



# Combat at Close Quarters

*Warfare on the Rivers and Canals of Vietnam*



Edward J. Marolda and R. Blake Dunnivant

**THE U.S. NAVY AND THE VIETNAM WAR**

Edward J. Marolda and Sandra J. Doyle, *Series Editors*

# Combat at Close Quarters

Warfare on the Rivers and Canals of Vietnam

Edward J. Marolda and R. Blake Dunnivant



DEPARTMENT OF THE NAVY  
WASHINGTON, DC  
2015

© 2015 Naval Historical Foundation

All rights reserved.

No portion of this book may be reprinted without written permission from the Naval Historical Foundation.

Printed in the United States of America.

*Published by*

Naval History & Heritage Command

in partnership with the Naval Historical Foundation

805 Kidder Breese Street SE

Washington Navy Yard, DC 20374-5060

www.history.navy.mil

Book design by Dean Gardei and Christopher Dunham

## U.S. GOVERNMENT OFFICIAL EDITION NOTICE



### Use of ISBN

This is the official U.S. Government edition of this publication and is herein identified to certify its authenticity. Use of 978-0-945274-73-5 is for the U.S. Government Publishing Office Edition only. The Superintendent of Documents of the U.S. Government Publishing Office requests that any reprinted edition clearly be labeled as a copy of the authentic work with a new ISBN.

### Library of Congress Cataloging-in-Publication Data

Marolda, Edward J.

Combat at close quarters : warfare on the rivers and canals of Vietnam / Edward J. Marolda and R. Blake Dunnavent.  
pages cm. -- (The U.S. Navy and the Vietnam War)

ISBN 978-0-945274-73-5 (alk. paper) -- ISBN 978-0-945274-74-2

1. Vietnam War, 1961-1975--Riverine operations, American. 2. United States. Naval Forces, Vietnam. River Patrol Force--History. 3. United States. Navy. Task Force 116--History. 4. United States. Mobile Riverine Force--History. 5. Vietnam War, 1961-1975--Naval operations, American. I. Dunnavent, R. Blake, 1968- II. Naval History & Heritage Command (U.S.) III. Title. IV. Title: Warfare on the rivers and canals of Vietnam.

DS558.7.M364 2014

959.704'345--dc23

2014049884

∞ The paper used in this publication meets the requirements for permanence as established by the American National Standard for Information Sciences "Permanence of Paper for Printed Library Materials" (ANSI Z39.48-1984).

For sale by the Superintendent of Documents, U.S. Government Publishing Office

Internet: bookstore.gpo.gov; Phone: toll free 866-512-1800; DC area 202-512-1800; Fax 202-512-2104

Mail Stop: IDCC, Washington, DC 20402-0001



---

## CONTENTS

---

Introduction	1
The First Indochina War	5
The Vietnam Navy River Force and American Advisors	9
The U.S. Navy and the Rivers of Vietnam	17
SEALORDS	45
The End of the Line for U.S. and Vietnamese River Forces	73
<b>Sidebars</b>	
The PBR	22
Riverine Warfare Training	28
Battle Fleet of the Mekong Delta	32
High Drama in the Delta	41
Vice Admiral Elmo R. Zumwalt Jr.	46
Black Ponies	56
The Swift Boat	60
Warriors with Green Faces	64
The Authors	80
Acknowledgments	80
Suggested Reading	81



NHHC K 59267

The meaning of brown water warfare is clear from this image of river patrol boats tied up at the Binh Thuy base in September 1968.

---

## INTRODUCTION

---

**T**hroughout Vietnam's history, inland waterways have been central to the country's growth and development. They are where the population settled and cultivated and marketed their agricultural products. The fertile Red River valley in the north, the lush Mekong Delta in the south, and the many canals and rivers crossing those two prime growing areas brought economic prosperity and social cohesion. During the 1960s, the Mekong Delta was home to six million people—nearly 40 percent of South Vietnam's population. The well-irrigated paddies that covered the flat land produced most of the country's rice, and the delta's 3,000 nautical miles of waterways enabled farmers to bring their harvests to market.

These same water courses have figured prominently in the military history of the Vietnamese people. When Chinese forces invaded and occupied northern Vietnam over the centuries, they exploited the fertility of the northern delta to feed both Chinese and Vietnamese populations. Harsh treatment of the Vietnamese people by the Yuan Dynasty under the Mongol Kublai Khan sparked an uprising in the 13th century, during which the legendary military leader Tran Hung Dao repeatedly defeated Mongol forces on the Red River and became a national hero.

In the 19th century, France took advantage of internal strife in Vietnam to occupy the country and establish an overseas colony that endured to the middle of the 20th century. Like the Chinese before them, the French recognized the importance of the rivers and canals in securing control of the country and exploiting its resources, especially rice production. Numerous battles between French naval forces and Vietnamese independence fighters occurred along and on inland waters.

Japan occupied Indochina in World War II with the collusion of the Vichy French government that collaborated with the Axis powers. Determined

to reestablish its Asian colony after Japan's defeat in August 1945, the "Free French" government of General Charles de Gaulle used Vietnam's rivers and canals to push troops far inland. By the end of 1946, French military forces were in firm control of the Red River and Mekong River deltas as well as the country's main navigable arteries.

The First Indochina War broke out when Ho Chi Minh's Viet Minh independence movement, which consisted of communist and noncommunist nationalists, rose up in revolt. Ho's troops destroyed French forces on the frontier with China and secured the jungles and mountains of northern Vietnam's interior during the early 1950s. The Viet Minh, however, were unable to break French power in the two delta regions. The French used the inland waterways as barriers to Viet Minh advances and as highways to quickly move ground and naval forces from one threatened area to another.

French units of heavily armed and armored river craft, most of them surplus World War II U.S. amphibious craft, prevented Viet Minh forces from seizing Vietnam's primary food-producing regions, population centers, and ports. But in May 1954, the Viet Minh defeated more than 10,000 French Union troops at Dien Bien Phu, an outpost located deep in the mountains and jungles of northern Vietnam and far from the country's inland waterways. The rout of the French army's most elite forces at Dien Bien Phu led ultimately to France's withdrawal from Indochina, leaving the Democratic Republic of Vietnam (North Vietnam) under Ho Chi Minh in control of the northern regions of the country. The Geneva Conference of 1954, convened by the world powers to bring peace to Indochina, established the division between North Vietnam and South Vietnam at the 17th parallel.

The survival and future growth of the fledgling government of the Republic of Vietnam (South Vietnam) depended heavily on its ability to secure the nation's waterways, especially the Mekong Delta

and the rivers that allowed access to the sea from the capital, Saigon. From 1955 to 1965 South Vietnam, with U.S. military assistance, developed a River Force to protect river transportation and commerce from attacks by indigenous Communists, the Viet Cong (VC).

In 1959, North Vietnam decided on armed struggle to destroy the government of South Vietnam and gradually stepped up attacks on American military advisors. In January 1960, the female Communist leader Nguyen Thi Dinh sparked the first serious uprising against the South Vietnamese government. Her insurgents stormed a number of municipal buildings at Ben Tre, the capital of Kien Hoa Province in the Mekong Delta, and assassinated 43 public officials. The stunning action served to inspire Communist guerrillas throughout the war.

Political chaos in Saigon, the deteriorating security in the countryside in 1963 and 1964, and the North Vietnamese attack on destroyer *Maddox* (DD-731) in the Gulf of Tonkin in August 1964 prompted major U.S. military intervention into South Vietnam in 1965. To stem the infiltration of weapons, ammunition, and other war materials into South Vietnam by sea, Commander U.S. Military Assistance Command, Vietnam (MACV) established the Coastal Surveillance Force (Task Force 115) under Chief Naval Advisory Group (later subordinated to a new organization, Naval Forces, Vietnam [NAVFORV]) on 30 April 1965. The United States also deployed U.S. Navy and U.S. Coast Guard destroyer escorts, ocean minesweepers, cutters, coastal craft, and patrol planes along the country's 1,200-mile coastline. The eventual success of this anti-infiltration operation,



NHHC K31134

called Market Time, forced North Vietnam to transport munitions via inland routes through Laos and via merchant ships into the port of Sihanoukville in supposedly neutral Cambodia.

As war materials flowed into the Mekong Delta from Cambodia, the U.S. command on 18 December 1965 stood up the River Patrol Force (Task Force 116). In Operation Game Warden, 31-foot river patrol boats (PBRs) assisted by armed helicopters limited the enemy's use of South Vietnam's larger rivers. The U.S. Navy then teamed with the U.S. Army to form the Mobile Riverine Force (MRF), whose purpose was to locate, surround, and destroy main force Communist combat units in the delta.

Although these efforts hurt the enemy, supplies from North Vietnam continued to get through to Viet Cong and North Vietnamese forces, enabling them to hold their own in battle with allied units. The Communists simply switched the infiltration routes from the main rivers to the lesser rivers, canals, and swamps of the delta. The buildup of enemy forces culminating in the nationwide Tet Offensive of 1968 severely tested the staying power of the allied forces. In the end, however, the River Patrol Force, the Army-Navy Mobile Riverine Force, and the Vietnam Navy (VNN) River Force reestablished control of the delta.

Hoping to cap this victory and prevent enemy forces from rebuilding their strength in the region, Vice Admiral Elmo R. Zumwalt Jr., Commander Naval Forces, Vietnam, and his staff devised SEALORDS (Southeast Asia Lake, Ocean, River, Delta Strategy). This strategy generated fierce battles and high casualties on both sides, but by 1970 allied forces had made it especially difficult for the enemy to maintain the supply route and had established a military presence in previously uncontested areas. U.S. Air Force, U.S. Army, and Vietnam Air Force resources, in addition to the Navy's OV-10 Bronco fixed-wing aircraft of Light Attack Squadron (VAL) 4, known as the Black Ponies, operating from Binh Thuy in the center of the delta, significantly boosted the combat power of the SEALORDS forces. The increase in security in the delta after 1968 enabled the South Vietnamese command to

divert significant combat forces for the invasion of Cambodia in 1970 and to counter the Communist Easter Offensive north of Saigon in 1972.

The SEALORDS effort equipped, trained, and prepared the Vietnam Navy to take on the fight as U.S. forces began withdrawing from Vietnam in the early 1970s. Accelerated Turnover to the Vietnamese (ACTOV) was the naval component of the overall U.S. Vietnamization program. By the end of March 1973, when the last American military units departed South Vietnam, the VNN operated 1,500 naval vessels that included hundreds of former U.S. river patrol boats, Swift boats, riverine assault craft, minesweeping craft, and river logistic support bases. South Vietnam's defeat in 1975 did not result from the failure of the VNN or the loss of control over the nation's waterways; the Republic of Vietnam succumbed to a massive North Vietnamese ground offensive that advanced inexorably from the hills of central and northern South Vietnam to engulf Saigon.

The fight in the Mekong Delta during the losing struggle for South Vietnam took place half a century ago. But the service and sacrifice of U.S. Sailors demonstrated America's commitment to its South Vietnamese allies in defense of freedom and universal human rights. Moreover, the conduct of the river war in Vietnam helped inform naval operations in more recent conflicts. Looking to the past for guidance, the U.S. Navy established three riverine squadrons that operated successfully on the inland waterways of Iraq during Operation Iraqi Freedom. ↴



NH 79376

French patrol boat sailors scan the riverbank for signs of Viet Minh guerrillas.

## THE FIRST INDOCHINA WAR

French involvement in Southeast Asia dated from the late 18th century when Nguyen Phuc Anh of the Nguyen Dynasty—later known as Emperor Gia Long—requested French assistance in defeating his enemies and uniting the Vietnamese. The French, however, continually expanded their imperial control over a weak succession of Vietnamese emperors so that by the 20th century France dominated Vietnam’s three main regions: Tonkin in the north, Annam in the center, and Cochinchina in the south. Following the brief interlude of Japanese occupation during World War II, the French reestablished their colonial presence in Vietnam, Laos, and Cambodia, triggering the First Indochina War.

The French military command planned to conduct the campaign in three stages: gain control of and establish bases on the country’s main roads and waterways (where, the French believed, the Viet Minh forces extensively moved fighters and munitions); establish strong points to deny the enemy access to resources and the population; and inspire and arm Vietnamese villagers to oppose Ho Chi Minh’s guerrilla army. The success of this strategy depended on control of the Tonkin and Mekong deltas and the coastal regions.

Vice Admiral Paul Philippe Ortoli, commander of French naval forces in the Far East, directed his command to focus on “clearing and controlling the network of interior waterways which serve as the principal means of access to the life of the country.” Following the Far East Naval Brigade’s successful 1945 operations to oust the Viet Minh from Can Tho and My Tho in the Mekong Delta, General Jacques-Philippe Leclerc, commander of all French military forces in the Far East, directed Captain Francois Jaubert to organize a river squadron, or flotilla, of landing craft and naval infantry to secure the Mekong and Bassac rivers.

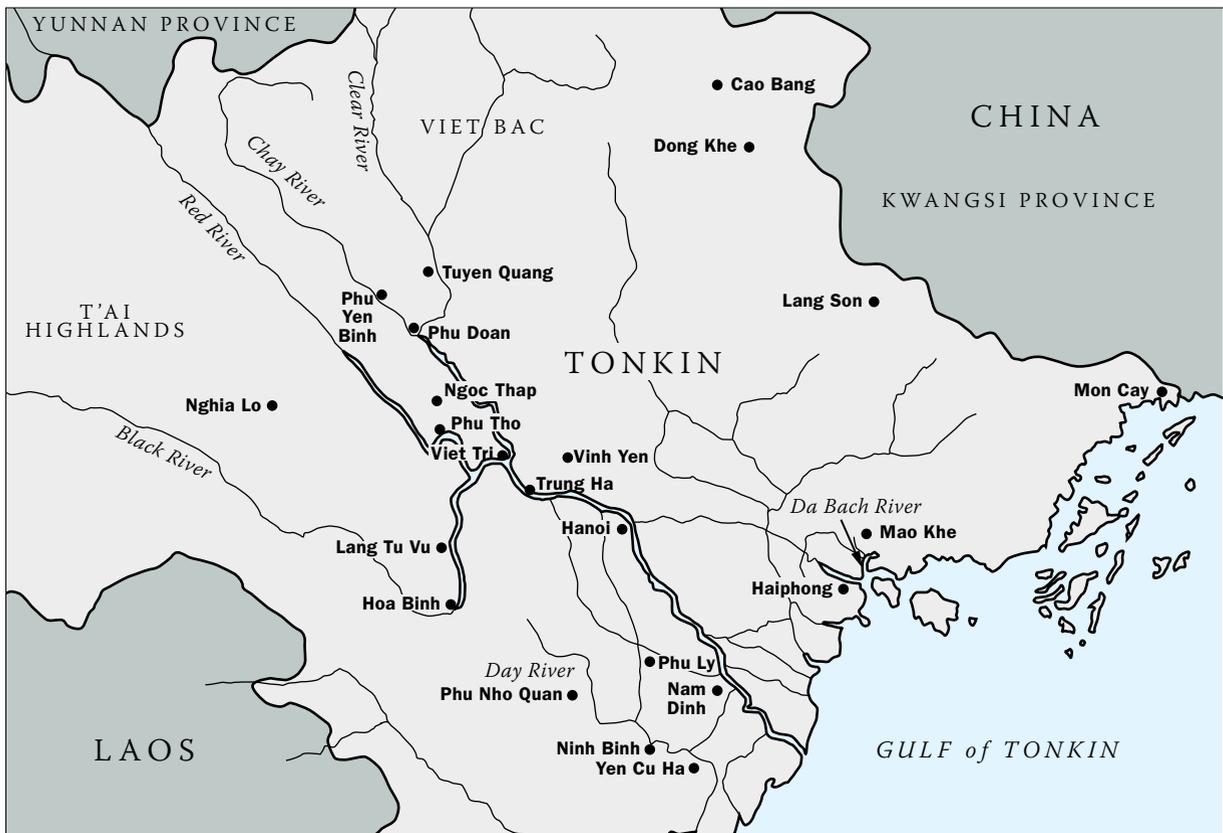
This initial riverine force evolved into the *division navales d’assaut* (*dinassauts*, or naval



Vice Admiral Paul Philippe Ortoli, commander of French naval forces in the Far East, poses in front of a map of Indochina.

assault divisions). *Dinassauts* typically included 12 converted U.S. World War II landing craft mechanized (LCM); landing craft utility (LCU); landing craft tank (LCT); landing support ship, large (LSSL); landing craft, vehicle or personnel (LCVP); landing craft, infantry (LCI); and landing ship infantry, large (LSIL). French-built river patrol craft, referred to as STCAN/FOMs, augmented these units. In addition to infantry small arms, each vessel maintained an array of larger ordnance such as 81mm mortars, 20mm cannon, 40mm cannon, 37mm cannon, 3-inch guns, .50-caliber machine

NHHC VN Collection



Red River Delta.

guns, and .30-caliber machine guns. A total of six *dinassauts* eventually served in Indochina. Their mission was to insert and extract troops and to provide emergency evacuation of isolated outposts along the rivers.

By most accounts, French military and naval forces swiftly subdued Viet Minh guerrilla units in Cochinchina, thus permitting the pacification of southern Vietnam. The *dinassauts*, however, served primarily in the Red River Delta, with each group operating from a base defended by either naval commandos or army infantry. They conducted river patrols or teamed with ground troops to subdue enemy forces. Close coordination between naval and ground troops was essential because *dinassauts* lacked their own assigned ground force. In a typical riverine amphibious assault, lead elements checked the approach waters for mines, gunfire units shelled the prospective landing site to kill or disorient defenders, and the assault infantry disembarked and

secured a riverbank position. Then the main infantry force landed and moved out into the terrain. Simultaneously, the naval craft set up flanking positions on either side of the landing site and stood by to provide gunfire support. If the battle ashore went badly for the French, the naval vessels were on hand to extricate the ground troops. Air force units often provided aerial reconnaissance of the immediate area to warn of enemy concentrations and prevent ambushes.

The battles on the Day River amply demonstrated the flexibility and lethality of French river forces. To gain control of the strategic Red River Delta, General Vo Nguyen Giap, military commander of the Viet Minh forces, launched a series of attacks in early 1951. Twice, French forces led by General Jean de Lattre de Tassigny repulsed Giap's attacks and inflicted heavy casualties on the Viet Minh infantry at Vinh Yen and Mao Khe. On 28 May 1951, Giap's forces hit French positions near

Ninh Binh on the Day River. General de Lattre directed army and naval forces to this locale. After successfully thwarting a Viet Minh ambush north of Ninh Binh, *Dinassaut 3* brought reinforcements and added firepower against Giap's forces. De Lattre counterattacked on 30 May with both ground and riverine units. Although Giap's failed campaign lasted until 18 June, the climax of the battle occurred on 5 June at Yen Cu Ha where the French riverine vessels pummeled Viet Minh units with gunfire, forcing them to withdraw from the battle. The swift provision of riverine forces, ground reinforcements, and naval gunfire enabled de Lattre to engineer the victory.

Despite *dinassaut* successes in open combat, waterborne mines plagued French riverine operations throughout the conflict. Although the French swept rivers prior to naval operations to help limit casualties, the enemy often employed new and ingenious tactics to confound French minesweeping measures. For all their thoroughness, French minesweeping units could never be assured that mines would not frustrate a naval operation.

Despite the effectiveness of the riverine forces, France lost the First Indochina War. The Viet Minh trapped the cream of the French Union forces (one tenth of France's military strength in Vietnam) at Dien Bien Phu, an airfield and outpost deep in the jungles of northern Vietnam and far from the delta waterways. On 7 May 1954, Giap's forces overwhelmed the last French defenders. At an international conference in Geneva, Switzerland, France agreed to a cease-fire and the withdrawal of its forces from Indochina. The agreement also provided for the partition of Vietnam at the 17th parallel with Ho Chi Minh's Democratic Republic of Vietnam ruling the regions to the north. Eventually, a Republic of Vietnam government headed by anticommunist Ngo Dinh Diem administered Cochinchina and the southern half of Annam. ↴



Ngo Dinh Diem, President of the Republic of Vietnam, inspects a warship of the Vietnam Navy (VNN) in the mid-1950s. The uniforms of these sailors reflect the French influence on the new naval service. South Vietnam's navy would later take on the look of the U.S. Navy, which became its primary benefactor.

## THE VIETNAM NAVY RIVER FORCE AND AMERICAN ADVISORS

In keeping with Washington's global Cold War policy of "containment" that aimed to prevent the spread of Communist power and Marxist-Leninist ideology, the United States provided economic and military support to France during the First Indochina War. In the Mutual Defense Assistance Program, from 1950 to 1954, France received military aid totaling \$2.6 billion from the United States. This assistance included two light aircraft carriers; 438 amphibious landing ships, landing craft, and armored river patrol boats; and 500 aircraft.

The Vietnam Navy of the Republic of Vietnam served President Diem's fledgling government well in 1955 by employing the river, coastal, and amphibious vessels handed over to them before the French withdrew from southern Vietnam. In late March 1955, the Binh Xuyen, an armed 25,000-man group that supported itself through criminal enterprises in Saigon, posed a direct threat to Diem's new government. After driving Binh Xuyen fighters out of Saigon, Diem employed VNN river forces to defeat a group of hold-outs in the swamps of the Rung Sat ("Forest of Assassins") southeast of the capital. By year's end the VNN had eradicated the Binh Xuyen's military power. It was the first major test for the new navy, and the young service's success in the effort impressed Diem.

The administration of U.S. President Dwight D. Eisenhower was especially concerned after France's defeat at Dien Bien Phu that Communist movements would follow up the conquest of northern Vietnam by seizing southern Vietnam, Laos, Cambodia, the Philippines, Indonesia,

and other Southeast Asian nations. To prevent such an outcome, in September 1954 the United States joined with Great Britain, Australia, and other concerned nations to form the Southeast Asia Treaty Organization (SEATO). The Geneva Agreement of 1954 prohibited Cambodia, Laos, and what became the Republic of Vietnam from joining SEATO, but the organization in essence existed to protect those nations from North Vietnam and China.

With France's withdrawal from Indochina, the United States took over responsibility for equipping and training the armed forces of the Republic of Vietnam. The Navy Section of the U.S. Military



President Dwight D. Eisenhower, shown here with Chief of Naval Operations Admiral Arleigh Burke, championed establishment of the Southeast Asia Treaty Organization to combat Communist aggression in the region.

NA 80-G-K-22608



Assistance Advisory Group (MAAG), Vietnam handled naval matters.

In 1956, U.S. Navy advisors received orders from Admiral Felix B. Stump, Commander in Chief, Pacific (CINCPAC), to help the VNN secure the inland waterways of South Vietnam and support the other Vietnamese armed forces. To accomplish these missions, the VNN would conduct river and coastal patrols to interdict enemy waterborne movement as well as minesweeping to keep the country's waterways open to military and civilian traffic. CINCPAC recommended that the VNN conduct riverine assault operations with ground troops.

