necessary. Fernandina off the Northern boundary of Florida was recommended as satisfactory.

(b) That the blockading vessels be divided into two commands on a geographical basis, one command to cover the coast from Cape Henry to Cape Romain, the other, from Cape Romain to St. Augustine.

(c) That the important Albemarle and Pamlico Sounds be closed by obstructing all the inlets that gave entrance with sunk-on vessels loaded with stone, the "stone blockade".

(d) That joint expeditions seize, and occupy with Army troops, Bulls Bay, St. Helena and Port Royal Sounds in South Carolina, and all of the sounds from the entrance to Savannah, Georgia to Fernandina in Florida. The objective of this seems to be the establishment of points suitable for basing small light draft

vessels suitable for work in the shallow waters of these sounds in order to more effectively close the numerous coastal entrances to the Confederacy, and to eliminate necessity for off-shore patrol.

(e) That the coast south of Fernandina be patrolled by one or two vessels.

ATLANTIC COAST OPERATIONS.

Notwithstanding that the President's blockade proclamation said that a competent force would be posted to enforce it, one can see by a glance that the vessels previously mentioned as available were neither suitable in design nor adequate in number to accomplish the objective. This fact made the legality of the blockade during the first six months open to question. After that time the increasing number of vessels employed gave its effectiveness continuous growth.

The plan proposed by the Board above mentioned was accepted by the Government on recommendation of the Navy Department, and on October 12, 1861, the Atlantic Blockading Squadron was divided into a North Atlantic and a South Atlantic Blockading Squadron, with Flag Officer Goldsborough in command of the former and Flag Officer Dupont commanding the latter; the line dividing their theaters of operation being the boundary between North and South Carolina.

The plan for the invasion and occupation of coastal points by joint expeditions was taken in hand almost immediately upon its approval. It should be borne in mind that this plan was primarily a naval one requiring the assistance of Army troops, and its purpose, the more effective conduct of the blockade. On August 29, 1861, a joint expedition under Flag Officer Goldsborough and Major General Butler captured and occupied the forts at Hatteras Inlet, and escorted the stone-laden vessels to be sunk as obstructions in the numerous inlets of this area. Although this was

successfully accomplished the sunken ships did not remain in position and the latter effort was fruitless.

Control over the Sounds was extended by the capture with joint expeditions, of Beaufort, N.C., on 9 November 1861, and in 1862 of Roanoke Island, on 8 February, Newbern, N.C., on 14 March, Fort Macon on 26 April.

On 7 November 1861, a joint expedition under Flag Officer Dupont and Brigadier General T.W. Sherman captured and occupied Port Royal. On November 24th the same force occupied Tybee Island at the entrance of the Savannah River which had been recently abandoned by the Confederates for reasons unknown.

In this area between Tybee Island and Fernandina control was extended by the occupation with joint expeditions of additional minor positions, and the operation of small naval vessels in the sounds and inland waterways.

On the 9th of March the timely arrival of the Monitor at Hampton Roads prevented the raising of the blockade at that point by the Confederate States Ship Merrimac in that historic engagement about which we all know.

In May Goldsborough was directed to support McClellan's operations in the Peninsula. In compliance he sent Commander John Rodgers with suitable vessels up the James River. These vessels got as far as Drewery's Bluff about 8 miles below Richmond where they found obstructions in the river protected by the guns on the Bluff. The ships could not proceed further as the ships' guns could not elevate sufficiently to reach the enemy guns

on the Bluff and consequently were unable to overcome the river obstructions under fire. The expedition remained in the river until McClellan withdrew from the Peninsula. McClellan's inability to advance from his position prevented him from taking advantage of the support that the gun boats might have afforded.

Time will not permit an investigation of the detailed operations that took place on the Atlantic Coast in carrying out the plans for invasion and occupation of points that would increase the effectiveness of the blockade operations. Charleston was not entered by the Navy until its capture by General W.T. Sherman late in the war, consequently it was necessary to maintain a force of vessels constantly off that port. Likewise Wilmington was not closed until the capture of Fort Fisher by a joint expedition under Porter and Terry on 15 January 1865. This was perhaps the most interesting of the joint expeditions as well as containing food for thought.

After an unsuccessful first attempt by Army forces under General Butler and General Weitzel supported by Porter with forces from the North Atlantic Blockading Squadron, Grant sent General Terry to command the Army forces in a second attempt. Grant had not intended that Butler should have any active part in the affair, and it was particularly unfortunate that he did, as previous difficulties between him and Porter resulted in a lack of cooperation in this undertaking that made it a failure. Grant's orders to Terry were that once ashore he would not abandon the seize until the Fort was taken.

The plan was for the Army to land on the Atlantic side of the Cape Fear Peninsula out of range of the guns of the Fort. The Navy was to bombard the Fort up to the time of the assault and longer if it did not endanger the assaulting troops, destroying the palisades on the Western face of the Fort. A part of the Army was to hold a line across the Peninsula to cut off Confederate reinforcements from the mainland. The remainder of the troops were to assault the fort from the river side while a force of about 1600 sailors and 400 marines assaulted from the sea side.

On 13 and 14 ~~February~~ ^{JANUARY} the troops, artillery, and supplies were landed, and entrenchments to protect the rear thrown up. On the 14th the bombardment commenced and continued throughout the night, and on the 15th until the Fort was captured. The fire was very effective. Porter had issued a special order directing all commanding officers to refrain from wasting their ammunition firing at the flagstaff - as they had in the first attack - and to direct their fire at the hostile guns. The palisade was flattened and the subterranean torpedo wires cut.

The assault began at 1530. The naval landing force attacked but was soon repulsed. ^{COLONEL} ~~General~~ Lamb who commanded the defense states:

"That magnificent charge of the American Navy upon the center of our works enabled the Army to effect a lodgement on our left with comparatively small loss."

The Army which had attacked simultaneously with the naval landing force effected the lodgement described above but the defenders

put up a desperate resistance, and it was not until 2200 that the last resistance was overcome.

GULF COAST OPERATIONS

The difference in the conditions along the Gulf coast from those along the Atlantic Coast were only a matter of degree. The configuration of the coast in places required the same type of minor blockade operations as did the Atlantic Coast. Weather conditions, however, were generally more favorable in the Gulf.

Flag Officer D.G. Farragut was appointed to command of the West Gulf Blockading Squadron on 9 January 1862, at which time the former Gulf Blockading Squadron command was divided into an East and West Gulf Squadron, the former covering the territory from St. Andrews Bay in West Florida to Cape Canaveral on the East coast of Florida, and the latter from St. Andrews Bay to the Rio Grande.

The Western of these two areas with the two important ports of New Orleans and Mobile, was the most difficult to cover. There is no doubt but what Farragut's reputation for energy and ability led to his selection for this command. The Secretary of the Navy in a letter of instructions dated 25 January 1862 directed him to reduce the defenses of New Orleans, take possession of the city and hold it, until relieved by the Army; and to reduce the defenses of Mobile Bay and turn them over to the Army. This same letter enumerated the vessels that would compose his command which included a separate organization of vessels referred to as a fleet of bomb vessels under the command of Commander D.D. Porter.

NEW ORLEANS

As the ships of Farragut's new command reported for duty they were assembled at the Southwest pass of the Mississippi Delta then taken to the head of the Passes, a feat which, for some, was nothing less than remarkable, and not accomplished without great difficulty. At the time of his advance up the river this force consisted of 4 screw sloops, 1 side ~~wheel~~^{wheel} steamer, 3 screw corvettes, mounting a total of 154 guns; and the bomb fleet above referred to, consisting of 20 mortar schooners mounting 1 mortar each and 6 gunboats mounting two guns each. About 20 miles above the Passes and ninety below New Orleans were Forts Philip on the left bank and Jackson on the right bank, guarding the river approach to the city. While these ~~guns~~^{forts} mounted a total of 109 guns, 56 of them were 24 pounders and the greater part of the remainder were of only medium caliber. In addition to the forts there were 4 vessels of the Confederate Navy, 2 of the State of Louisiana, and 6 belonging to the River Defence Fleet which was apparently under the Confederate Army. Just below the bend on which the Forts were located the river was obstructed with a heavy raft of logs and chains, and several sunken hulks.

On the 16th of April 1862 the Federal Fleet started moving up river toward the forts and anchored just below them with the mortar schooners in advance and toward the right bank. On the 18th at 1000 the mortar schooners opened fire on Fort Jackson and continued the bombardment until 1800. The fort replied but at 1700 ceased firing, apparently due to fires that were destroying

her citadel and outhouses and threatening the magazine. Mortars again bombarded on 19th until noon, then reducing the volume by continuing the fire with one division at a time. This bombardment was continued daily until the 23rd. At 0200, the 24th, Farragut made signal for the fleet to get underway and at 0330 the leading ship of the van division passed through the obstruction that had been opened several days before by ramming it with the Itasca. The fleet was organized in two divisions formed in single column. It had been instructed that the leading division would fire only at the starboard fort and the second division at the port fort (Fort Jackson) but it was not possible to follow this plan exactly as there was some minor confusion in the formation caused by the difficulty in passing the obstructions. During the passage of the forts by the fleet the mortar boats kept up their bombardment from below the obstruction having been directed to remain there. Before daylight all of the fleet except three of the smaller gunboats had passed the forts and the operation was a success. The Confederate gunboats above the forts got into the action but being unequal to their foe were destroyed by the fleet, except the Louisiana, an ironclad, the McKae, Defiance and a transport.