The VNN created river assault groups (RAGs) based on the French *dinassaut* model. In 1959, the River Force commander, based at Can Tho, directed close to 100 boats and craft, organized into five river assault groups. The two-officer, 100-man RAGs were deployed at Saigon and at My Tho, Vinh Long, Can

Tho, and Long Xuyen, the latter all in the Mekong Delta. The units alternated between one month of operations and one month of training.

Each RAG operated 17 to 19 modified World War II U.S. landing craft. An LCM-6 commandment (the Vietnamese continued to use the French spelling to identify this boat) served as a command ship and provided communications and gunfire support. Each of the groups also contained one monitor, similar to the commandment but able to project more firepower. The monitors carried one 40mm cannon, two 20mm cannons, one .50-caliber machine gun, and an 81mm mortar. The RAG's five LCMs, 12 LCVPs, and the French-designed STCAN/FOMs transported troops and supplies.

A typical river operation in the delta included six LCMs, four LCVPs, two small patrol boats, and several marine ground units (there were four Vietnam Marine Corps battalions directed by the



A French-designed STCAN/FOM river patrol boat that served in a river assault group of the Vietnam Navy.

NH 93793



Mekong Delta.

VNN headquarters based in the region) conducting assaults in An Xuyen Province. Another two LCMs and two LCVPs patrolled the Cambodian border near Chau Doc, while one LCM and two LCVPs operated on the Tranh Dong River in the Rung Sat swamp below Saigon. At the same time, two LCVPs protected a Vietnamese army fuel depot upriver from Saigon. The River Force carried out 27 joint army-navy operations in 1961.

Even though VNN leaders resented being used by the army as a supporting arm, the navy followed the direction of the senior service to escort convoys

laden with charcoal and rice from the delta to Saigon. Frequently, the enemy prevented these products from reaching the capital. The River Force commander allocated 18 STCAN/FOMs, 4 LCMs, and 8 LCVPs to a new command, the River Transport Escort Group. During 1961 the River Force facilitated the delivery of over one million tons of cargo to Saigon. On five occasions the Communists detonated mines in proximity to the convoys but failed to seriously damage even one transport.

Mines, however, were a particular worry for both the army and navy. Enemy mine warfare

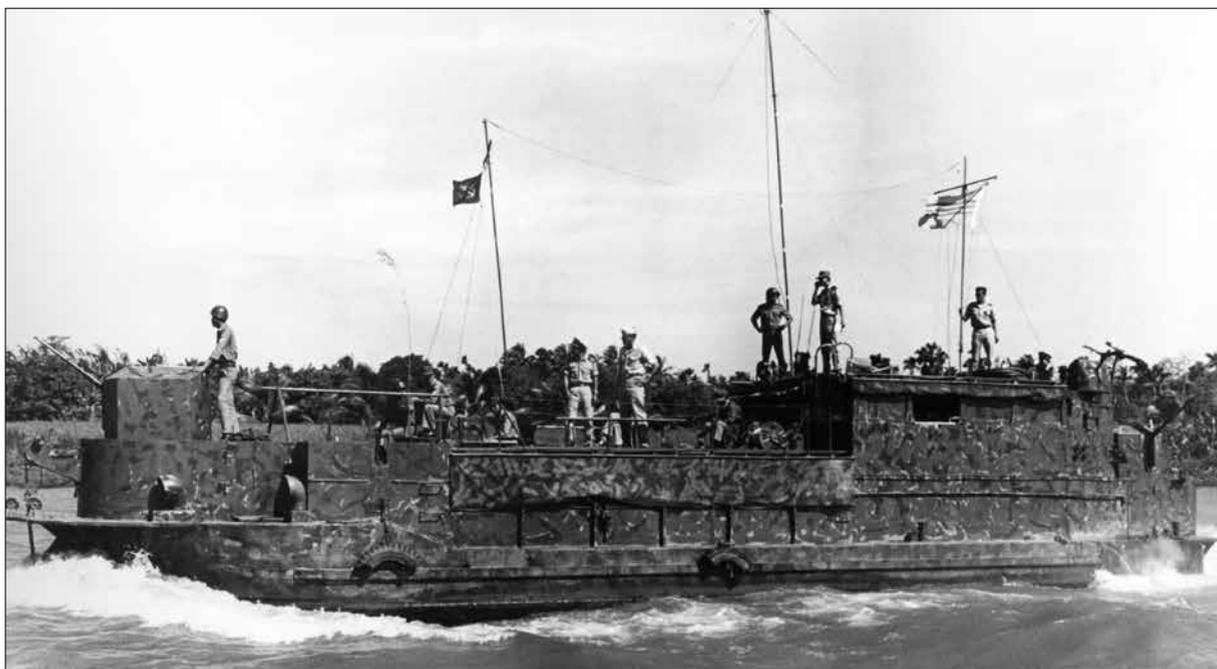
tactics differed little from those used during the First Indochina War. From a hiding place on the riverbank, a Viet Cong guerrilla would use a wire connection to a battery to trigger a mine when the lead ship in a convoy approached the narrows of a waterway. Then other guerrillas would open fire on the stalled convoy. To cut wires between the guerrillas ashore and their mines, River Force units dragged grapnels behind them or strung cutting cables between a pair of LCVPs.

These countermining tactics did not work, however, during a 25 November 1960 battle in Dinh Tuong Province. The operation began when an army commander, without asking for navy input, ordered three River Force LCMs to move an infantry battalion through narrow canals into a position near the Plain of Reeds. Near dusk, a mine explosion lifted the lead vessel out of the water, stove in her bulkheads, and caved in the roof over the well deck. The blast threw the seated soldiers against the overhead; the muzzles of several rifles punched holes through the wooden planking. Viet Cong fire then raked the force. The LCMs opened up with their 20mm guns, beached on the riverbank, and disembarked

uninjured troops who drove off the attackers. The short, yet sharp fight either wounded or killed 31 South Vietnamese soldiers.

A July 1961 River Force operation was more successful; in fact, it was the largest and most productive army-navy action against the Communists since 1954. South Vietnamese military leaders targeted a longtime VC stronghold in an area of Kien Phong Province bounded on all sides by canals and the Mekong River. From 4 to 16 July, River Force combat craft, army artillery, and paratroopers deployed all around the enemy concentration and poured heavy fire into the enemy positions. The paratroopers then advanced. Trying but failing to escape the ever-closing trap, the Viet Cong stood and fought. By the end of a six-hour battle, on the morning of the 16th, the South Vietnamese forces had crushed the 502nd Viet Cong Battalion and a company from the 504th Battalion, killing 167 men, capturing 11 more, and recovering 85 weapons.

Later that year, Washington decided to provide additional resources to strengthen the River Force. This U.S. provision of river craft enabled the VNN to create the 22nd River Assault Group in September



A South Vietnamese naval officer communicates with other leaders in the river assault group from the overhead of his command-control vessel, or commandant. The tall individual below him and to his front is an American naval advisor.

NH 93778



NH 43013

A converted U.S. landing craft of the VNN River Force transports South Vietnamese troops on a river in the Mekong Delta.

1962. Vietnamese naval leaders and their American advisors conceived the new RAG as a mobile group that would operate from an LCU in the Saigon River in support of army forces. Shortly afterward, the RAG headed for the Rung Sat with a company of marines embarked for a 30-day operation to test the new concept. The mobile group put small parties of marines dressed in civilian clothes ashore to gather intelligence. The RAG later landed troops to engage the enemy. The operation resulted in the killing of 26 Viet Cong guerrillas and the destruction of a headquarters, arms-making site, jungle hospital, and training camp. The South Vietnamese lost one sailor killed and three wounded. A captured Communist document spoke to the success of the operation: “Disruption of traffic lines and shortage of food stuffs is critical.”

By the end of 1963, the River Force operated 208 vessels, almost twice the force’s number in 1959. As a result of increased VNN support and the establishment in December 1961 of the River Force School,

which graduated 200 men every month thereafter, the river assault groups were fully manned by the end of 1963. The primary mission remained the same: to support army operations in the Mekong Delta. The River Force did not focus on interdicting Communist waterway traffic in the delta.

Indeed, one problem the River Force dealt with was the practice of III Corps (Saigon region) and IV Corps (Mekong Delta) province chiefs, usually army officers, tasking the river units with static defense duties that reduced the number of craft available for offensive missions or maintenance. To solve this dilemma, in 1962 U.S. naval advisors persuaded Washington to supply the VNN with 145 LCVPs that eventually formed 20 paramilitary Civil Guard boat companies to serve the province chiefs. Each company operated with seven or eight boats and two platoons of troops. The following year the VNN established the Civil Guard Boat Operation Training Center on the Saigon River. Although the boat companies suffered from the usual problems

of poor operational readiness, maintenance, repair, and supply support, they did ease the burden on resources.

The River Force took steps to counter enemy ambush and mining attacks, which totaled more than 75 incidents in 1963. Vietnamese commanders, with the assistance of American advisors, mounted flamethrowers on LCMs, as was done during the First Indochina War, and developed better anti-mining equipment.

In 1964, the River Force put much more emphasis than it had in the past on patrolling the delta's main waterways in search of Communist infiltrators. On a typical day in February 1964, for instance, 32 of the 67 operational River Force ships and craft were on patrol while seven supported ground operations. During one week in June, an average of 28 vessels conducted patrols; another ten supported the army. By October less than 10 percent of River Force units carried out assault actions with ground troops. Despite the focus on patrolling, the results for the year were discouraging. RAG sailors had searched 993 vessels for contraband and checked 3,620 persons for proper identification but identified only 12 Viet Cong.

Meanwhile, the River Force continued to mount raids against VC strongholds in the Rung Sat. In April, for instance, a force of LSILs, LCMs, monitors, STCAN/FOMs, junks, and two companies of soldiers aimed to destroy two Viet Cong companies that menaced the naval base at Ly Nhon. Under covering fire from an LSIL, 1,100 troops disembarked and joined in combat with a small group of Communist guerrillas, six of whom they either killed or captured.

In May 1964, to accommodate the growing U.S. military assistance and training effort, the Military Assistance Command, Vietnam, established two years earlier, absorbed the Military Assistance Advisory Group, Vietnam; MAAG's Navy Section became the Naval Advisory Group (NAG).

The South Vietnamese government strongly suspected by October 1964 that Hanoi was using the Mekong River to arm Viet Cong guerrillas in the delta. Saigon feared that oceangoing vessels making the passage from the sea to Phnom Penh,

Cambodia, were offloading munitions at night in South Vietnam or delivering their illicit cargoes to Communist agents just inside Cambodia for later movement throughout the delta. In October, Saigon issued a decree that banned merchant ships stopping at night on its section of the river. The document also prohibited a ship flying the flag of a Communist country or whose passage originated in a Communist port from transiting the Mekong. The decree also established South Vietnam's right to inspect cargoes and place a South Vietnamese official on board for the trip to the Cambodian border. In January 1965, concluding that the Cambodian government of Prince Norodom Sihanouk was supporting the Communists in the delta, South Vietnam's government banned his country's vessels from the river.

Although the River Force and indeed the entire VNN faced external and military threats, their greatest problems lay within the naval organization itself. Poor leadership and a troubled officer corps involved in plots, coups, and other political actions undermined the effectiveness of the service. Religious and cultural differences and personal animosities exacerbated the corps' difficulties. Among enlisted personnel quality of life issues—low pay, spartan living conditions, inadequate training for military life—caused many to desert. Poor maintenance of obsolete World War II-era ships and craft and inefficient repair and supply systems reflected the lack of a modern industrial base in South Vietnam. Taken together these conditions resulted in a generally mediocre operational performance that by 1965 compelled the U.S. Navy to intervene directly. ↴



NHHC K-43660

A River Section 512 PBR, or river patrol boat, operating from *Jennings County* (LST-846) skims a riverbank of the Bassac River to fire on a suspected Viet Cong position in December 1967.

---

## THE U.S. NAVY AND THE RIVERS OF VIETNAM

---

From its establishment in 1775, the U.S. Navy has fought on the rivers and inland waterways of America and numerous countries around the world. In the Revolution, War of 1812, Second Seminole War, Mexican-American War, Civil War, and Philippine-American War, Navy bluejackets have traded fire with the enemy far from the sea. Naval forces have shown the flag of the United States on China's Yangtze River, on the Rhine River after World War II, and on myriad other inland waterways for more than two centuries. Hence, the naval and military leaders responsible for planning and directing naval operations in the Vietnam War had a rich history from which they could draw. Major General William B. Fulton, commander of the Army-Navy Mobile Riverine Force in Vietnam, observed in his *Riverine Operations, 1966–1969*, that when he was considering a force for operations in the Mekong Delta, he looked at the “tradition of past American success in riverine operations.” This mission was something the U.S. military had done well in the past and could do again.

Contemporary analysts also argued that a successful outcome in Vietnam, laced with thousands of miles of waterways, depended on naval power. A study published by the Research Analysis Corporation in April 1963 recognized that the Viet Cong thoroughly understood the value to their cause of the Mekong Delta's navigable arteries. These virtual highways in a land with few roads could easily move troops, munitions, and supplies. Moreover, the delta's water-nourished foliage provided excellent cover and concealment from which the Viet Cong could mount attacks on VNN ships and craft. As the bread basket of Vietnam, the delta was also an abundant source of food and tax revenue for the Viet Cong.

In 1964, Jack Endacott, in his U.S. Naval War College thesis “Waterbased Counterinsurgency,” endorsed the Research Analysis Corporation report's emphasis on the Mekong Delta, especially

its transportation, communication, and commercial value to the South Vietnamese people. In contrast, however, Endacott suggested that inland waterways were obstacles for enemy forces, and only if “the insurgents [could] effectively control the waterways” would they be able to “use them to their own advantage.” He believed that a Viet Cong attempt to control the waterways “would force them to fight in the open where the superior firepower of the government forces could be brought to bear.”

The so-called Bucklew Report further inspired the establishment of an American naval presence in the Mekong Delta. In January 1964, CINCPAC Admiral Harry D. Felt dispatched Captain Phillip H. Bucklew and eight other officers to South Vietnam to study the issue. Known as the Vietnam Delta Infiltration Study Group, the officers interviewed naval advisors and examined the VNN efforts to counter enemy activity in the region.

The group's findings had a dramatic impact on the U.S. naval advisory role in South Vietnam, providing a document on which the U.S. Joint Chiefs of Staff could rely to deploy American riverine forces to the delta. The report concluded that the Viet Cong used South Vietnam's myriad waterways to infiltrate weapons, equipment, and men. The study further noted that “control of the Mekong and Bassac rivers and the related waterways . . . is mandatory for countering infiltration and Viet Cong movement from all directions.” It recommended that the RAGs have a single, dedicated ground force to launch amphibious raids on the coast and rivers. In addition, it suggested initiating border interdiction operations with combined naval and ground components and proposed fixed and mobile river-based checkpoints, barricades, and patrols. More specifically, the report called for “irregular river and canal patrols operating in conjunction with the mobile checkpoints to assist in keeping the Viet Cong infiltrators off balance and aid in disrupting established Viet Cong inland waterway infiltration routes.”

In 1965, following the Bucklew Report, MACV's Combined Intelligence Center, Vietnam produced the study "VC Tactical Use of Inland Waterways in South Vietnam." This document contended that "control of traffic on the inland waterways of the Mekong Delta is one of the key problems facing the Allied forces in South Vietnam." This statement was based on the conclusion, which reaffirmed the findings of the Bucklew Report, that the Viet Cong used the Mekong River to infiltrate manpower, foodstuffs, medical supplies, arms, and ammunition. It specified that because the waterways were vital to the enemy, their "lines of communication are probably most vulnerable in the Delta." In following years, many other relevant analyses poured forth from Defense Department agencies and contractors arguing in favor of a U.S. Navy riverine force.

The actual experience of naval forces in the maritime environment of South Vietnam, however, proved equally influential. In March 1965, MACV established the Coastal Surveillance Force designated Task Force 115 to interdict seaborne infiltration from North Vietnam along South Vietnam's 1,200 mile-coastline in Operation Market Time. Commander Task Force 115, initially reporting to Chief Naval Advisory Group and later to Commander Naval Forces, Vietnam, deployed U.S. forces to three interdiction areas: Navy patrol planes to an outer barrier far out in the South China Sea; U.S. Navy, U.S. Coast Guard, and Vietnam Navy oceangoing ships to a barrier beginning 12 miles offshore; and allied patrol craft and junks to an inner barrier just offshore. Market Time units operated in waters just east of the Demilitarized Zone (DMZ) at the 17th parallel all the way to Cambodia in the Gulf of Siam (Thailand). Task Force 115 units sought to locate, track, stop, and capture or destroy 100-ton North Vietnamese trawlers laden with war materials as well as junks and smaller vessels plying the coast.

On 10 May 1965, Rear Admiral Norvell G. Ward relieved Captain William H. Hardcastle Jr. as Chief Naval Advisory Group, Vietnam. Ward, a Naval Academy graduate, had received the Navy Cross for his leadership as a World War II submarine commander, and after the war commanded the first

Polaris-armed ballistic missile submarine squadron. During his 28 months in Vietnam, he earned praise for his efforts on two fronts: he strengthened that country's naval service and oversaw the standup of an American Army-Navy riverine assault force and a river patrol force.

### Game Warden

MACV leaders and Rear Admiral Ward concluded that the success of Market Time during 1965 had compelled the enemy to rely increasingly on the Ho Chi Minh Trail and the route through Cambodia to get their supplies to Viet Cong units in the delta. Therefore, on 18 December 1965, the U.S. Navy established the River Patrol Force designated Task Force 116 to conduct Operation Game Warden in the Mekong Delta in cooperation with the VNN's River Force.

On 26 March 1966, U.S. Navy, U.S. Marine, and South Vietnamese forces launched Operation Jackstay, the war's first major combined action in the upper delta's Rung Sat swamp. PBR units, motor



With a primed and ready M-60 machine gun close by, Captain Paul Gray, Commander River Patrol Force, takes part in a Game Warden patrol.



NHHC VIN Collection

A squad of Navy SEALs proceeds with caution down a jungle trail in the Mekong Delta. The professional skill of these highly trained and determined warriors often meant the difference between success and failure for U.S. forces engaged in river warfare.

launch minesweepers (MLMSs) and minesweeping boats (MSBs) based at Nha Be, SEALs, and helicopters deployed for the action. At the end of the 12-day operation, the allies had killed or captured 69 enemy troops; destroyed Viet Cong supply bases, training sites, and other logistical facilities; and at least for a time restricted enemy movement in the Rung Sat.

On 1 April 1966, the Navy established the billet of Commander Naval Forces, Vietnam (COMNAVFORV), under Ward, to oversee Task Forces 115 and 116 and enable the chief of the Naval Advisory Group, Captain Allan P. Slaff, to focus on helping improve the Vietnam Navy.

The River Patrol Force's mission was to patrol the Mekong and Bassac rivers and the lower Mekong's



NHHC K-31448

Sweat-soaked Marines slowly make their way, under a mercilessly hot sun, through the dense vegetation of the "Forest of Assassins." While most U.S. Marine activity in South Vietnam took place in the northern reaches of the country, early in the war Marine units carried out Operation Jackstay in the Rung Sat and advisors served there later.



NHHC K-31263

A Task Force 116 Sailor stands ready at his PBR's dual .50-caliber machine guns. Note the red-tipped tracer rounds placed between conventional rounds in the ammunition belt.

main tributaries—the My Tho, Ham Luong, and Co Chien rivers. The objective of Task Force 116 was to interdict Viet Cong taxation of commercial traffic on the rivers, hinder the enemy's use of waterways for transportation, and enhance the South Vietnamese government's control of the population and the country's resources. Task Force 116 worked to enforce a dusk to dawn curfew, but Vietnamese fishermen and farmers, dependent on the river for sustenance and transportation, did not always comply with the curfew. The Americans had to exercise restraint lest they kill such civilians moving about at night. The River Patrol Force also operated in the Rung Sat Special Zone, a lightly populated, but VC-dominated swampy quagmire south of Saigon, through which ran the capital's lifeline to the sea, the Long Tau shipping channel. The Game Warden forces eventually established control of the Long Tau and the Rung Sat's shallower but still important Soirap River.

As COMNAVFORV, Ward established river patrol bases at Nha Be, My Tho, Cat Lo, Vinh Long, Sa Dec, Tra Noc, Can Tho, Long Xuyen, and Binh Thuy (just upriver from Can Tho), and initially deployed tank landing ships (LSTs) to the mouths of the major rivers to serve as floating bases. Within weeks, however, he decided that a river-mouth location subjected the LSTs, and more important, the smaller boats that called them home, to heavy seas and high winds, which hampered their operations. He moved the LSTs inland.

The river patrol boat, initially designed for the civilian commercial market, became the principal fighting vessel of the River Patrol Force. A shallow draft allowed the PBR to reach relatively high speeds and maneuver especially well. Ward divided the PBRs into ten-boat river sections (later divisions) and positioned them at bases ashore and afloat.

The Helicopter Attack (Light) Squadron 3 (HAL-3) "Seawolves" provided the dedicated air support for Task Force 116, employing UH-1B Iroquois helicopters, commonly called Hueys, acquired from the Army. Two-helicopter detachments operated in close support of individual river sections. After several years of operation, COMNAVFORV concluded that he needed another aircraft type "that would bridge the gap between the helicopter gunship, which was accurate but slow, and jet aircraft support, which could deliver a large amount of ordnance in a short period but with questionable accuracy." Thus the Navy procured 14 OV-10A Bronco fixed-wing aircraft and commissioned Light Attack Squadron 4 to meet these mission requirements.

Despite the Navy's long history of river operations, in 1965 no codified doctrinal or tactical manuals on river patrol operations or riverine warfare existed. Based on operational experience and rules of engagement (ROE), the river patrol units developed their own operating procedures and tactics. In the early phases of Game Warden, the units established a standard 12-hour, two-boat, day-and-night patrol. Each PBR operated midstream and within radar range of the partner craft so both could respond quickly and simultaneously if attacked by the enemy.



NHHC VN Collection

Engineman 3rd Class Larry A. Thomas behind his PBR's 40mm grenade launcher.

The ROE for Task Force 116 authorized PBR units to “demand the identification and a declaration of intent and to stop, visit and search vessels flying the RVN flag or flying no flag . . . which give a manifestly false response to the demand for identification and declaration of intent.” Furthermore, the ROE gave permission to board and search vessels, detain suspicious individuals, and release those with proper identification. They also established guidelines for firing on enemy ground forces and watercraft attempting to evade a search. If U.S. Sailors repeatedly hailed a sampan or junk and received no response, the crew was instructed to fire warning shots to encourage a halt. If this action did not deter the crew, the PBR could stop the evading craft with direct fire. Should the occupants of a sampan or junk open fire on a Game Warden unit before or after hailing, the crew was authorized to return fire immediately. In all engagements with enemy



NHHC VN Collection

River patrol operations would have been especially costly if not impossible without the dedicated air support of this and other UH-1B “Hueys” of HAL-3, known as the Seawolves.

# The PBR

**BETWEEN 1966 AND 1967**, United Boatbuilders of Bellingham, Washington, constructed two versions of the river patrol boat, Mark I and Mark II, based on a design by the Hatteras Yacht Company. The PBR MK-I's 31-foot fiberglass hull was impervious to teredo worms and other marine borers that thrived in Vietnam rivers thanks to the region's high heat



NHHC K-56780

**River patrol boat Sailors stand at the ready alongside a sampan they are checking for contraband in the Mekong Delta, 1966. The men of Task Force 116 spent many hours in similar activity to ensure control of South Vietnam's main rivers.**

and humidity. Unlike other materials, when hit by enemy bullets and rocket propelled grenade rounds, fiberglass did not disperse the deadly shrapnel that killed or wounded crewmen of other type craft. The MK-I displaced 14,600 pounds and its draft was 2 feet 2 inches when operating at low speeds. Two Jacuzzi water-jet pumps located below the waterline and powered by two General Motors 220-horsepower diesel engines propelled and steered the MK-I. This machinery enabled the PBR MK-I to average just over 20-knot speeds. Especially maneuverable and responsive to the boat captain's handling at high speed, the boat could stop or turn completely around in its length. The PBR was equipped with a Raytheon Pathfinder surface search radar and two AN/VRC-46 radios and armed with a twin .50-caliber machine gun in a forward turret, a single .50-caliber aft, an M-60 machine gun, and a 40mm grenade launcher, the latter two weapons located port and starboard amidships. Armor plates guarded the coxswain's flat and the engines. A ballistic-nylon fragment-suppression canopy

craft, the Game Warden ROE specifically instructed Sailors to use "sound judgment in replying to fire around the vicinity of populated areas to ensure that unnecessary civilian casualties do not occur."

The rules for nighttime operations were different from the rules for daytime patrols because the former related to the South Vietnamese government's curfew in force from sunset to sunrise. River Patrol Force units could consider all vessels encountered during the curfew as hostile. Although instructions directed the Game Warden forces to illuminate, hail, then search and visit river craft operating at night, they also authorized PBR patrol

officers to radio their base or tactical operations center for permission to fire without preliminary action. The PBR Sailors could immediately return fire at night or during the day if they were fired upon from river banks, sampans, or junks.

Operation orders recommended random patrols to minimize the enemy's opportunity for ambush or evasion. They also stipulated that whenever two PBRs were involved in a daytime inspection, one unit should operate at a safe distance from the vessel, training its guns on both riverbanks, while the other unit conducted a search of the boat. Both units were warned not to drift toward shore lest they be ambushed.

covered the coxswain's flat as protection against fragments that often showered down when fire hit the radar dome.

The MK-II boasted the same armament as the MK-I but was somewhat larger in shape and length and presented a lower silhouette. Manufacturers made significant changes to the MK-II, adding aluminum gunwales to limit hull damage when sampans came alongside the PBR for inspection. Improved Jacuzzi jet pumps reduced fouling from weeds and other debris while upgraded engines reduced noise, a critical factor on patrol. The 32-foot MK-II's could reach speeds of 30 knots.

Commander River Patrol Force directed the combat operations of the PBRs as Commander Task Force 116 and managed their administration as Commander River Squadron 5 (redesignated River Patrol Flotilla 5 in September 1966). More than 250 PBRs plied the brown waters of South Vietnam as part of Game Warden and SEALORDS operations.

Four enlisted Sailors—boat captain, engineman, gunner's mate, and seaman—crewed each boat. They routinely carried M-16 rifles, M-79 grenade launchers, a 60mm mortar, shotguns, side arms, and a Starlight night-vision device. Navy lieutenants normally commanded river sections and on many occasions,

Instructions for nighttime operations cautioned the PBR crews to operate with one engine or no engine, keep radio chatter to a minimum, and avoid smoking cigarettes or using the boat's running lights. If a patrol unit discovered a native craft after curfew, one PBR remained in darkness but prepared to open fire while the other approached the vessel at high speed and turned on a spotlight. If the contact acted suspiciously or tried to flee, the PBR patrol officers were authorized to open fire.

One nighttime patrol on the Long Tau River in 1967 is instructive. A pair of PBRs spotted a sampan after curfew and illuminated the craft. On discovery,



**A patrol commander, left, communicates with other units as the PBR's helmsman maintains steady course and speed.**

NHHC VN Collection

two-boat patrols, but just as often chief petty officers and senior enlisted boat captains led operations. Veteran PBR crewmen became especially adept at repairing the fiberglass hull, fine-tuning the engine, and reducing onboard weight to achieve the highest speed—crucial to the PBR's defense in a firefight, along with its onboard weapons. In the hands of the energetic, resourceful, and courageous Sailors of the River Patrol Force, the PBR, in the words of historian and river war veteran Tom Cutler, "proved to be a fierce little combatant." The boats and the men who fought in them were truthfully characterized as Proud—Brave—Reliable. ↴

four men in the small craft opened fire on the patrol unit, which returned fire and killed the occupants, Viet Cong guerrillas. When the U.S. PBR crews examined the contents of the sampan, they discovered a large number of valuable documents, which they turned over to MACV intelligence. Several weeks later, a Viet Cong force sprung a nighttime ambush on a patrol unit at the confluence of a creek that emptied into the Long Tau. The enemy troops popped an illumination round and fired on the PBRs with automatic weapons and rocket propelled grenades. Impressed by the volume of fire from a concealed location, the PBRs withdrew and called



NHHC K-41720

Harkening back to earlier centuries, a Game Warden Sailor prepares to shoot a flaming arrow. The River Patrol Force used not only fire arrows but also flamethrowers and water cannon to destroy enemy positions on Mekong Delta riverbanks.

for assistance from a nearby patrol unit. The duo reentered the ambush zone, traded fire with the enemy, and neutralized the ambushers.

On occasion, the heroism of individuals went beyond the call of duty. On 31 October 1966, gunfire from a sampan greeted a two-boat patrol in the Mekong Delta near My Tho. Led by Boatswain's Mate 1st Class James E. Williams of River Section 531, the two boats, PBRs 105 and 107, opened fire causing the sampan to flee to an adjacent but smaller river. Williams' boats then took under fire another sampan that emerged from the same waterway. Williams ordered both boats to follow the retreating sampan and they soon found themselves in an enemy hornet's nest. As they entered the river, enemy troops in concealed positions on both banks and in two large junks opened a devastating fire. Right behind these junks were another eight boats loaded with enemy troops. Undeterred, Williams' PBR 105 and PBR 107 crashed at high speed right through the enemy concentration, smashing sampans and toppling soldiers into the water. Williams later observed

that the PBR "might be small but it was a man-of-war and I was in command."

Williams repositioned his craft away from the enemy concentration and called in air support. But when he spotted more enemy sampans and junks nearby, he decided not to wait for the aircraft. As before, the two PBRs raced through the enemy boats, taking a few hits from rocket-propelled grenade (RPG) rounds and automatic weapons, but dishing out destruction. With air support by then on hand, Williams ordered the patrol back to the previous ambush area. As Hueys from HAL-3 began the attack with M-60 machine guns and rocket launchers, Williams directed both PBRs to switch on their search lights to expose the enemy forces in the growing darkness. While the helicopters assaulted the rivercraft, the PBRs maneuvered close to the riverbank, and "despite a waning supply of ammunition the patrol successfully engaged the enemy ashore and completed the rout of the enemy force." The three-hour engagement destroyed scores of enemy boats and inflicted numerous casualties

on the hostile forces. In recognition of Williams' courage and leadership under fire, President Lyndon B. Johnson personally awarded the boatswain's mate the nation's highest award for bravery, the Medal of Honor.

The enemy also scored victories on the water. Calamity struck near Ben Tre southwest of Saigon just after midnight on 24 November 1967, only a few hours after *YRBM-16* (a non-self-propelled repair, berthing, and messing barge) hosted a Thanksgiving feast for the staff of Naval Support Activity, Saigon and Task Force 116. Mines placed by highly trained Viet Cong swimmer-sappers tore a huge hole in the barge's hull and ignited its diesel fuel tanks. The daring attack killed seven Sailors and wounded another 14 and put the barge out of commission for a year.

While the Coast Guard units in Vietnam focused primarily on securing the coastline against North Vietnamese infiltration, early in the war 82-foot cutters headed into the Mekong Delta to seek out the enemy. In December 1966, *Point Grace* (WPB-82323) succeeded in that quest, but not in the way intended, as she patrolled along the Bo De River deep in the heart of the Ca Mau Peninsula. The enemy's 75mm recoilless rifles emplaced on both banks of the river put several rounds into the cutter; only one of the three shells detonated and that one exploded in the crew's head without causing casualties. Captain Robert J. LaPorte, Commander Coast



Courtesy Thomas Barnett

Mines posed a particular problem for river operations. An enemy command-detonated mine put this PBR out of commission but spared the lives of the four-man crew. The boat was repaired and returned to duty on the delta's rivers and canals.



NHHC VN Collection

President Lyndon B. Johnson awards Boatswain's Mate 1st Class James E. Williams the Medal of Honor for his extraordinary leadership and bravery during a river battle in the Mekong Delta in October 1966.

Guard Squadron One, related in his diary: "We were lucky—very lucky!! If the rounds hadn't been duds or fallen short, we would have had our first Coast Guard prisoners of war and been down to 25 boats."

In line with counterinsurgency theory, the Game Warden units routinely worked with other American and Vietnamese military personnel to strengthen the rural people's allegiance to their government and to educate them about the enemy's agenda. Medical and dental teams visited villages to treat all manner of diseases, deformities, and other ailments; Seabees dug wells and freed canals of debris and booby traps; and PBR Sailors, in support of Project Handclasp, distributed soap, toothpaste, and other personal supplies rarely seen in some remote villages. The visitors also passed out informational materials that depicted the local VC guerrillas as traitors and dupes of the international Communist movement directed by Soviet and Chinese leaders.

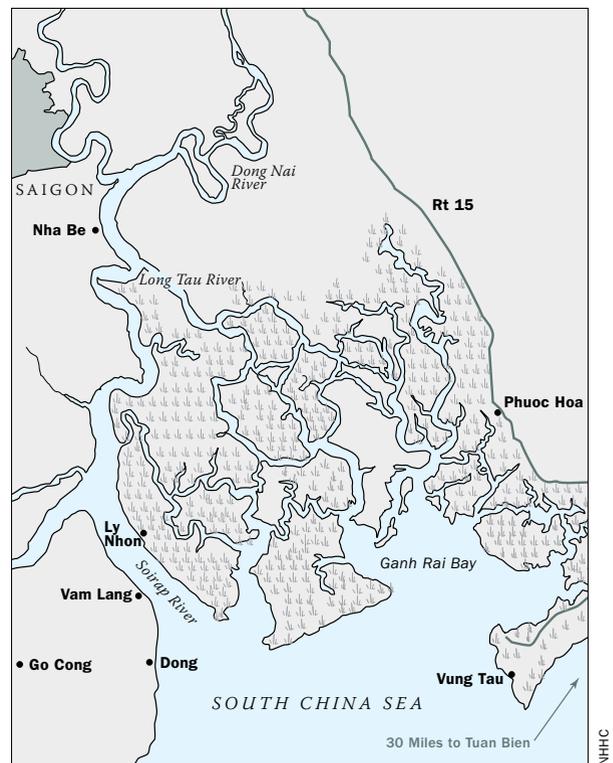
## Securing the Rung Sat

Throughout the war, the enemy aimed to cut South Vietnam's jugular vein, the Long Tau River that meandered 45 miles from the sea to Saigon. South Vietnam's capital was not only the largest city but one of the largest ports and the terminus for all the tanks, artillery, planes, fuel, ammunition, and food essential to allied military operations in the southern reaches of the country. The Long Tau flowed through the Rung Sat, an area of dense foliage and tidal mud flats. Early in the war, the Viet Cong owned the Rung Sat.

From the mid-1960s on, VC guerrillas operating from the Rung Sat mined or fired on merchant ships transiting the Long Tau or anchored at Nha Be south of Saigon. The enemy's campaign to isolate Saigon from seaborne supply challenged the Navy's mine warfare forces. Initially, a small force of lightly armed landing craft, personnel large (LCPL) operated in the Rung Sat, but the naval command shifted them to harbor defense duties. The Vietnam Navy also operated U.S.-designed and -built river patrol craft (RPC), which proved inadequate for river operations because of their low speed, limited armament, and noisy engines. Beginning in May 1966, a dozen 57-foot minesweeping boats of Mine Squadron 11, Detachment Alpha made Nha Be, a base at the confluence of the Long Tau and Soirap rivers, their home. Coast Guard Division 13, operating 82-foot WPBs from Cat Lo on the Vung Tau peninsula, also patrolled the lower reaches of the Soirap. *Point Partridge* (WPB-82305), one of the division's cutters, engaged in firefights with the enemy along the river every night during one week in May 1966.

During 1966 and early 1967, the most harrowing time for the minesweeping forces, the Navy detachment lost 13 men killed or missing in action and three minesweeping boats. In May 1966, within sight of Nha Be, Viet Cong forces sank merchant ship *SS Eastern Mariner*, although the attack killed no one. In August, the enemy triggered a command-detonated mine that blew a huge hole in *SS Baton Rouge Victory*, killed seven crewmembers, and compelled the master to put the crippled ship aground to avoid sinking and blocking the channel.

The *Baton Rouge Victory* attack resulted in the



The Rung Sat.

single largest loss of life suffered by the American merchant marine from enemy action during the war. That same month, attackers sank MLMS-156, a motor launch minesweeper of the Vietnam Navy's River Force, killing or wounding five Vietnamese sailors and wounding two American naval advisors. VC ambushers sank another MLMS in January 1967.

On 15 February 1967, ambushers hit MSB-49 with 75mm recoilless rifle and automatic weapons fire that wounded all six crewmembers and devastated the boat. Under heavy fire, the crews of a PBR and MSB-51, the latter commanded by Boatswain's Mate 1st Class John O. Hood, shepherded the damaged boat to shore to prevent its sinking, stripped it of its guns, and evacuated the wounded Sailors. Seaman Rodney H. Rickli of MSB-49 later died of his wounds. The Navy awarded Hood the Silver Star for his heroism in the action. Helicopters, fixed-wing aircraft, river patrol units, and South Vietnamese infantrymen finally drove off the Viet Cong. That same day, characterized by the mine warriors as the "Bad Day at Black Rock" after actor Spencer Tracey's 1955 movie,



NHHC VN Collection

A Sailor of Mine Squadron 11, Detachment Alpha prepares to deploy his minesweeping boat's (MSB's) gear that cuts the wires of enemy command-detonated mines.



NHHC VN Collection

An American merchant ship steams safely up the Long Tau River, cleared of mines by the MSB in the foreground and other allied minesweeping units.

the enemy sank MSB-45, killed two American Sailors, and wounded another 16. Even though this period marked the darkest time for the mine warriors, Mine Squadron 11, Detachment Alpha kept the shipping channels open to Saigon, a feat for which the unit was awarded a justly deserved Presidential Unit Citation.

Benefitting from hard-won experience and increasing resources, allied mine warfare forces began to turn the tide on the enemy's river interdiction effort during the latter part of 1967 and 1968. In June 1967, the allies developed a sweep plan that almost doubled the miles covered by the MSBs and MLMSs. The following month, the first of six U.S. landing craft motorized minesweepers (LCMMs) joined the force. The new craft sported steel hulls for better crew protection, twin screws for enhanced maneuverability, and improved sweep gear. As a result of tests conducted by the Navy's Research and Development Unit, Vietnam, remotely controlled minesweeping craft designed to reduce the risk to personnel soon entered service. Finding it increasingly hard to deploy mines in the river, the enemy resorted to ambushes with Claymore-type antipersonnel mines, rocket propelled grenades, and automatic weapons against the MSBs, the PBRs, and the base at Nha Be. On 2 January 1968, for instance,

VC guerrillas hit the base and nearby fuel tank farm with recoilless rifle fire, which damaged several storage tanks and sank MSB-22 at the pier.

In May 1968, the Navy reorganized its mine warfare forces in Vietnam. Mine Squadron 11, Detachment Alpha became Mine Division 112, with seven MSBs operating from Nha Be and six others divided among Cam Ranh Bay, Danang, and the Cua Viet River in the north of the country. In June, COMNAVFORV turned



NHHC Artifact Collection

Infiltration from North Vietnam enabled the Communists to replace the early homemade submachine gun, such as this one, with modern and deadly Soviet- and Chinese-made 75mm recoilless rifles and ammunition, RPG-7s, and Kalashnikov AK-47s.



NHHC Artifact Collection

75mm recoilless rifle round.



NHHC Artifact Collection

RPG-7 Launcher.

## Riverine Warfare Training

**PREPARATION FOR BATTLE** on the rivers and canals of Vietnam challenged the U.S. military's stateside training establishments. The U.S. armed forces had had a long history of fighting to seize control of inland waterways, but by 1965 most of that knowledge had atrophied. Little doctrine for riverine warfare existed. Much of the work to prepare the forces for war had to be done on a trial and error basis and experience gained only through actual operations.

Initially, the job of training Sailors and Coastguardsmen for duty in the inshore waters of South Vietnam fell to the Amphibious Training Command at the Naval Amphibious Base, Coronado and other naval facilities in California and Washington state. Many naval advisors and SEALs who served in South Vietnam during the early 1960s returned to the states as instructors and passed on their hard-earned insights. The training at Coronado included handling small-arms and crew-served weapons, radio

procedures, visual signaling, radio communication, and similar subjects. Most of the men remembered the week of Survival, Evasion, Resistance, and Escape training as so grueling that they felt the real thing could hardly be worse. As one Coastguardsman related, the SERE training involved "going for days with only weeds, clams, and an occasional snake to eat" as well as psychological abuse by men playing the role of prison camp guards. But the experience helped prepare the Sailors and Coastguardsmen for the rigors of service in the harsh environment of Vietnam.

While recognizing that his 9th Infantry Division brigade would be operating with naval units in the Mekong Delta as part of a joint force, Colonel (later Brigadier and then Major General) William B. Fulton initially did not stress Army-Navy interaction since "too little was known about riverine operations." His training program emphasized basic ground

over six LCMMs to the Vietnam Navy, which took over sole responsibility for mine clearance of the river between Nha Be and Saigon. Also operating from Nha Be, in shallow-water operations from September 1968 on, were six medium minesweepers (MSMs, formerly LCMMs) and four drone minesweepers (MSDs) of the newly created Mine Division 113. From the safety of river minesweepers (MSRs, formerly assault support patrol boats [ASPBs]), crews remotely operated the drone craft. The employment of these specialized craft increased the effectiveness and limited the casualties of mine warfare forces during this period of heavy combat on the rivers.

### **Mobile Riverine Force**

In 1966, General William C. Westmoreland, Commander U.S. Military Assistance Command, Vietnam, and Rear Admiral Ward, Commander Naval Forces, Vietnam, concluded that despite the Navy's success interdicting the enemy's infiltration on the main rivers, the naval force in the

delta needed an assault infantry element. What Westmoreland and Ward wanted was an amphibious arm in the delta to locate, encircle, and destroy Communist units in battle. Traditionally Marines would have constituted the ground component in such an operation, but the Marines were already fully committed to the fight in northern South Vietnam.

The U.S. command thus created an Army-Navy formation, the Mobile Riverine Force. The naval component, the Riverine Assault Force (Task Force 117) was paired with the 2nd Brigade and later the 3rd Brigade of the Army's 9th Infantry Division. The commanding general of the II Field Force, Vietnam, Lieutenant General Bruce Palmer Jr., exercised operational control of the MRF's Army element led by Major General William B. Fulton. COMNAVFORV Ward retained operational control of the MRF's Navy element headed by Captain Wade C. Wells. In accordance with long-established amphibious doctrine, Wells controlled the

warfare and infantry skills. However, he dispatched to Coronado Army officers slated to command or staff the major ground units of what would eventually be named the Mobile Riverine Force (MRF), and the instructors brought the soldiers up to speed on naval operations and techniques during a ten-day course.

In March 1966, to facilitate training in an environment that was close to that found in Vietnam, the Navy shifted the program from Coronado to Mare Island in the Sacramento River Delta of central California, and on 30 January 1967 established the Naval Inshore Operations Training Center (NIOTC). The 11 weeks of instruction there focused on two separate aspects of riverine warfare: river patrol and river assault. Both segments included instruction in counterinsurgency, Viet Cong doctrine, small-boat operations, weapons handling, assault tactics, and SERE training, but Sailors destined for the Army-Navy MRF also received training in joint warfare and Army

ground operations. To further prepare the men for joint operations, Marine and Air Force officers complemented the NIOTC staff. The 9th Division units practiced their special skills at Fort Riley, Kansas.

As intended by the commanders, training in the operational environment became the first order of business when lead elements of the Army and Navy forces of the MRF arrived in South Vietnam in January 1967. The 9th Division units staged from their base at Bear Cat southeast of Saigon while the Navy contingent operated from *Whitfield County* (LST-1169) anchored in the roadstead at Vung Tau. The intended training was cut short, however, when Viet Cong forces attacked a freighter on the nearby Long Tau River. For the next three years, the MRF Soldiers and Sailors would receive additional training in the hard school of combat on the rivers and canals of Vietnam. ↓

Army-Navy force while it was underway and Fulton took charge when the troops operated ashore. Although this command relationship was less than perfect, cooperation and accommodation generally characterized the joint operation.

As Major General Fulton put it, “there was to be no single commander of the Mobile Riverine Force.” In theory, the Navy exercised tactical control of its forces and the Army its forces, but the theory was not the practice. Captain Wells, the first commander of Task Force 117 (dual-hatted as Commander River Assault Flotilla 1), recognized that since the Army had the preponderance of forces in the MRF, and higher ranking officers to command them, it was appropriate that the Army be the lead service. Wells deferred to Fulton; however, both men proved to be compatible leaders and cooperated well in their joint operation, as did their successors.

The Navy’s armada divided into Mobile Riverine Group Alpha comprising River Assault Squadron (RAS) 9 and RAS 11, and later Mobile Riverine Group Bravo (RAS 13 and RAS 15). The 400-man river assault squadrons each contained two river assault divisions (RADs).

American military leaders designed the joint force to conduct operations in the vast Mekong Delta from bases afloat and ashore. The base at



NHHC VN Collection

General William C. Westmoreland, Commander U.S. Military Assistance Command, Vietnam, arrives on board self-propelled barracks ships *Benewah* (APB-35) to discuss Mobile Riverine Force operations with subordinate Army and Navy commanders.

Dong Tam (the MACV staff selected the name because it meant “united hearts and minds” in Vietnamese) was created from dredged fill west of My Tho. It served as the MRF’s home ashore and site of the infantry division’s headquarters. To house and support the force while afloat, the Navy created the mobile riverine base comprising various logistic ships.

In a typical operation, the MRF and the mobile riverine base would move swiftly to a site in the delta believed by allied intelligence to be the location of a battalion-size or larger enemy force. As the MRF approached the target area, ASPBs would move ahead to sweep any mines and Army artillery batteries, mounted on barges positioned along nearby riverbanks, would pummel the landing site. The ASPBs then deployed close to the riverbank opposite the landing site to protect the MRF’s rear. When the main boat formation reached about 500 meters from the landing site, the artillery would cease firing, and the weapons on board the river assault units would open up. The latter continued their gunfire support until the armored troop carriers (ATCs) had disembarked their troops and backed away from the shore. The naval units then moved to cut off enemy attempts at flight or to disembark troops at other locations. Once ashore, Army troops advanced to contact with the enemy and often linked up with other U.S. and South Vietnamese soldiers deployed on solid ground by helicopter or armored personnel carriers. If all went as planned, the enemy unit would be surrounded and destroyed.