About five miles above the forts at Quarantine the fleet anchored for the day, leaving 2 gunboats here to protect the landing of troops through Quarantine Bayou, they proceeded next morning to the city where they anchored at noon and received the surrender of the city from the mayor. All Confederate troops had been with-

drawn. They found the city in great confusion. Along the levees coal, cotton and shipping including the unfinished ironclad Mississippi were ablaze menacing the safety of the fleet itself.

Porter remained in command below the forts, continued his bombardment, and on the 28th received their surrender. On May 1st General Butler arrived and the city and its defenses were turned over to him.

The capture of New Orleans may have been timely for preventing recognition of the Confederacy by France.

MOBILE

It was not until the summer of 1864 that Farragut was able to carry out his instructions to reduce the defenses of Mobile. At that time he received assurances that Army forces would be available to assist him and he made his plans for the attack. It appears from a letter from Major General Canby, Commanding the Federal Division of West Mississippi, to Major General Granger designated to command the troops that were to assist Farragut that the Army had no other objective in view at Mobile than to assist the Navy in taking and holding the forts.

Toward the end of July Farragut began to assemble his force for the attack. The defenses of Mobile consisted of Fort Morgan on Mobile Point on the Eastern side of the Main Channel; Fort Gaines on Dauphin Island on the Western side of the channel; and Fort Powell at Grant's Pass, another and the deepest but narrowest of the entrance channels. These three forts were approximately

in a line South by East and about two miles apart. Fort Morgan mounted 40 guns about half of which were heavy and medium caliber; Fort Gaines 27 guns, mostly of light caliber. By staying close to the guns of Fort Morgan the ships were beyond range of the guns of Fort Gaines. Naval forces supporting the Forts were: the Confederate ram Tennessee, probably the most powerful ship built in the Confederacy, mounting six medium caliber guns; and three gunboats mounting a total of 7 heavy and 9 light guns. In addition there were a few other ironclads near the city which did not participate in the engagement and were of no consequence. From Dauphin Island toward Fort Morgan there was a pile obstruction and where the piling ended there was a triple line of torpedoes across the channel to a red bouy 226 yards from Fort Morgan. Farragut's attacking force on the main forts consisted of 4 monitors, 7 screw sloops, 3 side wheel double enders, 4 screw gunboats mounting a total of 159 guns principally of heavy caliber but all ships other than the monitors were wooden. He also employed five small vessels to engage Fort Powell during the fleet's passage of the main forts but these did not figure in any other action.

Farragut had an understanding with General Granger that the troops should land on Dauphin Island on 4 August and invest Fort Gaines while the Fleet passed Fort Morgan at the same time but as some of the vessels were late in arriving Farragut was unable to keep his part of the agreement. This circumstance while irritating to Farragut turned out advantageously because Fort Gaines was

reinforced and thereby a larger capture made when it fell to the Federals.

Farragut's plan was to lash his wooden ships in pairs consisting of one screw sloop and one smaller ship, these to form a left hand column while the monitors formed the right hand column with the leading monitor slightly in advance of the leading ship of the left hand column. These columns were more accurately a line of bearing slightly on the starboard quarter of the leading ship which bearing was to be changed to a similar one on the port quarter after passing the forts. He also wanted a flood tide to help crippled ships past the fort and possibly to turn the torpedo primers away from the direction of approach of the ships; and a westerly wind to hide his ships from the fort behind their own smoke.

Shortly after midnight on the 4th he found wind and tide conditions were favorable. Signal was made to get underway at 0530 and at 0610 the flagship Hartford crossed the bar. At 0630 the fleet was formed for battle and the Tecumseh, leading monitor, opened fire on Fort Morgan. At 0705 the fort opened fire on the leading ship of the left hand column, Brooklyn, and immediately thereafter the action became general the enemy's gunboats coming out from behind Fort Morgan and placing themselves across the channel, just inside the line of torpedoes. The Tecumseh fearing that she would go around if she followed the instructions to pass the ~~RED BUOY TO PORT, ATTEMPTED TO PASS~~ it to starboard, struck a torpedo and sank immediately. The Brook-

lyn as she approached the torpedo line thought she saw torpedoes ahead stopped and backed, momentarily causing great confusion at the head of the line; getting herself exposed to a raking fire from the fort; causing the Hartford to pass the red bouy to starboard, fortunately without damage; and nearly colliding with the Richmond. About this time the Richmond swung so that her broadside could bear on the fort which drove the defenders away from their guns and covered the situation until order could be restored in the line.