A major MRF engagement took place in June 1967 in Long An Province southwest of Saigon. Intelligence revealed that 300 to 400 Viet Cong troops were operating near the hamlet of Ap Bac. On the morning of the 19th, River Assault Division 91 landed a battalion of Army troops on the banks west of the hamlet while River Assault Division 92 deployed another 2nd Brigade battalion to the north of it. A South Vietnamese infantry battalion served as the “blocking force” to the south. The naval element then took up station to the east on the Rach Nui River. When the advancing soldiers made contact with the enemy force, the monitors



NHHC VN Collection

Dong Tam, the shore base of the Army-Navy MRF, created from dredged fill west of the city of My Tho.

and other naval units moved to within 25 and 30 yards of the hostile riverbank and blasted away with all their onboard weapons. Navy, Army, and Air Force helicopters and fixed-wing aircraft provided close air support that added to the enemy's woes. Despite receiving intense automatic weapons, RPG, and small-arms fire that killed 50 allied soldiers and wounded 15 sailors, the joint force killed 250 VC guerrillas and destroyed the combat effectiveness of their unit.

An action in December 1967 demonstrated how the MRF was able to exploit its inherent mobility and flexibility to the fullest. In the early morning hours of the 4th, the Viet Cong 502 Local Force Battalion ambushed River Assault Division 112, with the 5th Battalion of the Vietnam Marine Corps embarked, en route to a planned landing northeast of Sa Dec. RAD 112 fought its way through the ambush and eventually disembarked the Marines. The following naval contingent, RAD 111, landed its

troops, the 3rd Battalion, 47th Infantry Regiment, on the enemy's flank. Throughout the day and into the night, the naval force pumped fire into the enemy's ranks as the troops ashore converged on the guerrillas. At the end of the operation, on the 5th, the combined naval and ground forces had killed 266 Viet Cong, detained another 108 suspects, and captured 321 small arms and 5,000 rounds of ammunition.

During the annual Tet religious holiday at the end of January 1968, the North Vietnamese Army and its Viet Cong allies launched large-scale attacks on South Vietnam's cities and towns. Their objective was to spark a nationwide uprising, defeat the allied war effort, and destroy the government of South Vietnam. The entire Mekong Delta was aflame as Communist forces attacked My Tho, Chau Doc, Tra Vinh, and Can Tho. The PBRs and HAL-3 helicopters of Task Force 116 and VNN units raced to the defense of these towns.

# Battle Fleet of the Mekong Delta

**WHEN U.S. MILITARY LEADERS SURVEYED MAPS** of the Mekong Delta at the outset of the Vietnam War, one thing was clear. The region abounded with hundreds of rivers large and small, canals, and mangrove swamps; thousands of miles of inland waterway—and few roads. Those waterways served as virtual castle moats protecting Communist guerrillas from the forces of the Republic of Vietnam and its U.S. ally. To come to grips with this enemy, the allies would need a powerful combat fleet to transport, deploy, provide gunfire support, and logistically sustain a sizable ground force, much as the U.S. Navy had done on the Mississippi River in 1862, the Normandy coast in 1944, and the island of Okinawa in 1945.

The Riverine Assault Force (Task Force 117), the Navy component of the joint Army-Navy Mobile Riverine Force (MRF), had many similarities to the oceangoing fleets of the past. Serving as the fleet flagship was the command and communications boat (CCB). This 70-ton, 60-foot-long craft was propelled by diesel engines and festooned with antennas connected to its onboard VRC-46 and PRC-25 radios. While gunfire support was not the primary mission of the CCB, it mounted a 40mm turret and two

.50-caliber machine guns, a 20mm gun, and two M-60 machine guns.

Harkening back to the Civil War, the battleships of this inland fleet were called monitors. Each 70-ton monitor carried an array of weapons, including 40mm and 20mm cannons, an 81mm mortar, two .50-caliber machine guns, and a pair of M-60 machine guns. The monitor used its guns to bombard a chosen landing site, defend the flanks of troop units ashore, provide on-call gunfire support, and cover the infantry's reembarkation.

The destroyers and minesweepers of the brown water flotilla were the armored support patrol boats (ASPBs). Usually called an "alpha boat," the ASPB was the only river craft specifically designed from the keel up for operations in South Vietnam. Adapted from the French-built STCAN/FOM, the boat was 50 feet long, displaced 28 tons, and had a draft of 3 feet 9 inches. Two diesel engines powering two propellers enabled the ASPB to move all around the other riverine assault craft at 15-knot speeds. In its primary missions, this vessel scouted ahead, kept watch on likely Viet Cong ambush sites, and cleared mines with its onboard minesweeping gear. The ASPB





NHHC VN Collection

**An armored support patrol boat (ASPB) speeds ahead of the MRF to scout for enemy command-detonated mines or riverbank ambush units routinely armed with recoilless rifles, rocket propelled grenades, mortars, and machine guns.**

operated 20mm cannon, a .50-caliber machine gun, several 40mm grenade launchers, and an 81mm mortar. Insufficient armor protection and a tendency to swamp and sink in rough water initially caused high casualties in the ASPB force, but structural improvements alleviated those problems to a great extent.

The amphibious transport vessels of the Riverine Assault Force were the armored troop carriers (ATCs),

each of which embarked a platoon of infantrymen from the U.S. 9th Infantry Division. Called a “tango boat,” the ATC was 56 feet long, had a draft of 3.5 feet, and displaced 66 tons. The boat also boasted 20mm cannon and a variety of machine guns. Reconfigured ATCs also served as tankers and medical aid stations with landing pads for Army “Dust Off” medical evacuation helicopters. ATCs were



NHHC VN Collection

**Self-propelled barracks ship *Colleton* (APB-36) hosted the Sailors and armored troop carriers of River Assault Division 111 and a battalion of the 9th Infantry Division.**



NHHC VN Collection

**An Army “Dust Off” medical evacuation helicopter takes on board a wounded soldier from the landing pad atop an MRF vessel.**



NHHC VN Collection

**A water cannon-equipped armored troop carrier (ATC) of River Assault Division 111 washes away a Viet Cong bunker with its powerful water cannon.**



NHHC VN Collection

**A “Zippo” monitor uses flame to destroy riverbank foliage that might conceal enemy ambushers.**

modified to accomplish another task, the destruction of enemy riverbank bunkers that had proven impervious to the MRF’s gunfire. ATCs mounted with flamethrowers, called “Zippo boats,” and high-powered water cannon, called “douche boats,” admirably filled the bill.

The Navy reconfigured the LCM-6 mechanized landing craft to create the CCBs, monitors, and ATCs. Naval shipyards in the United States and the Philippines enclosed the old hulls in plate and bar armor, the latter specifically designed to counter recoilless rifle and rocket propelled grenade rounds.

When these rounds hit the outer bar armor, they frequently detonated without penetrating the inner plate armor. More powerful Soviet-made antitank weapons, such as the B-40 and B-50 rockets, however, began to cause the MRF’s combat craft problems in 1969.

Supporting the Army-Navy MRF afloat was the mobile riverine base (operationally Task Force 117.3 and administratively River Support Squadron 7) that consisted of two self-propelled barracks ships (APBs); two LSTs; a landing craft repair ship (ARL); a non-self-propelled barracks craft (APL); a repair, berthing, and messing barge (YRBM); two large harbor tugs

(YTBs); and a net-laying ship (AN). The larger logistic ships were armed for self-protection with 3-inch, .50-caliber, quadruple 40mm, .50-caliber, and .30-caliber guns. The 9th Division soldiers found the APLs and YRBMs godsends. Between battles ashore, the Navy vessels served as the soldiers’ homes, relatively safe from enemy attack and complete with hot chow and showers. The Navy ships also allowed the Army “grunts” to recover from “immersion foot,” an affliction resulting from days of slogging through the watery Mekong Delta. ⚓



NHHC VN Collection

**MRF Sailors communicate behind the protection provided by the monitor’s plate armor, sandbags, and bar armor.**



NHHC VN Collection

Soldiers and Sailors of the MRF stand at attention on board *Mercer* (APB-39) during an awards ceremony in July 1969.

One of the fiercest fights occurred at Ben Tre, home to almost 75,000 people. Before dawn on 31 January 1968, 800 VC troops from the 518th Main Force and 516th Local Force battalions stormed the city and within 16 hours had compressed surviving South Vietnamese ground units and their American advisors into a four-block area around the MACV compound. Allied naval forces immediately responded to the attack. PBRs from River Sections 534 and 532, *Harnett County* (LST-821), South Vietnamese Coastal Force junks, and River Force LCVPs poured heavy fire from their 40mm, 60mm, and .50-caliber machine guns, mortars, and light antitank weapons into the enemy positions ashore. *Harnett County* and an LCM supplied the naval units and the MACV compound with ammunition and food.

In Ben Tre, as throughout South Vietnam during the Tet Offensive, Communist forces chose the battlefield by infiltrating heavily populated areas and setting up their defenses among civilians unable to flee. With little regard for the lives of these people—their own countrymen—the Viet Cong

followed an approach that would in later decades be called employing “human shields.” Unless the South Vietnamese and U.S. governments were prepared to surrender these cities to the enemy, which was tantamount to accepting defeat in the war, they had no alternative but to retake them.

Accordingly, on 1 and 2 February, Army helicopters deployed two battalions of the 9th Infantry Division’s 3d Brigade to Ben Tre. The units fought house to house, with 16 U.S. troops killed in action, against dogged enemy resistance. The advance of the 9th Infantry Division’s battalions soon bogged down. American supporting arms then tipped the balance in favor of the allies. Air Force AC-47 “Spooky” gunships and other fixed-wing aircraft, the Seawolves’ attack helicopters, and Army artillery drove enemy soldiers from the shelter of the city’s buildings and killed scores of them in surrounding rice paddies and fields. By 5 February, allied forces had cleared Ben Tre of the enemy.

The fighting and destruction caused by both sides killed more than 500 civilians, leveled 5,000 structures, and made 30,000 people refugees. An



NHHC VN Collection

With hardly a sideways glance, a Vietnamese woman rows her sampan past a unit of the MRF whose Sailors go about their daily business during a lull in combat.

Army officer's observation that "it became necessary to destroy the town to save it," as reported by Australian journalist Peter Arnett, became a rallying cry for the antiwar movement in the United States. Nonetheless, many of Ben Tre's refugee citizens returned to rebuild their city in following

months, and it remained under the control of the Republic of Vietnam until the end of the war.

Similar hard fighting occurred at Vinh Long, site of a combined U.S.–South Vietnamese naval base, an airfield with a 3,000-foot runway, and installations for American advisors, military police, combat engineers, and Sailors of a Naval Support Activity, Saigon, detachment. South Vietnamese defenders included River Assault Groups 23 and 31, the 2d Armored Cavalry Regiment, and the 43d Ranger Battalion.

Viet Cong forces overran much of the city during 31 January. When the PBRs of River Section 535 temporarily deployed to the less-threatened *Garrett County* (LST-786), positioned at the confluence of the Co Chien and Tien Giang rivers, the South Vietnamese defenders took up the fight. Supported by the gunfire of RAG 23 and RAG 31 monitors and LSSLs, 40 VNN sailors bravely fought off repeated enemy attempts to storm the naval base. And in contrast to the Viet Cong's utter



NHHC VN Collection

A squad of 9th Infantry Division soldiers disembarks from a riverine force ATC and prepares to move out through the thick vegetation that lined most of South Vietnam's waterways.

disregard for the lives of the civilians in Vinh Long, the VNN unit transported 2,500 residents to the relative safety of an island in the middle of the Co Chien.

A Seawolves' detachment at the airfield helped a force of ARVN (Army of the Republic of Vietnam) armored personnel carriers and tanks and a company of 9th Infantry Division soldiers successfully hold the airfield. Meanwhile, ARVN troops battled hard to retake Vinh Long in close-quarters fighting; they were joined on 2 February by River Section 535 PBRs. During a lull in the fighting, Navy and Army helicopter crewmembers evacuated 12 nuns and 130 children from their threatened orphanage.

Exploiting its inherent mobility, the Mobile Riverine Force that same day coordinated with ARVN forces and established a cordon around the enemy-held sections of the city. Sensing defeat, sizable enemy units slipped through the ring, but many Viet Cong fighters did not escape to fight another day. MRF infantry battalions and River Assault Divisions 92 and 111 caught up with them southwest of Vinh Long between 4 and 6 February and killed or detained 259 combatants.

With its heavy combat power and mobility, the MRF proved to be the allies' heavy-hitter during the Tet battles. In February alone the MRF evicted the enemy from My Tho, Ben Tre, and Vinh Long and then reduced the enemy presence around Can Tho. These battles resulted in the death of 544 Communist troops. Captain Robert S. Salzer, Wells' successor as the Task Force 117 commander, observed that "it was sort of like cavalry coming to the rescue of the fort besieged by Indians, or rather with the Indians already in."

Following these initial Tet battles, Rear Admiral Kenneth L. Veth, who followed Ward as COMNAVFORV, emphasized to his command that it was time to strike: "Now is the time to resort again to the basic tactic of concentrate and clobber. . . . Consider it preferable to eliminate one enemy unit than to take small attrition from several. . . . The enemy is moving about. Sometimes lost, and very vulnerable to ambush. Recommend all units move to the offensive wherever practicable and where the



NHHC VN Collection

An armored troop carrier, the most ubiquitous combatant of the MRF, leads a column along a narrow, vegetation-choked river. Each ATC normally embarked a 43-man infantry platoon from the 9th Infantry Division's 2d Brigade.

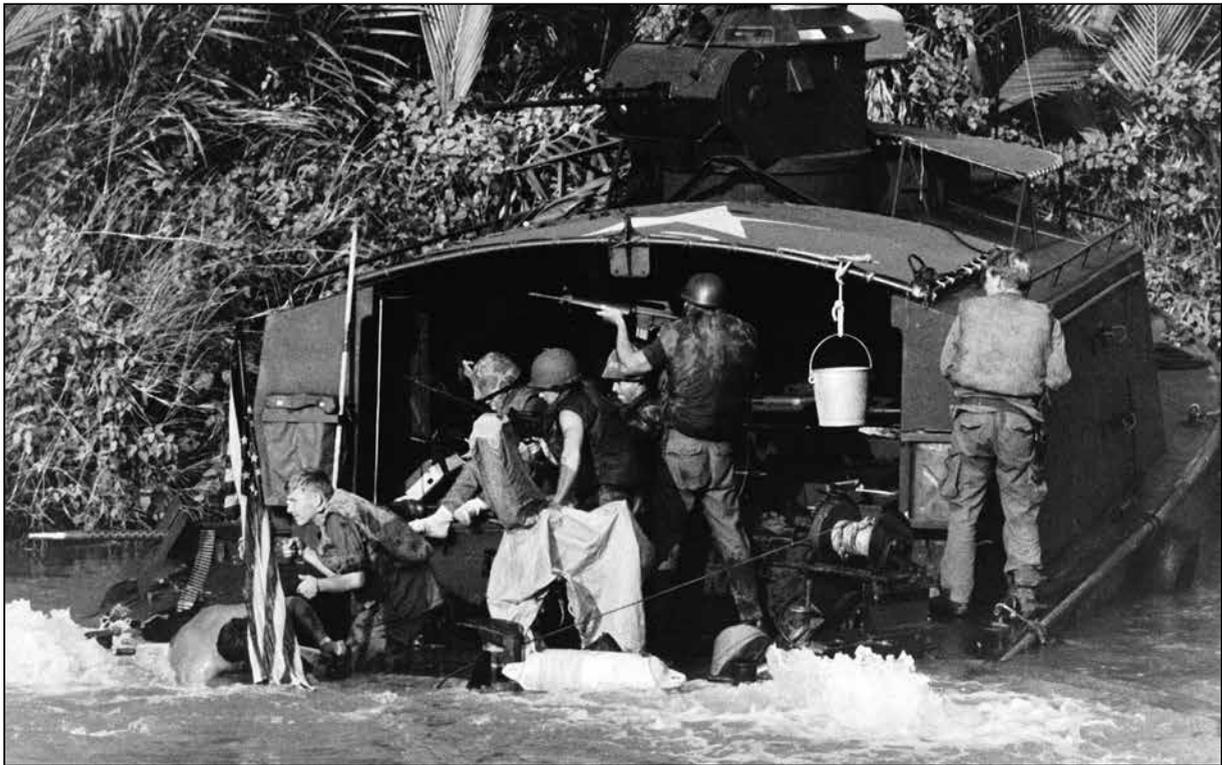
means are not available scheme, urge and cajole others to do the same. This is a time when ingenuity can pay off; Good Luck."

As the "fire brigade of the delta," the MRF traveled close to 1,000 kilometers fighting in the central Mekong Delta provinces of Dinh Tuong, Vinh Long, and Phong Dinh. The Viet Cong 514th Main Force Battalion was rendered combat ineffective after it tangled with the Army-Navy force near Cai Lai, and the MRF killed 687 Communist soldiers while relieving enemy pressure on Saigon. In August, the MRF deployed to the U Minh Forest, an area of dense mangrove swamps and a longtime Communist sanctuary on the delta's west coast. The fighting was fierce and casualties high, but the joint force established a presence there that would later be exploited by the Navy.

The MRF was clearly one of the U.S. military's most effective forces during the Tet Offensive of 1968. General Westmoreland credited the joint Army-Navy command with having "saved the Delta," and the nation's Commander in Chief recognized its superb performance with a Presidential Unit Citation.

### **Task Force Clearwater**

An increase in North Vietnamese Army attacks during 1967 against allied positions in I Corps, just south of the Demilitarized Zone in northern South Vietnam, prompted Lieutenant General Lewis W. Walt, Commanding General III Marine Amphibious



NHHC VN Collection

In this dramatic image, Riverine Assault Force (Task Force 117) Sailors trade fire with Viet Cong ambushers after the Americans grounded their damaged ASPB to prevent its sinking.



NHHC VN Collection

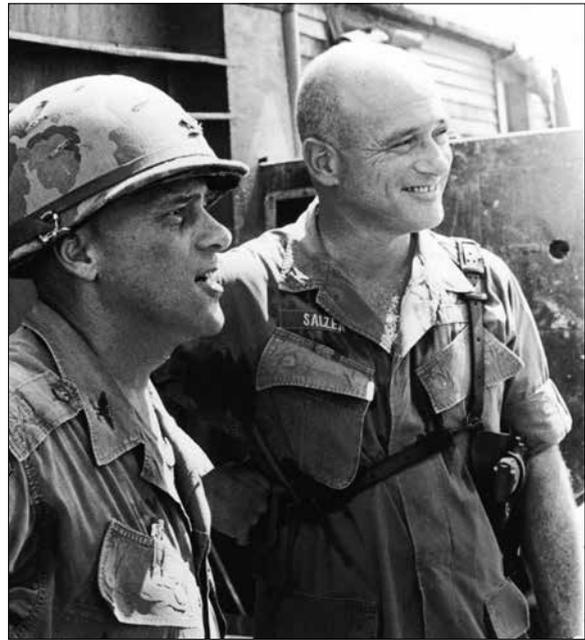
A 9th Infantry Division soldier armed with an M-79 grenade launcher struggles to move forward in knee-deep mud. After days of prolonged contact with the mud and water of the Mekong Delta environment, U.S. troops routinely developed what was called “immersion foot,” another name for the “trench foot” of earlier wars.

Force, to call for additional Navy support. Enemy ambushes and mining killed and wounded Sailors and endangered the support craft moving between the huge Naval Support Activity, Danang and allied forward positions. Impressed with the success of River Patrol Force operations in the delta, Walt asked for similar support on the inland waterways of Quang Tri and Thua Thien provinces in the region near the 17th parallel. In response, in September 1967, Veth deployed ten PBRs of River Section 521 on board *Hunterdon County* (LST-838) to the I Corps Tactical Zone. Heavy seas in the region severely hampered PBR operations from the LST, so at the end of the month *Hunterdon County* returned to the Mekong Delta. In December, COMNAVFORV emplaced Mobile Base I, a series of connected Ammi pontoon barges that provided berthing, messing, supply, and repair services, to Tan My east of Hue.

In early January 1968, the PBRs of River Section 521 began patrolling the Perfume River between the sea and the old imperial city of Hue. They also worked to guard the water approaches to Dong

Ha, a forward support base and airstrip on the Cua Viet River just south of North Vietnam. This latter operation became especially important as enemy forces converged on and surrounded the Marine combat base at Khe Sanh, only 20 miles west of Dong Ha.

At the outset of the Tet Offensive, North Vietnamese troops seized Hue and threatened the allies' hold on I Corps. In response, General Westmoreland sent 60,000 U.S. Army troops to the region. As the Marine Corps' official history of the Vietnam War observed, "the Army and Marine forces in northern I Corps were entirely dependent upon keeping open vital waterways [the Perfume and Cua Viet rivers]." In February, Lieutenant General Creighton W. Abrams, Westmoreland's deputy and the officer in charge of operations in the north, called for more Navy resources. He directed COMNAVFORV to assign a senior naval officer



NHHC VN Collection

Combat leaders of the Mobile Riverine Force, Army Colonel Bert A. David and Navy Captain Robert S. Salzer.



NHHC VN Collection

*Harnett County* (LST-821). This and other tank landing ships, initially positioned at river mouths and then moved upriver, served as afloat bases for the PBRs and Sailors of the River Patrol Force.



NHHC VN Collection

A monitor, the “battleship” of the MRF, deluges an enemy position on the Rach Nui River with fire from its guns in spring 1967.

who would lead a task force to secure these critical lines of communication. The officer chosen would coordinate river security operations with relevant Army, Marine, and Navy commands. Shortly thereafter, Veth named Captain Gerald W. Smith to head Task Force Clearwater. The severity of enemy artillery, mining, and riverbank ambush attacks on the Cua Viet, however, demanded a more heavily armed and armored naval force than another PBR section. The MRF’s River Assault Division 112, with one command and control boat, three monitors, and ten armored troop carriers, was transported to the north in March to begin operations on the bitterly contested rivers of I Corps.

The battle to recapture Hue proved to be one of the toughest fights of the war. Securing the old imperial citadel in Hue was the key to victory. In February, the North Vietnamese mounted a determined assault to cut the riverine lifeline. Enemy fire struck 34 logistic craft of Naval Support Activity, Danang and River Section 521 PBRs, killing five American servicemen and wounding another 37.

On one occasion during the battle for Hue, two Navy landing craft utility and a Swift boat towing

three junks, under enemy fire, ferried a Marine infantry company to the base of the citadel. River Section 521 earned a Presidential Unit Citation for its actions keeping the Perfume River open to logistic traffic, enabling LCUs to deliver over 400 tons of ammunition, food, and other supplies to the Marines. After weeks of fighting, and with the addition of U.S. naval gunfire and air support, the U.S. and South Vietnamese marines finally stormed and secured Hue. Fighting continued on the Perfume River in the spring, but by 1 June naval forces, with the support of Army troops that cleared the river banks, had established firm control of the waterway.

Combat on the Cua Viet lasted longer. At the end of February, recognizing that the situation on the Cua Viet was critical, Captain Smith moved his headquarters from Mobile Base I to Cua Viet, the logistic support base at the river’s mouth. Army and Marine officers served on the Task Force Clearwater staff to facilitate the commander’s call for air, artillery, and other combat support.

Task Force Clearwater fought hard to keep the Cua Viet open from the sea to Dong Ha eight miles to the west. In February, enemy forces killed seven

# High Drama in the Delta

**NAVAL RIVER FORCES SAVED THE DAY** at many Mekong Delta sites overrun by the Viet Cong in the early hours of 31 January 1968, the start of the enemy's nationwide Tet Offensive. This case was especially true at Chau Doc, a provincial capital with a population of 25,000 on the Bassac River less than one mile from the Mekong Delta border with Cambodia. Recovering quickly from the VC's swift nighttime occupation of Chau Doc, a pair of River Section 535 river patrol boats (PBRs) moved out into the waterway and made repeated firing runs on enemy positions while awaiting reinforcements. That help arrived several hours later when two more of the unit's boats and five PBRs from River Section 513, a detachment of SEALs, and Army Special Forces Staff Sergeant Drew F. Dix returned from an operation and joined the fray. After deploying the SEALs ashore under fire, the combined PBR force kept up a furious combat tempo and for the next two days and nights hammered VC forces in the city, brought in ammunition supplies, and evacuated American civilians to the safety of a landing craft in the river. Dix later observed that the PBRs "laid down an effective screen of steel" and that "I have to admit, I felt proud to be a part of that team."

The fighting ashore was just as intense. With little hesitation, the SEAL detachment led by Staff Sergeant Dix moved into action. Riding in two jeeps, Dix and his men blasted their way through the defenders to reach Margaret "Maggie" Frankot, a nurse with the U.S. Agency for International Development, trapped by the fighting in her house near the local hospital. As the party drew close to the house, they spied her International Scout jeep riddled with bullet holes, its tires flattened and windows shot out. The Americans traded heavy fire with Viet Cong troops positioned in surrounding buildings and in the house itself. When Dix called out to Maggie, he heard a faint female voice coming from one of the rooms, "I'm in here and the VC are in here [the house] too." In fact, when she first opened the door to her locked room, two enemy soldiers ran past but surprisingly kept on running. The 24-year-old nurse, who remained calm throughout the ordeal, then made her way to the house's locked iron gate and the waiting rescue party. With enemy rounds smacking the front of the building, she rummaged through a pile of trash and found the

key, but the gate was bent so badly it wouldn't open. Dix and the SEALs had to pull her through an open space in the damaged gate. Maggie injured her knee in the process, so the men carried her to one of the jeeps, covered her with their own flak jackets, and raced through a hail of enemy fire to reach safety. Miraculously, none of the party was killed or injured running this gauntlet.

For Staff Sergeant Dix this daring mission proved to be the first of many such operations he led with SEALs, CIA personnel, and Cambodian, Chinese Nung, and Vietnamese fighters who freed the city of enemy forces after 56 hours of hard combat. President Lyndon B. Johnson awarded the intrepid Soldier the Medal of Honor for his extraordinary leadership and courage under fire.

The story ended well for Maggie too. With little hesitation, after her rescue the dedicated nurse returned to duty tending the military men and civilians wounded and injured during the heavy Tet fighting. Little more than a year later, on 4 May 1969, Maggie emerged from the Catholic Church of Chau Doc the wife of Lieutenant (j.g.) William H. "Buddy" O'Brien, a PBR officer of the River Patrol Force. ↓



**Nurse Margaret "Maggie" Frankot and Lieutenant (j.g.) William "Buddy" O'Brien on their wedding day in Chau Doc, liberated from the Viet Cong during the Tet Offensive of 1968.**

Courtesy Thomas Barnett

Sailors and wounded another 42 during 27 separate attacks on riverborne traffic. Enemy artillery located in or just north of the DMZ pummeled the naval support facilities at Cua Viet and Dong Ha, destroying ammo and fuel dumps, caving in bunkers, and inflicting casualties on Sailors and Marines. For instance, that spring, North Vietnamese 122mm rocket fire destroyed 40,000 gallons of fuel at Cua Viet, and the following month artillery fire ignited a massive explosion at Dong Ha, obliterating 150 tons of ammunition.

Powerful North Vietnamese ambushes and mining attacks, many carried out by the 126th Naval Sapper Regiment, also killed and wounded American and South Vietnamese sailors and sank or heavily damaged logistic craft and their escorts on the Cua Viet. Enemy mines and gunfire destroyed harbor utility craft *YFU-62* and an LCM-8 and heavily damaged Army dredge *Hyde, Coconino County* (LST-603), and *YFU-59*. In one attack, an estimated 900-pound mine flipped over an armored



*Hunterdon County* (LST-838), which served as a mother ship for some of the fast patrol craft (PCFs) and PBRs operating in the northern provinces of South Vietnam in Task Force Clearwater.



NHHC K-40943

A river patrol boat operates at high speed in the waters of northern South Vietnam during fall 1967.

troop carrier of River Assault Division 112, destroying the craft and killing seven Sailors.

The enemy employed ingenious mining tactics. As related in one account, “Floating objects, regardless of their innocent appearance, had to be treated with the utmost caution. C-Ration boxes, tree limbs, cans, drums, plastic spheres and fish floats, a bright blue swim fin, and other flotsam and jetsam of no particular distinction—all might conceal or buoy a drifting mine. Recovered devices included some that were manufactured in part from scrap Styrofoam, cloth, string, wicker baskets, and inner tubes. The explosive charges these contained ranged from small fragmentation grenades to 750-pound bombs. Moored mines were sometimes anchored by mud-filled plastic bags on the river bottom.”

Highly trained and motivated enemy swimmer-sappers were another threat. On 21 February 1969, they sank an LCM-6 and damaged a pair of LCM-8s on the Cua Viet. A Communist attacker killed in the operation was found equipped with a Soviet-made underwater breathing apparatus and a Chinese-made head mask. Because of its proximity to North Vietnam, the Cua Viet became the most heavily mined river in South Vietnam.

At least one Marine commander observed that a Clearwater monitor “proved to be an ideal command post with good communications and significant fire power,” but high losses prompted a re-analysis of the best naval vessels for the mission. Lieutenant General Robert Cushman Jr., the new Commanding



NHHC K-43075

Under evaluation as a river warfare asset, a patrol air cushion vehicle, or PACV, moves effortlessly from the land to the water in late 1967. The Navy tested the revolutionary craft in the Mekong Delta and later in I Corps but eventually found them unsuitable for Vietnam operations.

General III Marine Amphibious Force, called for more PBRs, less well armed and armored than the MRF vessels, but faster and more maneuverable. As a result, COMNAVFORV returned RAD 112 to the delta and replaced it in May and June 1968 with the ten PBRs of River Section 543. Clearwater was augmented soon after with a half-dozen LCM-6 minesweepers, eight LCPLs (manned by Sailors and Marines) for night surveillance duties, and three patrol air-cushioned vehicles (PACVs), which

were deemed unsuited to the Vietnam operational environment and returned to the United States in May 1969. Three 57-foot minesweeping boats from Mine Division 113 joined the forces on the Cua Viet in early 1969.

When Task Force Clearwater turned over control of naval operations in I Corps to the Vietnam Navy on 1 July 1970, it had accomplished its mission of keeping the Perfume and Cua Viet rivers open to allied logistic traffic. ↓



NHHC VN Collection

Navy crewmen prepare to fire an 81mm mortar against North Vietnamese forces arrayed along the Cua Viet River just south of the Demilitarized Zone dividing Vietnam.



NHHC VN Collection

Enemy forces destroyed this LCM-8 as it attempted to deliver supplies from Cua Viet at the mouth of the river to the combat base at Dong Ha.



NHHC VN Collection

PCF-43 speeds along a river in the Ca Mau region. A significant feature of the Southeast Asia Lake, Ocean, River, Delta Strategy (SEALORDS) was the employment of Swift boats in the rivers of the Mekong Delta.

---

## SEALORDS

---

General Abrams, who had relieved Westmoreland as Commander U.S. Military Assistance Command, Vietnam, and Vice Admiral Elmo R. Zumwalt Jr., the new COMNAVFORV, met for the first time in Vietnam in September 1968. The naval officer already understood that Abrams wanted the Navy in the delta to increase pressure on enemy forces, badly hurt by the allies' counterattacks after Tet. He also found that while the Coastal Surveillance Force, River Patrol Force, and Vietnam Navy had limited the enemy's use of the sea and the delta's major rivers for infiltration, the Communists had come up with a new tactic. Hanoi shipped munitions to "neutral" Cambodia's port of Sihanoukville where they were offloaded onto commercial vehicles and transported to locations on the border with South Vietnam. Communist logistic units then bypassed U.S. and Vietnamese patrols of the major rivers by moving the munitions on and through the delta's numerous canals, small streams, and mangrove swamps to North Vietnamese and Viet Cong strongholds. He also learned that enemy main force units routinely avoided contact with the heavily armed and agile Mobile Riverine Force. Zumwalt concluded that "it was possible to blockade by water the entire area from the Gulf of Siam all the way across the Cambodian border" to the South Vietnamese city of Tay Ninh.

On 5 November 1968, Zumwalt's staff issued COMNAVFORV Operation Plan 111-69, which detailed the Southeast Asia Lake, Ocean, River, Delta Strategy and stood up Task Force 194 to execute it. The Market Time, Game Warden, and MRF operations would continue, but Task Forces 115, 116, and 117 were to detach units to support Task Force 194's mission. Hence, Swift boats would take part in patrols of the major delta rivers and PBRs, minesweepers, ASPBs, monitors, ATCs, and Vietnam Navy river units would move up to the Cambodian border and into the enemy's base areas.



NHHC VN Collection

General Creighton W. Abrams, Commander U.S. Military Assistance Command, Vietnam, and Vice Admiral Elmo R. Zumwalt Jr., Commander Naval Forces, Vietnam, at a ceremony in the Mekong Delta. The two leaders concurred in the need to develop a strong, durable, and combat-ready South Vietnamese military to carry on the fight when U.S. forces redeployed home.

In addition, *Asheville*-class patrol gunboats moved into the broad rivers of the Ca Mau Peninsula.

The campaign's objectives were to interdict Communist infiltration into the delta, eliminate enemy strongholds in the Ca Mau Peninsula, and improve the allies' protection of the South Vietnamese people in the Mekong Delta and the

region around Saigon. SEALORDS forces were specifically directed to:

- Maintain naval superiority on the inland waterways and contiguous waterways
  - Interdict the enemy's communication-liaison route
  - Conduct coordinated counter-infiltration operations in coastal and inland waterways in the III and IV Corps Tactical Zones
- Conduct operations to open and pacify assigned riverine areas essential to military, economic, and political efforts
  - Conduct coordinated and combined offensive operations in conjunction with friendly forces to destroy enemy forces, base areas, and logistics systems by riverine and coastal assault raiding operations

## Vice Admiral Elmo R. Zumwalt Jr.

**NO U.S. NAVAL LEADER HAD AS MUCH IMPACT** on the course of the riverine war in Vietnam as did Vice Admiral Elmo R. Zumwalt Jr. Politically astute and well connected to the Washington national security establishment, he understood what would be expected of Naval Forces, Vietnam when he assumed command in September 1968. It was then clear that the United States would withdraw its forces from the war in Southeast Asia; many Americans felt the sooner, the better. He also knew that U.S. leaders, including the prime presidential candidate, Richard M. Nixon, wanted to prepare the South Vietnamese armed forces to carry on the fight.

Soon after Zumwalt arrived in-country, he made a ten-day visit to Navy coastal and river commands throughout South Vietnam, where his chief subordinates briefed him on how the war was going. He concluded that naval resources were not being efficiently employed. For instance, there was excess capacity in the Coastal Surveillance Force since Hanoi had basically given up trying to deliver war munitions to Communist forces in South Vietnam via coastal infiltration. He found that the enemy was routinely avoiding contact with the patrols of Task Force 116 on the major rivers and with the Army-Navy Mobile Riverine Force. He also met with the new Commander U.S. Military Assistance Command, Vietnam, General Creighton W. Abrams. The no-nonsense general indicated that in his view Zumwalt's predecessor, Rear Admiral Kenneth L. Veth, had lacked the leadership and warrior skills Abrams believed essential to success in Vietnam. Abrams wanted a new dynamic.

In October, Zumwalt sketched out a plan that would take a combined-arms, multiservice, multinational approach to interdicting Communist infiltration from Cambodia, destroying enemy sanctuaries in the Mekong Delta, and extending the Saigon government's control of the countryside. In the final plan for SEALORDS, task forces from coastal, river, and riverine assault commands would join in combined operations with South Vietnamese ground and naval forces. Two primary objectives of SEALORDS were to set up patrols along the border with Cambodia and to penetrate longtime enemy strongholds deep in the delta.

Abrams called a conference in November 1968 to discuss how the U.S. armed forces in Vietnam would withdraw from the war. Air Force briefers laid out a plan whose endpoint would be eight years away in 1976. The general exploded, shouting "Bullshit! Bullshit! Bullshit!" and stormed from the room. When Abrams cooled down and returned to the briefing, Zumwalt laid out a three-year plan in which U.S. naval forces would fully integrate the Vietnam Navy into U.S. combat operations and train the Vietnamese sailors to operate American ships, boats, weapons, and equipment. During the same timeframe, in what Zumwalt termed an Accelerated Turnover to the Vietnamese (ACTOV) plan, the U.S. Navy would facilitate the transfer to the Vietnam Navy of hundreds of American combat vessels and logistic support bases.

Zumwalt's SEALORDS campaign sparked major combat actions with Communist forces that resulted in heavy enemy and allied casualties. Not content to sit behind a desk in Saigon, the admiral frequently

Before deploying allied naval forces on the Rach Giang Thanh–Vinh Te canal that closely paralleled the South Vietnam–Cambodia border, a move with possible foreign policy ramifications given the proximity of these waterways to Cambodia, Zumwalt ordered his “First Sea Lord” (initially Captain Salzer and after late November, Rear Admiral W. H. House) to establish as a test case a riverine blockade “in the western part of the delta . . . and if it worked” then

establish one on the Rach Giang Thanh/Vinh Te. In early November, Task Force 194 kicked off its first SEALORDS action—Operation Search Turn—when U.S. and South Vietnamese naval forces cleared the enemy from the vicinity of the Rach Gia-Long Xuyen and Cai San canals near the Gulf of Siam and established an interdiction barrier. This operation was executed about thirty miles south of the border with Cambodia.



NHHC VN Collection

**Vice Admiral Zumwalt, right, stresses the importance of their mission to the Sailors of Operation Sea Float. The energetic and courageous leader frequently visited his units in the field.**

visited battle sites and displayed the physical courage of an aggressive military leader. The Sailors of Naval Forces, Vietnam overwhelmingly praised Zumwalt’s bravery, energy, and concern for their well-being. More important, the SEALORDS campaign put the enemy in the delta on the defensive. Communist forces there were unable to oppose the allied invasion of Cambodia in 1970 or assist their comrades fighting for survival during the Easter Offensive of 1972.

As a result of Zumwalt’s ACTOV plan and subsequent U.S. military assistance programs, 1975 found the Vietnam Navy solely responsible for the security of South Vietnam’s rivers and coasts. A total of 42,000 sailors manned a fleet of 1,500 vessels, including almost 700 riverine warfare boats and craft. Perennial problems continued to plague the service, but South Vietnam’s navy still controlled the Mekong Delta. ↴



Courtesy Thomas Barnett

These River Division 522 PBRs are almost hidden from sight by the steep banks and foliage that characterized the Vinh Te Canal paralleling the South Vietnam–Cambodia border.

The opportunity to deploy forces all along the Rach Giang Thanh and the Vinh Te came about by happenstance. On 14 October 1968, Lieutenant (j.g.) Michael Bernique, a Swift boat commander, acted on a tip from sources in Ha Tien that the Viet Cong had established a tax collection site on the Rach Giang Thanh. The bold officer led his fast patrol craft (PCF) into the canal, which the U.S. naval command had declared “off limits” because of its nearness to Cambodia, and soon engaged in a firefight with the enemy, killing several



Courtesy Thomas Barnett

Lieutenant Thomas Barnett, commanding officer of River Division 522. His unit fought on South Vietnam’s Long Tau and Vam Co Dong rivers and the Vinh Te Canal during 1968 and 1969.

guerrillas. The presence of these Communist soldiers right on the border with Cambodia justified the deployment of South Vietnamese and U.S. forces in defense of the Republic of Vietnam’s sovereignty. Hence, on the 21st, the naval command inaugurated Operation Foul Deck/Tran Hung Dao, the allied patrol of the Rach Giang Thanh and Vinh Te canals from the Gulf of Siam to Chau Doc on the upper Bassac. Zumwalt could have disciplined Bernique for his derring-do but instead awarded him a Silver Star.

The Vinh Te Canal presented the allied river warriors with an especially dangerous and unique operating environment that demanded new tactics. Lieutenant (j.g.) Gordon Peterson, executive officer of River Division 522, first served in the Rung Sat where “patrols were conducted in the textbook manner . . . following the [guidance] of the PBR School in Vallejo . . . no beaching of boats and no personnel going on to land. . . . We did often turn off engines and drift at night. . . . OPs consisted of boarding and inspecting river traffic, checking ID cards. . . . Patrols were mostly boring and we all looked forward to getting back to the club for a beer or the mess hall for a hot meal.”

Peterson remembered that “the Vinh Te was very different. It was ‘throw away the rulebook’ regarding



Navy Art Collection

*Night Ambush* by Robert G. Smith. Drawing, ink and charcoal.

operations and learn to improvise. We set up base camps in the canal. . . . That was never taught in PBR school.” Because the canal was narrow, the banks high, and the water level often low, the Sailors took action to lower the PBR’s silhouette; they removed radar domes and sometimes even U.S. flags from atop the boats. Lieutenant Thomas Barnett, the commanding officer of River Division 522, reiterated that there was “no point in making ourselves more observable ‘ducks in a shooting gallery’ on the Vinh Te.” Lieutenant (j.g.) Bruce McCamey, a patrol officer in Barnett’s unit, emphasized that the ways to “operate on a large river and a small river [or canal] are totally different.”

In November 1968, COMNAVFORV kicked off an even more ambitious effort to limit infiltration into the III Corps Tactical Zone in Operation Giant Slingshot. The Parrot’s Beak, so-called because of what that portion of the South Vietnam–Cambodia border looked like on the map, pointed menacingly toward the South Vietnamese capital. Extending from the Parrot’s Beak almost to the outskirts of

Saigon were the Vam Co Tay and the Vam Co Dong, rivers along which the Communists moved their forces and supplies for the attacks on the capital during the 1968 Tet Offensive.

Allied leaders knew it would be challenging to ensure logistic support of naval forces operating an interdiction patrol on the two rivers. The naval command deployed *Askari* (ARL-30), *YRBM-18*, and *Harnett County* to Tan An and Ben Luc, even though it was understood the units would be deep in enemy territory. Round-the-clock vigilance, timely intelligence, and the simple but effective tactic of randomly dropping grenades into the water around the vessels were necessary to protect these logistic support units.

What the enemy could do to frustrate allied plans was vividly demonstrated on 1 November 1968 when swimmer-sappers attached limpet mines to the hull of *Westchester County* (LST-1167) anchored near My Tho in support of the Mobile Riverine Force. Explosions ripped into fuel tanks, storage spaces, and sleeping quarters, killing 25 American



NHHC VN Collection

*Harnett County* (LST-821). The naval command deployed her and other ships far upriver near the “Parrot’s Beak” area of the South Vietnam–Cambodia border in support of Operation Giant Slingshot. River Sailors welcomed the presence there of the LST’s 40mm gun.



NHHC VN Collection

The deployment to Ben Luc on the Vam Co Dong of Mobile Base II, shown serving as a support facility for PBRs and Seawolves’ helicopters, enabled more ambitious combat operations close to Cambodia.

and Vietnamese sailors and soldiers and wounding 27 other personnel. Repairs in the United States kept the ship out of the fight for five months, but she returned to Vietnam service in March 1969.

By mid-July, a substantial base had been built ashore at Ben Luc, and Mobile Base II made up of Ammi barge pontoons was stationed at Tan An, thus obviating the need for logistic ships at those locations. The delta’s only major roadway, Route 4, passed through these strategically important towns.

Further north the waterways were too shallow and narrow to accommodate large vessels, and there was little room ashore for robust bases. The Navy’s solution was to establish rudimentary but sufficient advanced tactical support bases (ATSBs) along both rivers and in proximity to U.S. Army, Green Beret, and ARVN firebases. Some of the ATSBs consisted of three or more connected Ammi barge pontoons, each 30-by-90 feet, moored to the shore. Other ATSBs were established on the banks of canals adjacent to U.S. and South Vietnamese firebases. The ATSBs normally sported a tactical operations center, communications shack, helicopter pad, and wood-covered eating, sleeping, and supply shelters. Ammo and fuel barges were normally positioned at a safe distance from the facilities. The SEALORDS units defended their bases with concertina wire,

trip flares, motion-sensors, claymore mines, RPG screens (chain-link fences), and crew-served weapons. Zumwalt’s Sailors could call in air support from the Black Ponies’ OV-10s, the Seawolves’ Hueys, Army Cobra attack helicopters, Air Force fixed-wing units, and artillery support from nearby ground forces.