As the Hartford passed over the line of torpedoes she received a raking fire from the enemy gunboats and suffered great loss of personnel forward. The Tennessee then attempted to ram but the Hartford avoided it. The Tennessee then followed the Hartford, now about a mile from her other ships. Although gaining the Tennessee abandoned the chase after a time and returned to the rest of the fleet passing down the whole line without serious damage, finally standing over near the fort. The fleet completed passage of the fort and anchored in Mobile Bay out of range of the forts' guns. Hardly had this been accomplished when the Tennessee was observed standing out from Fort Morgan toward the fleet. The fleet got underway to meet the attack. This move on the part of the Tennessee's commander seems to have been foolhardy. In spite of his protective armor it hardly seems reasonable that he could have expected to overcome the superiority opposed to him. He was seriously damaged by being ramméd five times, and

badly pounded by gunfire finally losing control through damage to his steering gear, whereupon he surrendered. In the meanwhile the other gunboats had been attacked by the fleet with the result that one surrendered, one was so badly disabled she was destroyed by her crew, and one escaped to Mobile at night after taking temporary shelter under the fort. Fort Gaines surrendered on the 6th but Fort Morgan refused to do so. The Army forces were then moved to Mobile Point and on the 22nd the investment of Fort Morgan began. On the 23rd it surrendered. Mobile was now closed as a port for blockade runners but the Army could not spare the additional forces required for the reduction of the city until the following spring.

OPERATIONS OF THE MISSISSIPPI RIVER FLOTILLA.

CAPTURE OF FORTS HENRY AND DONELSON.

January 29th, 1862 Halleck heard from McClellan that Beauregard was leaving Manassas with 15 regiments for reenforcement of the Bowling Green-Colombus line. On February 1st Halleck ordered Grant to ascend the Tennessee River and attack the center of the Confederate line at Fort Henry, directing Foote, in command of the river gunboats, to support him, which he did with four ironclad and three wooden gun boats. Grant planned to wait for the gunboats to reduce the fort then to cut off the retreat of the Confederates by throwing his troops across the two roads in the rear of Fort Henry but heavy rains slowed Grant's advance and prevented him from intercepting the Confederates. At 11 a.m. 6 February the gun boat flotilla opened fire at about 1700 yards on Fort Henry slowly closing to 600 yards. Two hours later the Confederate flag was lowered and the Confederate fort and garrison surrendered to Foote altho the principal part of the garrison had previously withdrawn and proceeded to Fort Donelson. On arrival of the army later, the fort and its material was turned over to them. This action indicated the suitability of the gunboats to contend with most of the guns to be found at that time on the river provided they could fight bows on, while on the other hand the shot that pierced the casemate and exploded a boiler on the Essex indicated a fearful vulnerability to a type of accident that others subsequently encountered.

After the fall of Fort Henry two gun boats of the flotilla proceeded up the Tennessee River as far as Muscle Shoals in Alabama destroying the Memphis and Ohio railroad bridge across the Tennessee, large quantities of supplies, several Confederate steamers, and spread alarm amongst the population of the countryside.

It was Grant's desire to proceed immediately to the attack of Fort Donelson before it could be reinforced or its defenses otherwise strengthened. The wisdom of this plan is apparent in that had he been able to do so he would have made his attack prior to the arrival of the 14,000 additional troops sent to reinforce it, the last of which arrived on February 13th. Again Grant was delayed by the condition of the roads and the necessity for the gun boats, which he felt were important to the success of his undertaking, to return down the Tennessee and come up the Cumberland, meanwhile making some repairs to damage received during the attack on Fort Henry. It was therefore February 12th before Grant could take up his position on the high ground around Fort Donelson where, as at Fort Henry, he planned to await the reduction of the fort by the gun boats before attacking with troops.

On 13 February the ^VCayoulet shelled the fort from about 3000 yards for 6 hours.

At 1500 on 14 February the gun boats flotilla opened fire on Fort Donelson at about 2000 yards closing to 600, then 400 but without the same success that met their efforts at Fort Henry. Fort Donelson was on high ground which gave the batteries a favorable position for firing on the gun boat flotilla and

made them a difficult target for the guns of the flotilla. The height of the water batteries caused the shells to strike sloping armor at right angles, finding enemy weak points, but the punishment taken by the flotilla was more severe than at Henry. At 1630 two of the gun boats, the St. Louis and the Louisville, had their steering gear damaged to an extent that made them unmanageable and they drifted helplessly down the river. Loss of their support forced the remainder of the flotilla to retire to Cairo for repairs without having damaged the Confederate batteries.