Once the Search Turn, Foul Deck, and Giant Slingshot operations were underway, COMNAVFORV moved to fill in the unpatrolled section on the border

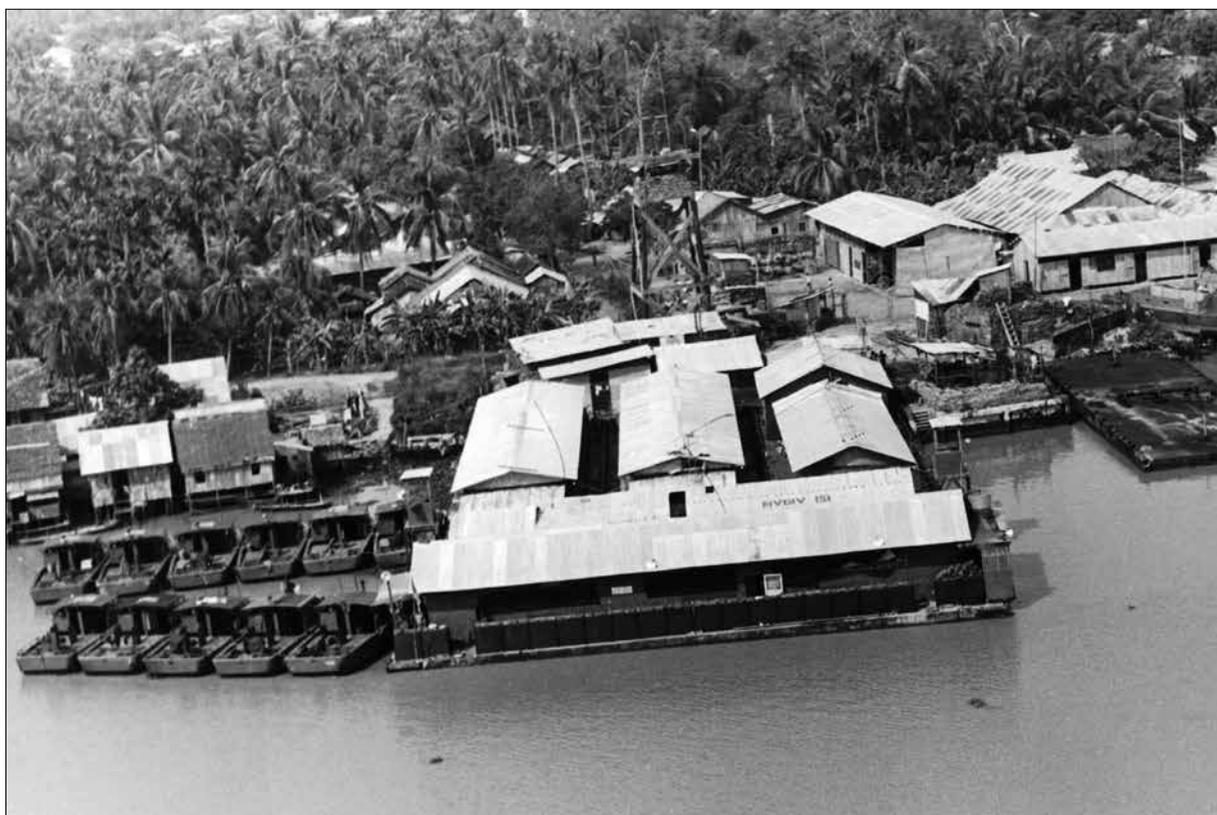
between Chau Doc on the west and the Vam Co Tay on the east. Operation Barrier Reef, initiated on 2 January 1969, completed the barrier interdiction line from the Gulf of Siam all the way to Tay Ninh northwest of Saigon.

To protect the barrier patrol forces and help them accomplish their mission to interdict cross-border infiltration, naval units laid land mines all along the canals fronting Cambodia. Moreover, having taken advantage of former Secretary of Defense Robert McNamara's advocacy and financial support for electronic warfare, the Navy in Operation Duffel Bag emplaced movement and other sensors in the border reaches. The naval command also assigned river minesweepers and drone minesweepers to Barrier Reef in response to the enemy's mining of area canals.

The American mine warriors did yeoman work keeping these inland waterways free of mines, but not without cost. A nighttime ambush in 1969 devastated MSR-7, killing Chief Boatswain's Mate

Charles P. Geisert and wounding four other Sailors. HAL-3 Seawolves came to the rescue, driving off the enemy and enabling units to retrieve surviving crewmen and recover the river minesweeper. A few months later the enemy once again hit MSR-7, this time on the Vinh Te Canal. A trio of B-40 RPGs hit the craft, knocked out its steering, and set it ablaze. With little hesitation, Boatswain's Mate 1st Class Richard L. Schreifels, the captain of MSR-3, conned his boat into the hot kill zone, picked up several MSR-7 crewmen, and headed for safety. Learning that other MSR-7 crewmen had been thrown overboard during the attack, however, the petty officer reentered the kill zone and retrieved the missing men. In the words of his Silver Star citation, Schreifels' "bold courage under fire was directly responsible for saving seven lives."

In 1969, Zumwalt directed the establishment of Strike Assault Boat Squadron 20, which operated specially designed 26-foot, gasoline-powered, aluminum-hulled boats, to serve as a fast reaction



The advanced tactical support base at Ben Keo on the Vam Co Dong.



NHHC VN Collection

Strike Assault Boat Squadron (STABRON) 20 unit patrols South Vietnam's Grand Canal near the border with Cambodia during 1970.



NHHC VN Collection

STABRON 20 Sailors beam as they display an enemy flag captured on the Grand Canal, 1970.

force. When the squadron deployed to the northern delta, however, the river forces' mission had changed from one of patrolling large rivers to one of conducting stationary nighttime ambushes. The switch eventually obviated the need for specialized boats, so they operated in similar fashion to the other river patrol units.

The infiltration experience of the Viet Cong 528th Heavy Weapons Company detailed the enemy's difficulty delivering war materials to combat units in the delta. Equipped in Cambodia with a Chinese-made, 12-tube, 107mm rocket launcher and protected by a VC infantry battalion, the 528th crossed the border into South Vietnam on 10 January 1969 and headed for the Barrier Reef line on the French-built La Grange–Ong Lon Canal. Warned by intelligence reports, the allied command deployed six PBRs and a platoon of South Vietnamese territorial troops that ambushed the escort battalion, forcing both units to abort their crossing. Additional attempts fared no better. Finally, on the 14th, when a U.S. reconnaissance plane spotted the 528th holed up in a small canal, Army helicopter gunships swooped in, killed or captured most of the unit, and retrieved the 12-tube rocket launcher.

One problem with operations along the Cambodian border was the shallowness of the water during the dry season. Lieutenant James Reckner, an advisor to a South Vietnamese river assault group, remembered a time in 1969 when the STCAN/FOM, an "underpowered, under-armed, and overage relic from the French," in which he was embarked got stuck in the mud at low water in hostile territory and with night fast approaching. As he and his Vietnamese shipmates struggled in knee-deep water to free the vessel, "around a bend in the canal came two American fiber-glass jet boats (PBRs) at high speed . . . [what] relief I felt as I spotted the Stars & Stripes whipping in the boats' self-generated breeze. Against the dark jungle background and the brown of the canal water, the American flag seemed to me to be clean, pure, strong. At that moment, it truly was 'Old Glory'."

**“John Paul Jones is proud of you all.”**

Giant Slingshot generated the most combat of all the SEALORDS operations. By 1 February 1969, after two months of heavy action, Captain Arthur W. Price Jr.’s Task Group 194.9 had engaged in 103 fire-fights with the enemy, mostly on the Vam Co Dong. Its Army and Navy units killed 259 Communist troops while losing ten of their own. On one occasion, exploiting tips from local villagers, the task group also uncovered almost fifty tons of arms and explosives hidden in 55-gallon drums all along the waterway. As security improved, civilian commerce picked up on the canals and rivers.

River Division 532 commanded by Lieutenant George Stefencavage was one of the most successful units in Giant Slingshot. Between 8 February and 4 April, the PBR unit killed more than 100 of the enemy while suffering the loss of two PBRs and four

Sailors. Stefencavage and over half of the men in his command were wounded during the period. On 28 February, in a typical action, the PBRs surprised and dispersed a Viet Cong ambush force but then took heavy fire from another position nearby. Without hesitation, Stefencavage, even though he was already wounded in several places, led his command against the threat and silenced the remaining guerrillas. The Navy awarded him a Silver Star for his bravery.

Reacting to intelligence reports of the enemy’s heightened interest in Saigon, the naval command increased the number of PBRs in Price’s command. The Saigon government also deployed to the Vam Co Dong a VNN river assault and interdiction division (RAID) comprising one CCB, 3 monitors, 8 ASPBs, and 13 ATCs.

Price’s task group put relentless pressure on the enemy. A document found on a dead Communist



With U.S. Army troops embarked, a PBR patrols a section of the Saigon River north of the capital in January 1969.

NHHC K-66849



NHHC VN Collection

Boatswain's Mate 1st Class Dolle Sewell Jr., left, a PBR boat captain, and Lieutenant Stephen F. Thiel, a patrol officer, inspect the Viet Cong 122mm rocket launcher they captured on the Dong Nai River only ten miles east of Saigon.

soldier complained that the American river patrols had prevented his supply unit from crossing the Vam Co Dong on nine consecutive nights. In another captured document, the writer lamented that Giant Slingshot operations had “resulted in heavy losses inflicted on our forces.” When Price’s units preempted a planned enemy attack on the city of Tay Ninh, Lieutenant General Julian J. Ewell, Palmer’s successor as Commanding General II Field Force, Vietnam, sent Price a laudatory message that ended with the words “John Paul Jones is proud of you all.”

Heavy losses on the Vam Co Dong prompted the enemy to shift the infiltration effort to the east and the upper reaches of the Saigon River. To combat the enemy maneuver, in May 1969, Zumwalt directed the movement of six PBRs of River Division 574 from Go Dau Ha on the Vam Co Dong to a point on the Saigon River 16 miles away. The PBRs got there by air! In a move that would have taken four days by vehicle, huge Army Skycrane helicopters lifted the PBRs to their new operating area in three hours.

Following up on this deployment, in June, COMNAVFORV deployed ten PBRs to a new ATSB at Phu Cuong on the Saigon River. Enemy contact picked up considerably in July when River Division 593 joined U.S. and South Vietnamese infantry

units and the VNN’s RAG 24 in search and destroy missions to the north. The combined forces killed or captured more than 150 enemy troops.

The PBR units executing SEALORDS operations adapted their tactics to the new barrier interdiction mission. In the past, pairs of PBRs patrolled the delta’s major rivers during the day, stopping and searching suspicious craft. At night they moved slowly along the quiet waterways or drifted with engines off in search of enemy crossers. It became clear, however, especially at night, that the “PBRs and PCFs, no matter how quiet they may have been at low RPMs, still generated too much noise.” The Giant Slingshot and other SEALORDS units devised a different tactic, called a waterborne guard post. In this approach, as day turned to night, the first of two boats continued moving forward as the second boat cut its engines and drifted silently bow first into the shore near a favorite Viet Cong crossing spot. The first boat would do the same soon after. For the rest of the night, the two crews would remain silent usually enduring the chill of the dark, driving rain, and other discomforts.

Lieutenant Barnett remembered that even though he and his men stayed quiet, “in a night ambush you heard every frog, creak, groan, rustle of nature—truly spooky.” Another boat commander, Lieutenant John “Kirk” Ferguson, recalled that usually “there was nothing going on. And, you know, it became pretty tedious, just you and the mosquitoes.” Bruce McCamey had a different impression of night patrol: “I never found one minute on the [Vam Co Dong] tedious . . . those were nights of tension.” As in every war, it depended where you were and when you were there. For McCamey, “if you were out after dusk it was shoot first and ask questions later” on the Vam Co Dong.

Once the boats had silently established their ambush position, the Sailors often waited until dawn with nothing to show for their efforts. Sometimes, however, the crews picked up the sounds of men entering the water and whispering to comrades. When the patrol commander, often a chief petty officer, was confident the enemy force had entered the water or reached the far bank, both boats opened

up with their .50-caliber and 60mm machine guns and grenade launchers and called in artillery or air support.

The waterborne guard-post tactic proved especially effective on the Saigon River patrols. A consummate practitioner of the tactic was Chief Signalman Robert A. Monzingo of River Division 593, who sported a red handlebar mustache and exuded an air of extreme confidence. The petty officer knew that the enemy, perhaps for lack of timely intelligence, repeatedly used the same river crossing points even after other units were ambushed there. One dark night, he positioned the two PBRs under his command on opposite sides of the river at a crossing point. Through a Starlight scope night-vision device, he observed a platoon of Communist troops, oblivious to the American presence, silently slip into the water and head for the other side. When the chief was confident the entire enemy unit had reached the middle of the stream, he ordered his men to pop flares, bring their engines to life, and charge guns-blazing into the enemy formation. In the apt words of historian Richard L. Schreadley, “no mercy was asked or given. It was not that kind of war. The destruction of the enemy platoon was brief, brutal, and complete.”

On another nighttime patrol, in August 1969, the riverbank position of Monzingo’s two PBRs was concealed by a heavy rain that caused armed enemy troops moving across the river to shield their faces from the weather. At the most opportune moment, the chief ordered his men to open fire. Although surprised, the enemy returned fire with such gusto that Monzingo immediately called for assistance from nearby PBRs, HAL-3 helicopter gunships, and VAL-4 Broncos. With daylight came the discovery of 49 dead enemy soldiers. The Navy awarded the intrepid chief with a Silver Star.

Without a standard approach to the waterborne guard-post tactic, however, river division officers and men exhibited ingenuity and flexibility, adapting their methods, weapons, and equipment to their particular combat environment. Lieutenant Peterson related that he and his PBR Sailors “slept many a night on the river bank” while Lieutenants Barnett

and McCamey preferred to remain afloat for fear of booby traps ashore. In fact, the latter officer “only put the boats directly on the banks when there was no other choice. The tactic I used was to find trees that overhung the banks. We would slide the boats into the overhanging branches [so] we could back down into the river without untying. This also gave us cover and prevented us from being seen at dusk or a full moon.” When McCamey’s boats made contact with the enemy, he preferred artillery support from nearby Army firebases rather than wait for air support. Other patrol officers wanted pilots overhead in aircraft observing the target before they brought down their fire.

The same operational variation applied to weapons and equipment. Barnett and his men considered Claymore mines more of a danger to themselves than the enemy, so they did not use them. Peterson, on the other hand, recalled, “Army liaison officers taught us how to use Claymore mines and how to set up an ambush on the river bank . . . and that was exactly what we did.” After unsatisfactory experiences with his 60mm mortar, McCamey “never put one on [his] boats again.” The PBR on which River Division 522’s Gunner’s Mate 3rd Class Frank W. Free served, however, found the 60mm mortar a favorite weapon. The crew used it to fire illumination rounds and expose enemy forces caught crossing waterways. In an ingenious method, Free and his mates adapted the weapon to a direct fire role; they triggered the mortar round with the barrel only five degrees above horizontal “like a rifle” and it “worked great.” On occasion, the round “would skip off the water and still go in the front door of a hooch.”

Confident that this operating area on the Saigon River would continue to be productive, COMNAVFORV established Operation Ready Deck on 11 October 1969. Zumwalt and the South Vietnamese naval command bolstered the American force with eight VNN PBRs and a river assault group. That December, Zumwalt initiated one of the first Navy actions of the Vietnamization program, Washington’s strategy to improve South Vietnam’s ability to fight on after the American military withdrawal. COMNAVFORV turned over responsibility

# Black Ponies

**NAVAL FORCES, VIETNAM STAFF OFFICERS** developing the SEALORDS campaign recognized that naval forces needed additional resources for air support to execute the barrier patrol operations on the Cambodian border and penetrate the enemy's most heavily defended strongholds. Navy attack helicopters carried only so much ordnance, and they could not operate for long periods on patrol. The Navy found a solution by complementing Helicopter Attack (Light) Squadron 3 with a squadron of fixed-wing aircraft capable of carrying 2,400 pounds of ordnance, remaining on patrol for two to three hours, and speeding at close to 200 knots to reach a trouble spot. To fill that role, Light Attack Squadron (VAL) 4 deployed in April 1969 from Naval Air Station, North Island, California, to the middle of the Mekong Delta at Binh Thuy and Vung Tau south of Saigon.

The naval aviators of VAL-4, who called their squadron the Black Ponies, brought with them 14

fixed-wing, twin-engine, propeller-driven OV-10A Broncos. The plane carried a powerful arsenal of aerial weapons. The six revolving barrels of the SUU-11 Gatling-type mini gun could fire a prodigious 6,000 7.62 rounds per minute. The Bronco's 5-inch Zuni rocket capability, called the "big stick" by VAL-4 crews, enabled the plane to destroy tunnel and bunker complexes, clear swaths of jungle, and neutralize enemy troop formations in close contact with allied ground troops. The plane's 20mm guns could fire 400 rounds a minute, and its M-60 machine guns and 2.75-inch rockets complemented that firepower.

A light attack fire team (LAFT) of two Broncos could scramble from Binh Thuy and within 25 minutes reach any spot in the Mekong Delta to provide air support. Other missions involved flying over enemy territory looking for targets of opportunity or flying in direct overhead support of river patrols. The two crewmen of each Bronco had specific tasks. The pilot





NHHC VN Collection

**An OV-10 Bronco fires a 5-inch Zuni rocket at enemy forces below. Light Attack Squadron (VAL) 4, known as the Black Ponies, provided the Navy's brown water units with especially responsive and effective air support.**

in the lead seat selected and fired the weapons. The back-seater handled navigation, communications, and getting clearance to fire the weapons. Neither naval aviator wanted to kill friendly troops or innocent civilians.

The OV-10A's ability to operate in foul weather and at night resulted in more than 60 percent of VAL-4's missions taking place at night. Often, because heavy weather produced low cloud ceilings, the Black Ponies flew their Broncos below 100 feet. One night-time tactic called "chumming" entailed one plane operating with its lights on to draw enemy fire while the other flew nearby ready to pounce on the rash attacker. On eight out of ten missions, the Broncos took fire, and it was not unusual for the aircraft to return to base punctured by AK-47 rounds.

Pilot Donald J. Florko observed that a "dark night in August 1969" had "all the elements for disaster—torrential rain, thunder, and extremely poor visibility." His LAFT was scrambled to assist an ARVN outpost in Tay Ninh Province northwest of Saigon when a North Vietnamese unit threatened to overrun it. Hearing the Black Ponies overhead, the ARVN troops popped flares to identify their position. The two Broncos dove on the enemy's positions with guns blazing and in short order drove off the attackers. VAL-4 fought on in Vietnam long after most U.S. military forces had been withdrawn from the war. ↴

for Operation Ready Deck to the South Vietnamese leader of the III Riverine Area, Commander Dang Trung Hieu.

After dark, on 31 December, Communist guerrillas opened fire on a force of VNN PBRs and riverine assault craft involved in the salvage of a sunken PBR in the Saigon River. The South Vietnamese commander managed the battle with professional skill, effectively calling in support from U.S. helicopter gunships, Broncos, and artillery. After fighting the enemy all night and the next morning, the VNN force completed its mission and recovered the sunken craft.

### **Penetrating the Delta Sanctuaries**

The effort to open and pacify riverine areas vital to South Vietnam's economic, political, and military fortunes got underway in late 1968 and early 1969. Task Force 194 PBRs, MRF units, and Seabees, in conjunction with South Vietnamese troops, cleared Viet Cong obstructions from the Cho Gao and other waterways. Farmers and other civilians began using the routes to transport their produce to market. SEALORDS and South Vietnamese ground units also teamed up to reduce the enemy's hold on Tan Dinh and Dung islands at the mouth of the Bassac River.

Soon after his arrival in Vietnam in September 1968, Zumwalt met with Market Time commander Captain Roy F. "Latch" Hoffmann. The hard-charging officer, who would earn a Silver Star in combat, persuaded the admiral that the Coastal Surveillance Force could strengthen SEALORDS' combat power. With seaborne infiltration under control, many of Task Force 115's Swift boats and 82-foot Coast Guard WPB cutters were free to mount aggressive raids into the delta's large rivers. During the first six months of SEALORDS, Market Time PCFs and WPBs raided into the once impenetrable Cua Lon and Bo De rivers and other delta waterways on 76 occasions. The Cua Lon and the Bo De connected in the heart of the Ca Mau Peninsula's forests, mangrove swamps, and mud flats and provided entry to this isolated, lightly populated region 175 miles southwest of Saigon. The Ca Mau and the U Minh Forest on the Gulf of Siam coast to the north had



NHHC VN Collection

Swift boat machine gunners open fire on likely fighting positions ashore to preempt an ambush, as South Vietnamese marines stand by to disembark and advance into the bush. Convinced that the oceangoing patrols of the Coastal Surveillance Force had drastically curtailed enemy seaborne infiltration, Vice Admiral Zumwalt deployed Task Force 115's Swift boats into the rivers of the lower Mekong Delta.

long been virtual Communist sanctuaries. During Tet 1968, Viet Cong forces overran the few major towns in the region, forcing the population to flee.

One of the first raiding operations took place in October 1968 on the My Thanh River near the mouth of the Bassac. Lieutenant Commander Joseph F. Smith, USCG, the commanding officer of Coast Guard Division 13, served as the officer in tactical command of a force of WPBs, Navy PCFs, and Huey helicopters. Smith's units surprised a Viet



NHHC VN Collection

A Coast Guard 82-foot cutter. Such cutters worked closely with the Navy's Swift boat forces in the Ca Mau region. The units, based at An Thoi on the island of Phu Quoc, often operated at the mouths of large rivers to provide nearby Navy craft with gunfire support.

Cong village and with gunfire and hand grenades destroyed a number of fortified bunkers, 15 boats and motorized sampans, and 150 gallons of fuel.

In November, the Navy demonstrated how control of inland waterways could help maintain the South Vietnamese government's presence in the delta. The village of Cai Nuoc, deep in enemy territory, was defended by a U.S. Army Special Forces A Team and Vietnamese troops. Viet Cong forces had the village under virtual siege, with nightly mortar and recoilless rifle attacks. Enemy fire made aerial resupply of the outpost dangerous, and the

defenders' ammunition stocks were running low. On the 20th, Market Time "river raiders"—PCFs 5, 43, and 82—made a fighting run up the Bay Hap River to Cai Nuoc. Coast Guard cutter *Bibb* (WHEC 31) and U.S. and Australian aircraft assisted the boats with naval gunfire and air support. After the successful resupply of the outpost, evidence that the government would continue to defend the village and its people, increasing numbers of Vietnamese civilians settled around Cai Nuoc.

The river runs of the Market Time raiders did not always go



Navy Art Collection



NHHC VN Collection

Swift boats, loaded with South Vietnamese troops, move up a canal in the Ca Mau in early 1969. The officer in charge of the boat making the turn, PCF-94, is Lieutenant (j.g.) John Kerry, a decorated Swift boat Sailor, future presidential contender, U.S. Senator, and Secretary of State.

as well. On a four-PCF mission up the Bo De River, on the 24th, everything that could go wrong did go wrong. With the water off the river mouth too shallow, *Washoe County* (LST-1165) could not get close enough to provide gunfire support; a *Seawolves'* detachment was diverted to another mission; and the officer in tactical command, Lieutenant Robert "Friar Tuck" Brant, knew from his own observations that the enemy was aware that his quartet planned to enter the river. When they did, Viet Cong gunners in fortified bunkers on both banks opened a furious barrage. Before Brant's boats withdrew to the safety of the sea, enemy fire had shot up all four PCFs and wounded three Sailors.

Once the surprise of U.S. naval forces entering the Ca Mau region had passed, enemy forces (increasingly North Vietnamese regulars, better armed and trained than the Viet Cong) constructed fortified bunkers on all the main waterways and

triggered numerous ambushes. But during late 1968 and early 1969, the Americans killed, wounded, or captured more than 1,000 Viet Cong and North



NHHC VN Collection

Swift boat Sailors ready their weapons for action. With the .50-caliber/81mm mortar combination, M-60 machine guns, M-79 grenade launchers, and dual .50-caliber machine guns (not shown), a PCF possessed heavy fire-power for river warfare.