This situation left Grant without the support of the gun boat flotilla. But his further action was not left to his initiative because the Confederates fearing the possible consequences if the flotilla returned to the attack decided to abandon the fort. This surprise action forced Grant's hand, momentarily creating a certain amount of confusion and demoralization among his troops. Believing that the Confederates had a stronger and more efficient force than they did have, he felt that the demoralization of his troops would be greatly relieved if the gun boats put in their appearance even though they were unable to take an effective part in the action. Grant's evaluation of the effectiveness of this flotilla is indicated in his note to Foote on the morning of 15 February in which he said, "If all the gun boats that can, will immediately make their appearance to the enemy, it may secure us a victory. Otherwise all may be defeated. - - - If the gun boats do not show themselves it will reassure the enemy and still further demoralize our troops - - - I do not expect the gun boats to go into action, but to make appearance and to throw a few shells at long range."

This strategic penetration on the part of Grant caused Johnson, to retire first to Nashville, to prevent his communications being cut in his rear by the advance of Union forces up the Cumberland River, and then to Murfreesboro. Buell then occupied Nashville on 24 February.

Operations at Island No. 10.

After the fall of Forts Henry and Donelson and the falling back of the Confederate army to Nashville and Murfreesboro, Columbus was no longer tenable for Confederate forces. They evacuated, moving their ordnance to Island No. 10, located in a bend in the river just below Hickman. Its position with relation to the bend in which it was located and the bend at New Madrid is shown on the slide. The Confederates depended on this as their Northern outpost to block passage down the river, because its isolation prevented it from being readily attacked. General Pope who had seized New Madrid, was unable to get across the river to a position where he could isolate Island No. 10, because he could get no transports below the fortifications, and urged Halleck to send him gun boats to enable him to get across. Ten days later, on May 15th, the iron clads and gun boats appeared but Foote declined to attack the fortifications at close range inasmuch as he was attacking down stream which in the event of serious injury to his vessels would have caused them to drift past the forts and entail their loss. Foote thought that the advance of the Army through Tennessee would render the place untenable and declined to run serious risks without justifiable cause, hence he continued

bombardment at long range for a month while the Army cut a canal from the Missouri side, as indicated by the slide, which allowed transports to pass below the batteries while avoiding them.

When this canal had been completed, Foote thinking that the time had come to assist the Army across the river sent two iron clads past the batteries at night without injury, this was followed by a series of such passages. The running of these batteries as well as those at New Orleans and Mobile ^{was} ~~were~~ so successful and so important that there is a prevalent opinion that when ships oppose forts they must run by them, but a hasty acceptance of this principle is dangerous. On every occasion that vessels ran past our forts in the Civil War they always had one of two objectives to accomplish, namely, to cut the communications of the enemy, or to extend those of their cooperating Army. In all prolonged operations ships which undertook these operations either preserved their own communications or speedily opened a new line with the help of the cooperating Army. Thus the criterion by which to judge a proposal to have ships run past batteries is to ask how the move will effect the communications of all parties. If there is no relative change in the communications of the two opponents, the operation is justified only, if at all, by very exceptional circumstances. Farragut's first run past Vicksburg accomplished nothing.

Having successfully passed Island No. 10, the gun boats and iron clads, promptly silenced the guns of the enemy on the banks

of the river and covered the passage of the Army. The crossing of the Army caused the enemy to evacuate his position on the mainland and since the only route of retreat from Island No. 10 was held by Pope, the garrison of the island surrendered to Foote.

Having opened the river up this far the flotilla moved down to Fort Pillow, the next most important position on the river, entertaining the fort daily with a light bombardment and engaging a Confederate flotilla once successfully while awaiting the advance of the army through Tennessee. When the Army seized Corinth it threatened to isolate Memphis and its defensive works, so Fort Pillow was abandoned followed by the surrender of Memphis on June 6th the river was now opened as far South as Vicksburg.

The Navy Department was very anxious to have Farragut's force advance up the river and join the river flotilla. This plan was not approved by Farragut because first he felt that the Federal troops present at New Orleans was no more than sufficient to garrison the city; second he believed that even though his ships were capable of reaching Vicksburg, 400 miles up the river, it would be impossible to maintain a line of communications without the connecting points along the river being held by the Federal Army. In short, such an operation would not create a more favorable military situation, if successful, and might result in a less favorable one. Notwithstanding Farragut's objections he was directed to carry out the operation and on June 28, 1862, ran by the batteries at Vicksburg. Vicksburg, it will be remembered, had bluffs right at the river's bank 200 feet high and it was impossible for the ships

to silence batteries at this elevation as had been done at Fort Henry. Consequently Farragut was forced to withdraw without accomplishing anything, before his ships would be caught by the falling water. In this operation he had succeeded in joining with the Western River Flotilla based on the upper river, but he contributed nothing which would improve the military situation for the Union Forces.

First Attempt Against Vicksburg.

The Confederates had now lost the control of the Mississippi from Vicksburg north, and at its mouth at New Orleans. In order to maintain communications between the Confederate territory West and East of the river, it was necessary to retain control over some or all of that portion of the river which remained in their hands. They decided to concentrate their efforts on the stretch of about 200 miles between Vicksburg and Port Hudson including the mouth of the Red River. Vicksburg was important because the only railway connection to Confederate territory West of the river was at Vicksburg. Heavy fortifications were established by the Confederates at Vicksburg and Port Hudson and the Federals assembled great armies at the end of the line to subdue them. Grant did not feel strong enough to begin an advance against the communications with the West through Vicksburg, guarded by Pemberton's army, until November 1862. His plan contemplated a joint expedition under General Sherman down the Mississippi river from Memphis while he, Grant, threatened a movement along the railway line, holding Pemberton's field army as far away from Vicksburg as possible, never to lose touch with it and to close on the city should

Pemberton go there.

Sherman arrived at Memphis on December 12th, organized his army expeditionary force, and with the naval forces under Porter, who now commanded the Western Flotilla started on December 20th. Sherman's plan was to surprise the enemy by a rapid descent of the Mississippi, to enter the Yazoo and supported by the gun boats, to get a position on the bluffs northeast of Vicksburg, while Grant occupied the field army as previously mentioned. But Grant lost his railway communications by a raid and was obliged to fall back before Sherman landed. His original plan having failed, he returned to Memphis to eventually proceed down the river and join Sherman. Sherman's attack was unsuccessful because Haines Bluff had been reinforced by the field army of Pemberton, released by Grant's withdrawal and ^{was} beyond supporting range of the gun boat artillery. It was impossible to remain long in the encampment along the river bank because of the possibility of it being submerged by any rise in the river. So Sherman's troops reembarked. A rise in the river making another landing temporarily impossible in that vicinity, and no orders having been received for further operations, the expedition up the Yazoo was given up for the time being.

Arkansas Post.

In the course of this expedition a transport or two had been lost near the Arkansas River and attention was invited to the Confederate fortifications which had been constructed at Arkansas Post on the Arkansas river a few miles from the Mississippi where it was able to control both of them with little difficulty. Sherman

believed that the only practicable route against Vicksburg was by river and that the capture of Arkansas Post was a necessary preliminary to future operations of this kind. McClernand, who had meanwhile superseded Sherman in command of the expedition, agreed with Sherman and Porter that this was necessary. Accordingly the joint forces proceeded up the Arkansas River and after two days had captured the post. This action was an excellent demonstration of cooperation between the Army and Naval forces. The gun boats cleared away about 3000 men defending some lower works which considerably shortened the line of advance of the Federal troops permitting them to take their positions opposite a line of rifle pits in the rear of the forts, ^{EXTENDING FROM THE FORT} into an impassable swamp. When troops were in position the gun boats opened a heavy fire on the forts permitting some of the minor craft to pass it and thus cut off a possible retreat of the Confederate troops across the river. At the end of two hours the iron clads had silenced the guns opposed to them but the army was still 3000 yards from the entrenchments and unable to advance. Porter thereupon reembarked on his flagship one section from the brigade that had been landed on the opposite side of the river and laid his ship alongside the fort with the intention of assaulting from the river side, but at the instant of doing so, white flags were raised in the forts and along the lines and Porter himself received the surrender of the fort.

In this operation we have the converse of that which occurred at Island No. 10. At Arkansas Post the vessels which passed the forts completed its investment and prevented any possibility of

escape, whereas at Island No. 10 the passage of the ships enabled the army to complete the investment. This operation was apparently undertaken without any orders from higher authority and was finally, although not initially, approved by Grant. It resulted in the ensuring the freedom of communications from the North in subsequent operations against Vicksburg.

CONTROL OF THE MISSISSIPPI PASSES TO FEDERALIS

After the capture of ARKANSAS POST the Federal forces returned to VICKSBURG in January 1862. The principal part of the Flotilla was with the Army at VICKSBURG, although some of its units were patrolling North of this point, maintaining the line of communications open for the Federal forces.