# The Swift Boat

**THE FAST PATROL CRAFT (PCF), OR SWIFT BOAT,** served as one of the Navy workhorses of the SEALORDS campaign. The boat, constructed by the Sewart Seacraft Company of Louisiana, was used by offshore oil drilling companies to service their rigs in the Gulf of Mexico. The Navy became interested in the boat for Vietnam operations because it had a shallow draft, was capable of high speeds, could operate in moderate seas, and most important was in production. And the boats already had an operational history; the CIA had used them in clandestine actions along the coast of North Vietnam. When the tempo of operations increased in 1965, the Navy ordered 100 of these small patrol boats and rushed them to Vietnam to counter the enemy's seaborne infiltration.

The aluminum-hulled Mark I PCF was 50 feet long, had a beam of 13 feet 6 inches, a draft of 4 feet 19 inches, and a displacement of 22 tons. A pair of 475-horsepower diesel engines turned

two propellers giving the Swift boat a maximum speed of 25 knots. A junior officer and five enlisted Sailors manned the crew. The PCF's lethal weaponry included twin .50-caliber machine guns emplaced above the pilot house and a .50-caliber machine gun mounted atop an 81mm mortar (called an over-under gun) aft. From 1965 to 1968, the PCFs served on the Market Time inshore patrol under Commander Coastal Surveillance Force (Task Force 115). The units performed well on anti-infiltration patrols, but it was no easy job. The boats had difficulty in heavy seas and could not stay out on long patrols because they were only marginally habitable. Still, along with other Navy, Coast Guard, and South Vietnamese units, by late 1968 the PCF divisions had stymied North Vietnam's seaborne infiltration program, forcing Hanoi to rely more heavily on the Ho Chi Minh Trail and the Cambodian port of Sihanoukville to supply their troops in South Vietnam.



NHHC VN Collection

**A fast patrol craft, or PCF, with embarked South Vietnamese infantrymen enters a narrow waterway in the Mekong Delta. When ambushed, the Swift boats quickly deployed the troops on the flanks of enemy forces to drive the latter from the riverbank.**



Navy Art Collection

**Firefight—Swift on Soi Rap by John Steel. Drawing, acrylic.**

Concluding in September 1968 that the PCFs could be put to better use, Vice Admiral Zumwalt and Commander Task Force 115 Captain Roy F. Hoffmann incorporated the Swift boats into the SEALORDS campaign plan. After initial raiding operations into the mouths of South Vietnam's larger rivers, the PCFs began operating along inland waterways to free up PBRs and riverine assault craft for patrols in even shallower water.

An operation on 28 January 1969 attested to the courage and quick thinking of the young Swift boat Sailors. Lieutenant (j.g.) John Rodgers Roland Jr., the officer in tactical command of PCF-35 and PCF-100, brought his charges into a narrow canal off the delta's Ham Luong River. A Viet Cong force positioned on both sides of the canal suddenly hit the two American units with a volley of accurate gunfire, wounding two crewmen on PCF-100 and throwing them into the

water. Blinded by smoke and unaware that his shipmates had been knocked overboard, the coxswain properly "stepped on the gas" to get his boat free of the kill zone. Even though the enemy fire then concentrated on PCF-35—a rocket propelled grenade hit it—Roland did not follow suit. Seeing the Sailors in the water, the lieutenant endured the enemy fire, closed with the two Sailors overboard, and hauled them on board for a safe withdrawal from the area. The service awarded Roland the Navy Cross. ↓

Vietnamese troops; destroyed huge weapons and supply caches; and established a government presence in this strategic region of the delta. Indeed, it was important that U.S. and South Vietnamese negotiators be able to assert in peace negotiations underway in Paris since March 1968 that the Republic of Vietnam controlled all of its territory.

To impede the raiding operations, the Viet Cong emplaced wooden barricades across the broad Cua Lon and other rivers. When American SEALs and South Vietnamese Special Forces failed to dislodge the massive barricades, even with the help of air strikes, Zumwalt ordered in stronger forces. In Operation Silver Mace, during December 1968, several ships of the Mobile Riverine Base as well as MRF monitors, ASPBs, and ATCs loaded with South Vietnamese troops steamed from the central delta and concentrated at the mouth of the Cua Lon. Elements of the naval force then entered the river, and Navy explosive ordnance disposal personnel destroyed the wooden barricades in addition to



Destruction of a water barrier. Navy explosive ordnance disposal units joined U.S. and South Vietnamese naval commandos in destroying barricades barring allied access to the Ca Mau's waterways.



Lieutenant Commander Roland F. Habicht, left, the officer in charge of a HAL-3 detachment, confers with a Navy SEAL. Without close coordination and cooperation between the Seawolves' squadron and the elite naval commandos, operations in the hostile Ca Mau area would have been even more dangerous than they were.

enemy riverbank bunkers. Throughout the early months of 1969, U.S. and Vietnamese forces made little contact with the enemy even though they captured 380 weapons.

The enemy, however, was very much present in the region. In April, two VC companies sprang an ambush on the Duong Keo River near the village of Rach Goc. They surprised a force under Coast Guard Commander (later Commandant) Paul A. Yost that included 13 Navy Swift boats, Hueys, SEALs, underwater demolition team (UDT) personnel, and South Vietnamese marines. Enemy Claymore mines, recoilless rifles, rocket propelled grenades, and machine gunfire disabled PCF-43 and mortally wounded two crewmen. Under heavy fire, two other Swift boats rushed in and removed the surviving crewmen and passengers. The craft exploded after the fight. The devastating ambush killed three Americans and wounded another 33. South Vietnamese losses were two dead and 13 wounded.

Market Time commander Hoffmann directed Lieutenant Commander John C. Spence, USCG, to return to the scene with a strong force and attack Rach Goc to "get even." Hoffmann flew overhead in a HAL-3 helicopter to coordinate the air support. With four HAL-3 gunships, an LST, two WPBs, and seven Swift boats, the latter two units embarking

90 troops, Spence returned to the Duong Keo River that same month (April). Fully expecting to be ambushed, he had a plan. Three PCFs would fight their way through the kill zone and land troops on one flank of the ambushing force while the other Swifts would deploy their infantry on the near flank.

As expected, the Viet Cong unleashed a heavy barrage; three B-40 RPGs hit the first boat, which beached without sinking. As planned, both PCF forces landed their troops for the enveloping maneuver and poured fire into the enemy ranks with their 81mm mortars and .50-caliber machine guns. The fighting was intense, and as Spence later observed, “air support was the only thing that broke” the enemy’s resistance. The Hueys and an Air Force F-4 Phantom that strafed and dropped napalm bombs as close as possible to the boats turned the tide. Mission accomplished, the force took the damaged PCF in tow, cared for the wounded, and returned to base.

U.S. leaders recognized that to sustain a military presence deep in the Ca Mau Peninsula they had to

develop a permanent logistics capability in the region. The repair ships, self-propelled barracks ships, and LSTs deployed to the Gulf of Siam in December 1968 were too distant from the inland operational areas. Moreover, the Vietnamization process did not entail the transfer of large logistic vessels to the VNN, so the allies had to find another way to supply the riverine forces. Zumwalt ordered the construction of an Ammi barge pontoon base mid-point in the Cua Lon opposite Old Nam Can, a town overrun and evacuated during the Tet Offensive. The admiral hoped that the base afloat would serve as an essential element in an operation called Sea Float to assert the South Vietnamese government’s presence in the Ca Mau region. The eventual 13-barge complex, a mobile advanced tactical support base (MATSB), provided berthing, messing, and supply support for U.S. PCFs, riverine assault craft, and a patrol gunboat; VNN ships and craft; and Navy SEALs. A Huey from the Seawolves’ detachment operated from a landing platform on one of the barges.



Courtesy Roy F. Hoffmann/Weymouth Symmes

Warriors of the Ca Mau: Lieutenant (j.g.) Don G. Droz, left, Captain Roy F. Hoffmann, and Lieutenant (j.g.) Michael Bernique. Droz was killed when the enemy ambushed PCF-43.

# Warriors with Green Faces

**THE NAVY'S RIVERINE WARFARE FORCES** would have lost many battles and suffered greater casualties in Vietnam without the intelligence on enemy movements provided by the Navy's elite SEAL (Sea, Air, and Land) commandos. SEALs also demonstrated special skill destroying Viet Cong base camps and capturing or killing enemy leaders.

The Navy established SEAL Teams 1 and 2 in January 1962 and from the very beginning looked to these units to counter Communist guerrillas and insurgents in "restricted waters" and "rivers, bays, harbors, canals, estuaries, and land areas adjacent to coasts." South Vietnam was the testing ground not only for the Kennedy administration's counterinsurgency warfare doctrine but for the new SEAL units. During 1963, detachments from SEAL Team 1 (based at Coronado, California) deployed to Southeast Asia and trained South Vietnamese sailors conducting clandestine operations in North Vietnam, VNN Coastal Force special troops, and the LDNN (*Lien Doi Nguoi Nhai*) naval commandos.

The River Patrol Force, established in December 1965, took charge of not only the PBRs and other resources flowing into South Vietnam for Operation Game Warden but also an increasing number of

SEALs. In 1967, the Atlantic Fleet's SEAL Team 2 deployed three platoons to Vietnam, where they conducted operations throughout the delta. Three 14-man platoons from SEAL Team 1 operated from Nha Be south of Saigon in support of Task Force 116 operations in the Rung Sat Special Zone.

The difficulty of operating in the Rung Sat was vividly described in the July 1968 end-of-tour report by the officer in tactical command of a SEAL detachment. He observed that in the Rung Sat "the foliage is so thick that it is not unlikely for a patrol to be within a Viet Cong base camp and not realize it. Visibility is sometimes only 5 to 10 feet and silent movement is practically impossible. . . . In a firefight with a concealed enemy at a range of 5 to 10 meters the possibility of losing at least the first two members of a friendly patrol is great."

The SEALs carried out their vital function of gathering intelligence for Task Force 116 on the location of enemy units, their combat capabilities, and plans to attack allied forces. While well prepared to fight and kill their foes in hand-to-hand combat, the normal six-man SEAL squads avoided combat if at all possible. Nonetheless, SEALs carried out day and night ambushes and hit and run raids to kill or

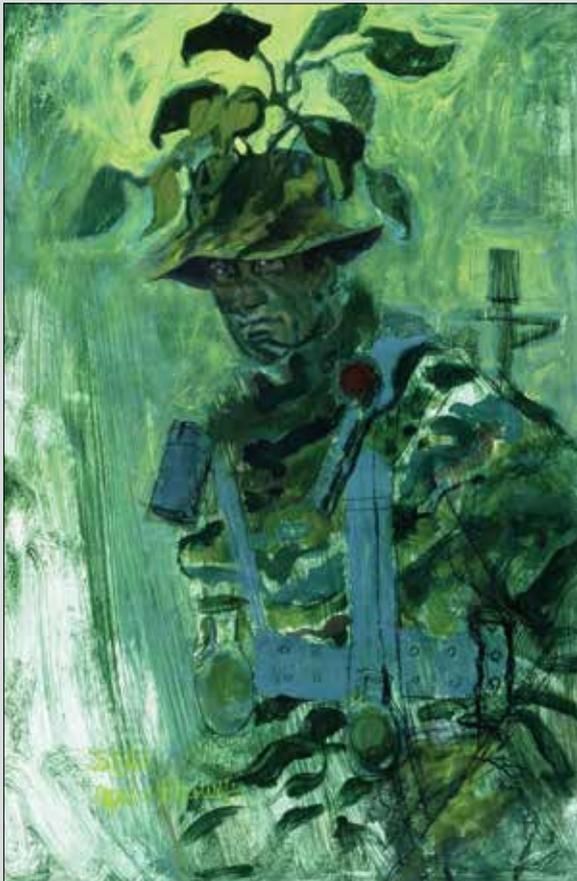
capture Viet Cong leaders, tax collectors, and couriers. SEALs used special SEAL team assault boats, sampans, or other craft to get to and from target areas. Just as often, River Patrol Force PBRs and HAL-3 helicopters inserted the naval commandos, provided gunfire support for their operations, and stood by to pluck them from the jungle.

The experience of Chief Petty Officer Barry W. Enoch of SEAL Team 1 in an April 1970 firefight



Courtesy Barry W. Enoch

**Chief Gunner's Mate Barry W. Enoch, a Navy SEAL, who earned the Navy Cross for his extraordinary combat performance in Vietnam.**



Navy Art Collection

**War Paint—SEAL by Marbury H. Brown. Oil on board.**

showed the nature of combat in the delta. Enoch and the Vietnamese LDNN unit he was advising surprised six guerrillas during an operation to kill or capture VC leaders in Ba Xuyen Province near the mouth of the Bassac River. Enoch killed three of the men, but his small force soon found itself surrounded by a large guerrilla unit and under heavy fire from rocket-propelled grenades and automatic weapons. Even though his radio was damaged, Enoch managed to direct fixed-wing and helicopter strikes that got dangerously close to his men. His skillful coordination enabled the aircraft overhead to blast a corridor through the encircling enemy force. He led his unit through the gap and toward the nearest river where allied naval forces safely extracted the patrol. Chief Enoch earned the Navy Cross for his combat leadership and courage under fire. ↴

On the morning of 25 June 1969, Navy dock landing ships towed the barges to the mouth of the Bo De where they were taken in tow by tugs and moored off Old Nam Can. The weapons of the U.S. and South Vietnamese combat vessels as well as emplaced mortars and automatic weapons made Sea Float a defensive porcupine. The river's 6- to 8-knot current provided the most effective defense against VC swimmer-sappers. Despite riverbank banners that promised "Americans and Vietnamese soldiers who come here will die," the Viet Cong limited their initial reaction to the allied presence.

At the allies' invitation, an increasing number of local woodcutters and fishermen visited Sea Float to have their axes sharpened and outboard motors repaired and to get medical treatment from U.S. Navy corpsmen or from the medical staff on board a VNN hospital ship. In addition to giving the visitors food and small gifts, Sea Float personnel carried out a measure of psychological warfare by informing them of their government's concern for their well-being and the Communists' failings. Freed by the PCF raiders from enemy tax collectors, the region's main waterways saw an increase in activity of commercial boats and sampans plying their trades.

In November, General Abrams endorsed Zumwalt's first-priority effort to establish a permanent South Vietnamese government presence in Ca Mau, in Operation Solid Anchor. Additional resources poured in. Navy Seabees built an airstrip, military structures, and schools ashore at Old Nam Can and nearby. U.S. Air Force planes defoliated the terrain surrounding both Old Nam Can and Sea Float with Agent Orange to deny the enemy cover and concealment. South Vietnamese ground troops reinforced the area's defense forces. With the increased security, civilians opened schools, restaurants, shops, charcoal kilns, and fish markets. In Richard Schreadley's words, "Nam Can was recovering rapidly as people who had been driven away from the Cua Lon and Bo De rivers returned to rebuild their lives."

In the early months of 1970, Navy SEALs, PCF raiders, and South Vietnamese Montagnards of a mobile strike force made life increasingly difficult for the enemy in the Ca Mau. On the moonlit night



NHHC VN Collection

In June 1969, the Navy positioned Sea Float, the main operating base for U.S. and South Vietnamese naval forces in the Ca Mau region, in the middle of the Cua Lon River. The enemy tried hard but failed to destroy Sea Float with swimmer-delivered mines and mortar and rocket attacks.

of 21 January, a patrol made up of ten strike force soldiers and a U.S. Navy UDT “frogman,” Chief Hospitalman Donel C. Kinnard, sprang an ambush on Communist guerrillas 20 miles east of Old Nam Can. At a range of 25 meters, they opened up on two motorized sampans moving along a canal. The enemy’s return fire with automatic weapons, RPGs, and grenades was surprising in its intensity. Undeterred, and despite wounds to his arms and legs, Kinnard charged and knocked out an enemy machine gun and then fought in the water with one of the assailants, killing a North Vietnamese lieutenant. Inspired by the bravery of the American, the Montagnards redoubled their fire on the guerrillas. When it was all over, the allies had killed 14 enemy troops and captured AK-47 rifles, B-40 RPG launchers, grenades, and sidearms. In recognition of his exemplary leadership and courage under fire, Kinnard was awarded the Navy Cross.

The enemy tried repeatedly but failed to put Sea Float out of operation. In April 1970, for instance, alert guards frustrated an attempt by VC swimmer-sappers equipped with Soviet-made underwater gear and explosives. The defenders’ grenades and rifle fire killed four attackers. That July, mines tore a hole in *Krishna* (ARL 38) anchored in the Cua Lon but failed to sink the ship. Later in the month the enemy was



NHHC VN Collection

The harsh, unforgiving terrain of the Ca Mau region made it tough going, even for these SEALs.



NHHC VN Collection

South Vietnamese civilians visit Sea Float. The protection provided by allied forces stationed on board Sea Float and in nearby waters stimulated civilian commerce on the rivers and ashore.



NA 80-G-K-40164

A Swift boat Sailor opens up with his twin .50-caliber machine guns against Viet Cong forces ashore.

more successful when they mined and capsized the VNN's LSSL-225, killing 17 South Vietnamese sailors.

Other warships came under fire on the Bo De River, which entered the Ca Mau Peninsula from the South China Sea. In August 1970, Lieutenant Commander David B. Robinson's patrol gunboat *Canon* (PG-90) was engaged in "harassment and interdiction" fire against suspected enemy positions on the shore. Suddenly, a VC platoon deployed on both banks opened fire on *Canon*. An exploding RPG round hit the gunboat's bridge, breaking Robinson's leg and lacerating his body with shrapnel. The badly wounded officer ordered his men to strap him to a stretcher and prop it upright so he could continue directing the battle. Only when *Canon* drove off the enemy ambushers and proceeded to a safe anchorage at Sea Float did the commanding officer consent to medical evacuation. Robinson received the Navy Cross.

The disestablishment of Sea Float in September 1970 occurred not because of enemy action but



NHHC VN Collection

Commander Thomas R. M. Emery, the Sea Float commander, briefs his attentive officers in preparation for a mission in the dangerous waters of the Ca Mau.

because the Solid Anchor base ashore was ready to take on the logistic support job. Soon after that date, the Navy towed the Ammi barges out of the area to serve other needs. As part of the Vietnamization

process, in April 1971, the Navy turned over control of Operation Solid Anchor to the Vietnam Navy. American naval advisors continued to serve at Old Nam Can until February 1973, one month before the withdrawal of all U.S. military personnel from South Vietnam.

Despite mortar attacks, minings, perimeter probes, and the assassination of municipal leaders and villagers, the enemy was unable before 1975 to eliminate the South Vietnamese government's control of the population living around Old Nam Can in the Ca Mau Peninsula.

### **A Hot Wind on Breezy Cove**

In addition to Sea Float, the Navy established Operation Breezy Cove to facilitate further penetration of enemy sanctuaries in the southern reaches of the Mekong Delta. On 26 September 1969, Lieutenant Commander L. H. Thames and ten PBRs from River Division 572 deployed to the mouth of Ong Doc, a river on the Gulf of Siam south of the U Minh Forest. By the end of the month, Seabees had moored an ATSB next to the north shore. A two-helicopter Seawolves' detachment operating from a pad ashore, onboard mortars and machine guns, and the weapons of the PBRs were to defend the austere

base. South Vietnamese troops and Navy SEALs deployed inland to protect this advanced tactical support base that was part of SEALORDS.

Within a few months, close to 500 Vietnamese refugees hoping for protection from the Viet Cong established a village (2,000 people lived there within a year) close to the ATSB. Aggressive patrolling by the PBRs drove enemy tax collectors from the Ong Doc and stimulated commerce on the river.

The enemy was not prepared to surrender his control of this area, a source of food especially during the annual rice harvest. In October 1969, the Viet Cong sprang an ambush on River Division 572, losing 14 guerrillas to the fire of the Seawolves' and the Black Ponies' aircraft but killing or wounding 13 Sailors and badly shooting up a PBR. After a ten-boat South Vietnamese PBR unit bolstered the forces at Ong Doc in November, enemy recoilless rifle fire sank one boat and damaged another. Both were recovered, repaired, and put back into operation.

The allies took a greater toll of the enemy. In December 1969, River Division 572 killed 40 Viet Cong guerrillas and SEALs captured another 17. Because of successful allied operations, for the first six months of 1970 there was little combat activity in

the operational area. Another factor may have been the U.S. and South Vietnamese offensive into Cambodia that drove Communist forces away from the border and disrupted their logistic support to units in the delta.

As if he had a premonition, in September 1970 Vice Admiral Jerome H. King Jr., COMNAVFORV, warned Commander Cyrus R. Christensen, in charge of Breezy Cove, to strengthen his defenses because he believed the ATSB was "an accident waiting to happen." Several days later the enemy



Navy Art Collection



NHHC VN Collection

Song Ong Doc on 21 October 1970, the morning after enemy forces destroyed the base in a sudden and devastating attack.

shot down an Army Cobra gunship and two Navy Hueys, killing two Sailors and wounding two others, over “VC Lake” not far from the base. Intelligence determined that a sizable and elite enemy unit had entered the operating area.

The crewmen of two VNN PBRs paid the price for lax behavior in such a dangerous war zone. On 6 October, VC swimmer-sappers found the allied sailors fast asleep on a nighttime waterborne guard post and attached explosives to the hulls of the two boats. The resulting explosions destroyed the PBRs and killed five South Vietnamese sailors and their American naval advisor, Gunner’s Mate 1st Class Edward W. Withee.

Anticipating that Breezy Cove was in enemy crosshairs, Christensen asked to move the ATSB to a safer location upriver. NAVFORV headquarters denied his request, concluding that without the ATSB presence there the enemy would find it easier to mine the river mouth. Instead, he was promised the future addition to his defense force of South Vietnamese ground troops. As a fall back, Christensen planned that in the event of a Viet Cong

assault on his moored base, he and his men would immediately take to the PBRs, riverine assault craft, and helicopters and fight from the middle of the river. Working with Christensen, the commanding officer of Coast Guard high endurance cutter *Bering Strait* (WHEC-382) mapped out sections of the river’s south bank to be saturated by rounds from the ship’s 5-inch gun in case of an attack.

The expected event occurred on the night of 20 October when a company-size force of enemy troops opened up on the ATSB from both sides of the river with mortars, rockets, and heavy machine guns. Despite 60 incoming rounds hitting the base within the first ten minutes of the attack, the American and Vietnamese sailors ran to their boats and helicopters and moved out of the kill zone. Fast-reacting Broncos from Binh Thuy joined with the river units and *Bering Strait* to pummel the enemy positions, ending the attack before daylight. In Christensen’s temporary absence, his executive officer Lieutenant William T. Dannheim led the fight that night, earning a Navy Cross. Nonetheless, the Viet Cong unit had utterly destroyed the ATSB, sunk two

PBRs at their moorings, killed two Americans, and wounded another 31 allied sailors.

The following month the Navy established a new Ammi pontoon base at a more defensible location close to the provincial capital of Ca Mau, and in December 1970, the Vietnam Navy took charge of the operation. South Vietnamese PBRs continued to patrol the Ong Doc and fight the Viet Cong for control of the area.