Grant considered approaching VICKSBURG from the South by marching his troops down the WEST bank of the River, at which time he wrote to Porter, "It looks to me, Admiral, as a matter of vast importance that one or two vessels should be put below VICKSBURG, both to cut off the enemy's intercourse with the West bank of the river entirely, and to insure landing on the East bank by our forces if wanted". Porter agreed to this suggestion with the qualification that Grant's decision should be final as boats passing down the river could not return against the current and under fire.

In accordance with this plan Porter sent two gunboats past the VICKSBURG batteries in February but they were soon afterward destroyed by a CONFEDERATE flotilla. About this time Farragut decided it was necessary for his large ships to come up the river and give the Army support from the South which the River Flotilla was unable to provide. Accordingly on 14 March he attempted to pass the batteries at Fort Hudson and was successful in getting his own and one other ship past, the others being driven back. This partial success however succeeded in closing the RED RIVER and denying to the Confederates control of any part of the river although it did not yet give the North control.

After two attempts to approach the city from the North, Grant finally adopted his plan of marching down the right bank and approaching the city from the South. Accordingly Porter sent the Flotilla past the VICKSBURG batteries on 16 April, and Grant marched to NEW CARTHAGE. The Flotilla reconnoitered the batteries at GRAND GULF and finding them too strong for the Flotilla to support a crossing of the Army at that point, Grant moved farther South to a point about opposite BRUINSBURG. At this point the Army supported by the naval forces, crossed the river on April 30, proceeded Northeast to JACKSON and then West again to VICKSBURG, investing it from the rear and interposing between it and the supporting Confederate field army. The Flotilla supported the flanks of the Federal Army and completed the investment on the West. It even supplied one battery to each of the three Army Corps to remedy a deficiency in Army siege guns.

VICKSBURG surrendered on 3 July 1862, followed immediately by the surrender of FORT HUDSON which had been under siege by General Banks. With the surrender of these two positions control of the MISSISSIPPI passed into the hands of the Federal troops, and the future work of the Flotilla was one of maintaining control in co-operation with the Army.

In reviewing these operations on the MISSISSIPPI it is noted that

- (a) the Flotilla engaged the heaviest land batteries with success;
- (b) the Confederate naval forces opposing them were never superior or equal in strength to the Federal naval forces;

- (c) the Flotilla kept open the river in rear of the Army thus keeping a line of communications open for them;
- (d) the Army assured a secure base for the operations of the Flotilla;
- (e) the mutual understanding of the proper spheres of activity and the capabilities of the Army and Naval forces by Grant, Porter, and Foote placed the naval forces as effectually under Grant's control as though they had been placed under his command.

CRUISER OPERATIONS.

The cruiser operations of the Confederacy had no direct bearing on the final results of the war, but they did cause an important financial loss to the North. Besides the loss caused by the destruction and capture of ships and cargo they indirectly caused

- (a) the transfer of over 800,000 tons of American shipping to neutral flags,
- (b) diversion of carrying trade to foreign vessels, and
- (c) increased war insurance premiums.

Another effect was the diversion of some fifty or more Federal warships from blockade or other duty, which number was at some time or other engaged in chasing these cruisers. It is interesting to note that of the \$17,000,000 damages claimed before the GENEVA Commissioners, all but \$4,000,000 was done by the Confederate cruisers ALABAMA and SHENANDOAH.

The most spectacular and the most successful of these cruisers from a naval point of view was the ALABAMA under the command of

Rear Admiral Semmes. This ship, which began its career as a raider at the AZORES in August 1862, operated continuously until destroyed by its famous battle with the KEARSARGE off CHERBOURG on 19 June 1864. Semmes had had preliminary experience in cruiser warfare while in command of the SUMTER and he turned this experience to his great advantage. His success may be said to have been principally due to

- (a) proper selection of correct strategic points on the trade routes,
- (b) careful calculation of the time required for news of his operations in any one locality to reach the United States and for Union warships to subsequently reach that area,
- (c) frequent movement to new areas of operation which were not infrequently widely separated,
- (d) correct selection of remote and obscure anchorages for overhaul and repair periods.

CONCLUSION

The original objective of the North, contain^{ING}~~ment~~ of the South, was persistently pursued to a successful conclusion. The pressure it effected on the South was the governing contribution to the Northern victory.

Without seapower that commanded the sea, this objective could not have been accomplished.

Unquestionably, initial command of the sea by the North greatly expedited the accomplishment of this plan, but not without a great deal of avoidable delay through lack of foresight in providing ves-

sole of suitable design and adequate in numbers to meet the requirements of the initial deployment.

All operations of the navy were a direct or indirect contribution to cutting the maritime communications of the South. In this connection, Grant said with reference to the operations of the Navy in the campaign in the MISSISSIPPI VALLEY, "without its assistance the campaign would not have been successfully made with twice the number of men engaged. It could not have been made at all in the way it was with any number of men without such assistance. The most perfect harmony reigned between the two arms of the service. There never was a request made, that I am aware of, either of the flag officer or of any of his subordinates, that was not promptly complied with."

A maritime nation without seapower is at the mercy of its enemies.

NAVAL OPERATIONS OF THE CIVIL WAR

Given by Comdr. Cary

Date 8 Feb. 1939

LEFT SCREEN (Facing Stage)			RIGHT SCREEN (Facing Stage)		
Box: No. 1	File No. :	TITLE OF SLIDE	Box: No. 1	File No. :	TITLE OF SLIDE
1	38-368	Division of the Union	-	-	Blank
2	36-930	Strat. Map of Confederacy	3	36-922	Mountain Wall
4	36-554	Coastline of Confederacy	5	39-1168	Coast of North Carolina
6	38-425	Coast of South Carolina	5	-	Repeat
6	-	Repeat	7	38-426	Coast of Georgia
-	-	Blank	-	-	Blank
8	36-920	Prin. Navigable Rivers	-	-	Blank
9	39-1151	U.S. Ships of War, Mar. 4, '61	11	38-424	U.S. Ships of War, Mar. 4, '61
10	39-1227	Dekalb	13	36-997	Benton
13	39-1264	Tyler	12	-	Repeat
-	-	Blank	-	-	Blank
14	39-1210	Banahoe	-	-	Blank
15	39-1327	C.S.S. TENNESSEE	16	39-1156	C.S.S. MANASSAS
17	39-1153	C.S. Sub. H.L. Hanley	16	-	Repeat
-	-	Blank	-	-	Blank
18	39-1249	Comdr. John Rodgers	-	-	Blank

List of Slides Cont'd.

LEFT SCREEN			RIGHT SCREEN		
Box:	File No. :	TITLE OF SCREEN	Box:	File No. :	TITLE OF SCREEN
No.1			No.1		
-	-	Blank	-	-	Blank
19	36-698	Coast of Confed- eracy	-	-	Blank
19		Repeat	5		Repeat
20	36-470	Conquest of South	5		Repeat
6		Repeat	7		Repeat
21	29-1198	MONITOR-MERRINAC fight	22	29-1191	Remodeling MERRINAC
23	36-1013	Cape Fear River Entrance	-		Blank
24	34-24	D.D. Porter	25	36-1010	Maj. Gen'l Terry
24		Repeat	26	36-1009	Maj. Gen'l Butler
27	29-1216	Fort Fisher	28	29-1214	Plan of attack on Fort Fisher
29	29-1215	Bombardment of Fort Fisher	30	36-1011	Assault of naval column
31	29-1235	Adm. Farragut	-	-	Blank
31		Repeat	32	37-476	Mortar Schooner
33	29-1344	Battle of New Orleans	-	-	Blank
33		Repeat	34	29-1313	Farragut passing the Forts
35	29-1351 A	Mobile Bay	-		Blank
35		Repeat	15		Repeat
35		Repeat	36	29-1321	Battle of Mobile Bay
37	29-1317	Destruction of Tecumseh	36		Repeat
38	29-1318	Surrender of Tennessee	36		Repeat

List of Slides Cont'd.

LEFT SCREEN

RIGHT SCREEN

Box:	File No. :	TITLE OF SCREEN	Box:	File No. :	TITLE OF SCREEN
No. 1			No. 1		
39	37-482	Mississippi Valley	40	38-396	Mississippi-Tennessee-Ohio Rivers
41	36-1005	Capture of Forts Henry & Donelson	40		Repeat
41		Repeat	42	29-1286	Gunboats at Ft. Donelson.
44	29-1222	New Madrid & Island # 10	43	34-940	Tennessee and Kentucky
44		Repeat	45	29-1315	Mortar Boats
44		Repeat	46	30-157	Captain Foote
44		Repeat	47	29-1269	Cutting the Canal
49	29-1284	Running batteries at Island #10.	49	29-1267	Comdr. Walker
44		Repeat	45	36-940	Repeat
50	38-398	Passage of Vicksburg batteries	-		Blank
59		Repeat	51	36-399	Yazoo Delta
53	36-400	Vicksburg to Bruinsburg	51		Repeat
53	36-402	Arkansas Post	51		Repeat
53		Repeat	51		Repeat
54	36-935	Vicksburg Campaign	51		Repeat
55	29-1423	Alabama	56	29-1366	R. Adm. Semmes
20		Repeat	-	-	Blank