In April 1971, Navy and Coast Guard units sank a North Vietnamese trawler loaded with munitions off the delta. Soon after, they found another ship



NHHC VN Collection

Chief Quartermaster Billy A. Williams of River Division 543 and a South Vietnamese sailor on board a PBR in the Cua Dai River, November 1969.

grounded at the mouth of a delta river and empty; the Communists had retrieved her cargo. These measures were similar to Hanoi's failed attempts during Tet 1968 to compensate for the loss of land lines of communication by pushing seaborne infiltration. At that time, allied naval forces sank, captured, or forced five North Vietnamese munitions-carrying trawlers to abort their missions.

The enemy's weakness in the Mekong Delta after 1968 was reflected in their inability to prevent the allied advance into Cambodia in 1970 or to support the Easter Offensive of 1972, when for the first time in the war the allied command was able to divert an entire ARVN infantry division and two separate regiments from the delta to the fight north of Saigon.

## Operations in I Corps and the Rung Sat

In keeping with the new SEALORDS approach, early in 1969, PCFs began raiding operations in the Cua Dai River and its tributaries southeast of Hue in I Corps. These operations were systemized in April with the establishment of Operation Sea Tiger. The Swift boats initially generated numerous firefights with enemy troops operating from riverbank bunkers and other positions. The Task Force 115 commander was able to report that Sea Tiger forces had driven Viet Cong tax collectors from the Cua Dai and its tributaries; stimulated commercial commerce on those waterways; and prevented enemy units from crossing over them. During two months of operations, the PCFs destroyed 331 enemy bunkers and 142 sampans and killed 59 Communist soldiers; 17 Sea Tiger Sailors were wounded, but not one was lost.

At the end of September 1969, Sea Tiger forces pushed allied control on area rivers even further inland. At the request of Lieutenant General Herman Nickerson Jr., the III Marine Amphibious Force commander, Task Force Clearwater sent three PBRs of River Division 543 from Danang to the city of Hoi An, the waters around which had proven inaccessible to the larger PCFs. Following this successful operation, Vice Admiral Zumwalt assigned the eight PBRs of River Division 521 to Operation Sea Tiger in November and turned over the Perfume River patrol to the Vietnam Navy. Throughout 1969 and early 1970, the PBRs and PCFs of Sea Tiger conducted numerous combat operations, often in concert with U.S. amphibious forces and South Vietnamese and South Korean soldiers. In 188 firefights, Navy Sea Tiger forces killed or captured more than 500 enemy troops for the loss of 28 American Sailors and other allied personnel. These operations helped the South Vietnamese government gain control of the area's waterways and stimulated civilian river commerce.

## Success in the Rung Sat

Most of the offensive weapons in the allied arsenal—B-52 bombers, helicopter gunships, and fixed-wing attack aircraft; SEALs and other allied special forces;



NHHC VN Collection

River Division 593 PBRs move at high speed along a South Vietnamese waterway. The 593rd and other PBR units often joined forces with minesweepers to keep open the rivers between Saigon and the sea.

U.S. and South Vietnamese troops; and aerial defoliation with Agent Orange—were employed against the Viet Cong guerrillas operating in the Rung Sat. Actions by these forces had diminished but not ended the Communist campaign to close the Long Tau.

As part of the SEALORDS program to penetrate and pacify enemy strongholds, Zumwalt's staff engineered a comprehensive, multiservice, multinational campaign targeting the VC sapper battalion DOAN-10, the enemy's primary fighting force operating on the Long Tau. The unit actually worked from a base area in the Nhon Trach District of Bien Hoa Province north of the Rung Sat. At the end of June 1969, a force of U.S. and South Vietnamese PBRs and riverine assault craft; attack helicopters; and U.S., Australian, and Thai ground troops conducted a sweep through Nhon Trach and the northern part of the Rung Sat. The combined force destroyed four base camps and killed or captured 53 DOAN-10 fighters.

The allies followed up this effort with aggressive actions in late summer and fall by South Vietnamese

troops, provincial reconnaissance units, and SEALs that kept the enemy on the run in the Rung Sat. Heavy Army "Rome Plow" bulldozers and aerial-sprayed herbicides reduced the enemy's cover and concealment in the area. During November and December 1969 and January 1970, the enemy did not launch a single attack on the merchant ships transiting the Long Tau. At the end of his Vietnam tour, in February 1970, Lieutenant Robert W. Champion, the commanding officer of Mine Division 112, reported that after more than 2,000 combat sweeps by his force, the only enemy gear they recovered were 17 lengths of wire minus their mines.

The VNN took over complete responsibility for the patrol that year and performed well as U.S. naval forces withdrew from the war. Thus, after years of hard fighting and a comprehensive ground, naval, and air effort, the allies had finally established firm control of the crucial waterway to Saigon. ⚓



NHHC VN Collection

Sailors of the River Patrol Force salute as they transfer their unit's PBRs to the Vietnam Navy as part of the ACTOV (Accelerated Turnover to the Vietnamese) program. Beginning in 1969, the United States reinforced the VNN with hundreds of PBRs, PCFs, and riverine assault craft.

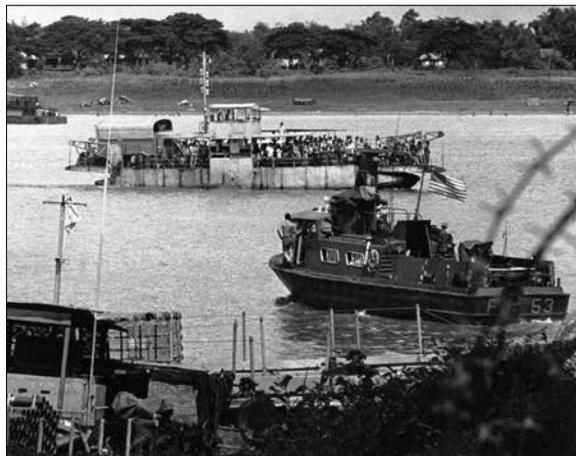
## THE END OF THE LINE FOR U.S. AND VIETNAMESE RIVER FORCES

The allied advance into Cambodia during the spring of 1970 brought the combined SEALORDS forces into a new riverine environment. On the morning of 9 May, more than a week after ground troops crossed the border, a Vietnamese-American naval task force under the overall command of a VNN officer proceeded north on the Mekong River to secure that vital waterway to the Cambodian capital of Phnom Penh. The U.S. contingent consisted of PCFs, ASPBs, PBRs, YRBMs, strike assault boats, a barracks ship, a landing craft repair ship, and a tank landing ship, as well as UH-1B helicopters and OV-10 fixed-wing aircraft. The Vietnamese flotilla comprised riverine assault craft, Swift boats, river patrol boats, and marine units. American naval advisors accompanied each Vietnamese vessel.

By the end of 9 May, the combined naval force secured Neak Luong, a strategic ferry crossing point on the river midway to Phnom Penh. Because of the strong U.S. domestic opposition to President Nixon's military "incursion" into Cambodia, no U.S. personnel proceeded north of Neak Luong (indeed, for the same reason, all U.S. forces were pulled out of Cambodia by 29 June). VNN units continued on to the Cambodian city and continued to guard the Mekong route for the next four years.

### ACTOV

The Nixon administration's main objective before pulling U.S. troops from the war was to prepare the South Vietnamese military to continue the fight against North Vietnam and its southern Communist allies. The Navy's part in this Vietnamization program was termed ACTOV (Accelerated Turnover to the Vietnamese); the Coast Guard effort was named SCATTOR (small craft assets, training, and turnover of resources). After Vice Admiral Zumwalt came on board as COMNAVFORV in September 1968, his staff drew up a plan to transfer



NHHC VN Collection

The Neak Luong ferry transports Cambodian civilians from one side of the Mekong River to the other under the protective guns of PCF-53 and other U.S. naval units. In May 1970, South Vietnamese forces secured the river between that town and Phnom Penh.

NAVFORV's river warfare forces and their support bases to the Vietnam Navy by the end of 1971.

The program also included the training of South Vietnamese sailors by American naval personnel in the operation, repair, and maintenance of U.S. riverine assault craft, PBRs, and PCFs.

In early 1969, Zumwalt directed the Naval Advisory Group to begin preparing Vietnamese sailors to man an anticipated navy of 40,000 men—twice the size of the Vietnam Navy in 1968—by the end of 1970. NAG ran recruit training centers at Saigon, Nha Trang, and Cam Ranh Bay. Later, the advisory group reduced the 12-week training regimen and emphasized on-the-job training for Vietnamese sailors. The more than 500 American officers and enlisted personnel in the Naval Advisory Group helped integrate Vietnamese sailors into the crews of U.S. PBRs, PCFs, riverine assault craft, and logistic support bases. When U.S. commanders were convinced their Vietnamese trainees were ready to handle the job by themselves, they sent the American naval personnel home and turned the unit over to VNN officers and men.



NHHC VN Collection

New recruits of the Vietnam Navy march from their naval base in Saigon. With the size of the South Vietnamese navy doubling between 1968 and 1970, training of new sailors became critical.

Under ACTOV, improving the living condition of the average South Vietnamese sailor and his family became a priority. Zumwalt recognized that a sailor living with his family in crowded, squalid housing, surviving on low, inflation-racked pay, and eating poorly hardly inspired him to fight hard for the Republic of Vietnam. Thanks to \$900,000 in U.S. Military Construction funds, Seabees and other American Sailors built numerous 500-square-foot cinder block “dependent shelters” at naval bases throughout the country. While well-intentioned, the dependent shelter program overseen by NAVFORV

did not fare well because many VNN sailors resisted locating their families on a military base subject to mortar and rocket attack and lacking a market where wives could work to supplement the usually meager family income. Somewhat more successful was the “pigs and chickens” program in which the Vietnamese raised farm animals on naval bases to consume as well as to sell at local markets where they might turn a profit. Zumwalt also worked to beef up the Vietnam Navy with combat craft. In December 1969, COMNAVFORV kicked off a program using local building yards and local labor to construct

replacement craft for the PBR and PCF. Both replacement types, called ferro-cement boats, were constructed with cement applied to a wire-mesh hull and then sprayed with a resin to seal the hull.

As entire units came under VNN command, control of the various SEALORDS operations passed to that naval service as well. In March 1970, the barrier along the Cambodian border was turned over to the Vietnam Navy, which renamed the operation Tran Hung Dao I. In May, Giant Slingshot and Sea Tiger became Tran Hung Dao II and Tran Hung Dao VII. The following month, in keeping with the focus of ACTOV, the SEALORDS commander took on additional duty as the operations deputy to the VNN chief of naval operations, Tran Van Chon. In July, the Vietnam Navy took sole responsibility for the Ready Deck operation, also assigned a Tran Hung Dao designator. That same month, the U.S. Navy ended its Task Force Clearwater operations in I Corps and transferred the last of its combatant craft to the VNN. With the U.S. turnover of all remaining PBRs, PCFs, and riverine assault craft at the end of 1970, the Vietnam Navy took command of Search Turn, Barrier Reef, and Breezy Cove in the Mekong Delta. The last SEALORDS operation, Solid Anchor, passed to VNN control in April 1971.

The Mobile Riverine Force ended operations in the summer of 1969 when the 9th Infantry Division redeployed to the United States and Task Force 117 turned over 64 CCBs, monitors, ASPBs, and ATCs to the Vietnam Navy. Task Force 116 stood down in December 1970, replaced by a new headquarters, Delta Naval Forces. The latter command directed the operations of HAL-3, VAL-4, and SEAL detachments—the only U.S. Navy units remaining in South Vietnam until their withdrawal in spring 1972.

By the end of 1970, the VNN mustered 32,000 men equipped with the U.S. Navy's frontline river combat craft. With its new responsibilities, the Vietnamese naval command reorganized the river forces. They grouped their riverine assault craft in riverine assault interdiction divisions and their PBRs into river interdiction divisions and river patrol divisions (RPDs). The RPDs were initially designated river patrol groups, so-called RPGs, but this

probably led to confusion in message traffic with one of the enemy's most potent weapons, the rocket propelled grenade. The United States bolstered existing RAGs with new boats and equipment. VNN river units performed reasonably well in SEALORDS operations in the delta and during the invasion of Cambodia but they soon faced a new challenge on the Mekong.

### **Convoy Battles on the Mekong**

As 1971 began, Communist Khmer Rouge forces interdicted Cambodia's Route 4, the main road from Kompong Som (formerly Sihanoukville), the main port for delivery of petroleum, oil, and lubricants (POL), to the capital Phnom Penh. On the Mekong River, North Vietnamese and VC forces also increasingly harassed tanker traffic so much so that by 7 January, the Cambodian government had only a few days' worth of POL on hand. The U.S. ambassador to Cambodia feared that without fuel, Cambodian air, ground, and naval operations would grind to a halt. In response, the U.S. and South Vietnamese governments agreed to protect merchant ship convoys proceeding on the Mekong from South Vietnam to Phnom Penh.

To command the operation and assist the Vietnamese and Cambodians in carrying out Operation Tran Hung Dao XVIII, COMNAVFORV



Rear Admiral H. Spencer Matthews Jr., tasked with overseeing the Mekong River convoys, interacts with officers of the Cambodian and Vietnamese navies on board his repair, berthing, and messing barge (YRBM) headquarters at Tan Chau.

Courtesy Michael W. Taylor

Vice Admiral King posted his deputy, Rear Admiral H. Spencer Matthews Jr., to Tan Chau, the last town on the Mekong before the river entered Cambodia. Until April, when he was relieved by a VNN officer, Matthews served as commander of the Mekong River convoy escort operation. King also sent Navy Lieutenant (j.g.) Michael W. Taylor, a NAVFORV field historian, to Tan Chau to serve as an interpreter with French-speaking Cambodians.

Matthews oversaw the operation from naval vessels positioned just north of Tan Chau; non-self-propelled repair, berthing, and messing barges *YRBM-20* and *YRBM-16* and repair barge *YR-71*. Except for the aircrews, however, Americans were prohibited from taking part in the convoy operations. At one point, as Matthews watched a South Vietnamese Swift boat head upriver for convoy escort duties, he exclaimed, "I sure wish I was in that boat. This is the *damnedest* war I ever fought!"

A Convoy Operations Commander (COC) assigned by the Vietnam Navy coordinated the merchant ship convoys steaming to and from Phnom Penh. For a typical ten-ship convoy, the South Vietnamese commander assembled 46 advance, escort, and reaction vessels. The first contingent, the advance group, consisted of four LCM minesweepers, two PBRs, a CCB for use by the COC, a monitor, and three ASPBs. It covered the convoy's flanks and provided a shield at likely ambush points. The escort group was made up of an LSSL convoy flagship, four

PCFs, and 20 PBRs. The reaction force of one CCB, two ASPBs, and five ATCs was prepared to land South Vietnamese ground troops for direct action against ambushing guerrillas. To complement these forces, Vietnamese army troops were directed to defend the riverbanks from Tan Chau to the Neak Luong ferry crossing; Cambodian troops were assigned riverbank protection from there to Phnom Penh. Cambodian Colonel Chea Sicoun, head of a liaison team at Tan Chau, coordinated Cambodian ground operations with the convoy planning process. Ironically, Sicoun had served as Prince Sihanouk's emissary to the Communists' headquarters (Central Office for South Vietnam, or COSVN) located in the jungled border area of Cambodia.

The U.S. Seventh Air Force directed units from the Air Force, Army (U.S.), Vietnamese air force, and Cambodian air force providing round-the-clock air support for the convoys along the 70-mile passage from Tan Chau to Phnom Penh. The HAL-3 Seawolves and VAL-4 Black Ponies joined the fight in February 1971.

With the successful completion of the first convoy on 18 January 1971, King expressed his view that the operation "provides ample evidence of benefits attainable from interservice and allied cooperation, and will provide an example of future such operations." He was especially pleased that the "air coverage provided the convoy left nothing to be desired." Reflecting the importance of air support, Rear Admiral Matthews on another occasion told an Air Force major that "if those helos aren't there, my ships are going to get sunk."

Between February and September 1971, 640 tankers, other fuel carriers, ammunition barges, and tugs in 32 convoys made the round trip between Tan Chau and Phnom Penh. The enemy attacked convoys 29 times with RPGs, recoilless rifles, mortars, automatic weapons, and mines.

To coordinate U.S., South Vietnamese, and Cambodian convoy escort, air support, and ground operations—no mean feat—Matthews convened several conferences at Tan Chau with top allied commanders including Vice Admiral King, Rear Admiral Chon, and the head of the Cambodian



Courtesy Michael W. Taylor

Navy Lieutenant (j.g.) Michael W. Taylor, who served as an interpreter and aide to Rear Admiral Matthews at Tan Chau and as a naval historian.



Courtesy Michael W. Taylor

A pair of U.S. Army light observation helicopters circles a pagoda in Cambodia looking for signs of the enemy.

Navy, Captain Vong Sarendy; brigadier generals from the U.S. Air Force, Army of Vietnam, and Cambodian army; and diplomatic officials from the U.S. Embassy in Phnom Penh.

On 10 February, in conjunction with a convoy's passage, South Vietnamese marines swept a bank of the river and along with U.S. air support, killed 41 enemy troops and captured recoilless rifles, machine guns, and AK-47s. The fighting killed or wounded 26 South Vietnamese soldiers and sailors. In a particularly fierce firefight on the Mekong, on 22 February, the enemy launched successive attacks and sank a barge loaded with one million rounds of small arms ammunition destined for Cambodian government troops and damaged another carrying 500-pound bombs that did not explode. Four civilian merchant mariners were wounded before Air Force and Army aircraft disrupted the ambush. Some of this action occurred within sight of Phnom Penh.

On St. Patrick's Day, 1971, Matthews, his flag lieutenant Thomas Leiser (a former U.S. Naval Academy football halfback and Roger Staubach's teammate), and the crew of an Army helicopter survived an accidental crash into a canal at the edge of the Tan Chau base.

A crewmember of an Army light observation helicopter was not so lucky at the end of March. Prohibited from attacking enemy positions in proximity to Cambodian religious or cultural sites, two Army aircraft moved in close to a pagoda suspected of harboring enemy troops but did not open fire on the building. The Communists deployed there shot down both aircraft, killing one crewmember and threatening to capture another. Army Captain G. Wayne Tingle, piloting a command and control helicopter

overhead, took a bullet through the body that then hit copilot Army Lieutenant Thomas Emerson in the head, knocking the latter unconscious. Bleeding profusely and with great difficulty, Tingle managed to keep the helicopter aloft. Just before Tingle passed out, Emerson came to and piloted the aircraft to safety. The Army awarded Tingle the Silver Star. It took most of the day before South Vietnamese troops and U.S. aircraft had destroyed the pagoda and its defenders and rescued the downed flier. The convoy then proceeded to Phnom Penh.

The Communists failed to halt any of the convoys and only briefly delayed one of them when the Americans led the operation. Before the employment of the Mekong River convoys, the POL consumption rate in Phnom Penh had decreased from 20,000 tons per month to 5,000 tons. By July 1971, the convoys were delivering 25,000 tons of POL each month to the Cambodian armed forces.

Despite this and other successful operations, once American troops departed from the war in 1972 and 1973, and the South Vietnamese and Cambodian ground forces in Cambodia were defeated, Communist pressure on the Mekong River route increased. In March 1973, enemy sappers

mined two ships at the Tan Chau staging area. The following month river ambushers destroyed two freighters, an ammunition barge, and a fuel barge and damaged another eight vessels. The last fuel and ammo convoy reached Phnom Penh on 26 January 1975, after losing three ships to enemy attack. On the return trip, the convoy ran into a Communist minefield and an ambush that sank several more vessels. That was it for the Mekong River convoys. The last fuel supplies to get into Phnom Penh and the last Cambodian government officials to get out of the capital in April 1975 could do so only by air. Soon afterward, Pol Pot, leader of the brutal Khmer Rouge Communists, observed that “[cutting] the Mekong was the key to our victory.”

### **The End in Vietnam**

From the American military withdrawal from South Vietnam in March 1973 to the fall of Saigon in April 1975, the Vietnam Navy appeared to be a formidable force. The 42,000-man navy operated 1,500 ships and craft, including 293 PBRs, 107 PCFs, 84 ASPBs, 9 CCBs, 64 monitors, 100 ATCs, and 16 minesweeping boats. Communist forces were unable to shut down South Vietnam’s ports or cut the river lifelines that connected Saigon and Hue to the sea. The enemy continued to disrupt commerce and waterborne transportation in the Mekong Delta but proved unable to seize control of the region or the nation’s rivers. Neither infiltration by sea nor infiltration from Cambodia appreciably changed the balance of power in southern South Vietnam.

Indeed, South Vietnamese forces in general and the VNN in particular kept the enemy on the defensive in the delta and registered several notable victories. During 1973, ARVN forces drove the enemy from a base area on the Cambodian border near the Gulf of Siam and in 1974 inflicted heavy casualties on North Vietnamese forces in the region. Early in 1975, the VNN’s newly reappointed CNO, Admiral Chung Tan Cang, created Riverine Task Force 99 based at Nha Be. The flag officer took that action for political reasons—unfortunately a routine practice in the politicized South Vietnamese armed forces—but the unit fought hard during the last chaotic fight for the

upper delta and Saigon. A formation of river patrol boats intercepted and defeated an attack on a village southwest of the capital by the North Vietnamese 5th Division. On 17 April, Task Force 99 led by Captain Le Huu Dong surprised a large number of enemy troops bathing in the Vam Co Tay. Fire from the task force’s “Zippo” flame-throwing boats and other combatants decimated the unit. These and other actions stymied the North Vietnamese effort to cut Route 4 into Saigon until the very end of resistance in all South Vietnam on 29 April 1975.

The final battles for South Vietnam involved offensives by major ground forces armed with tanks, armored personnel carriers, heavy artillery, and well-armed infantry. The Republic of Vietnam was severely hampered in its fight against this threat. For South Vietnam, the U.S. Congress appropriated only \$700 million for fiscal year 1975. Compelled to choose which of the military arms it would favor in the provision of meager financial resources, the government of President Nguyen Van Thieu picked the army and the air force.

Because South Vietnam’s inland waterway and coastal environments were relatively secure, Saigon brought down the budget axe on the navy’s neck. The VNN’s operational budget was slashed by 50 percent and its river combat and patrol activities by 70 percent. The government laid up over 600 river and harbor craft and 22 ships to conserve scarce ammunition and fuel.

Hanoi’s last offensive started with attacks in the mountains of central South Vietnam and spread to the northern provinces. Communist ground forces then stormed Hue and Danang and moved relentlessly south to the gates of Saigon. For once in the long war, the enemy did not make a big push in the Mekong Delta; the main event was now the fight for the South Vietnamese capital.

In April 1975, the Vietnam Navy’s river warfare forces came to the fore in an appropriate but tragic finale when they steamed down the Bassac, Mekong, and Long Tau rivers, and headed out to sea with tens of thousands of South Vietnamese citizens who had no desire to live in the soon-to-be Socialist Republic of Vietnam.

## Conclusion

The river warfare forces of the United States and its South Vietnamese ally did not—could not—ensure victory in a war decided by massed ground combat divisions fighting in triple-canopy jungles, dense forests, rugged mountains, and arid plateaus. But these same river forces were indispensable to operational success in the strategically vital Mekong Delta and on the broad rivers of northern South Vietnam.

The River Patrol Force, the Army-Navy Mobile Riverine Force, and the Vietnam Navy River Force helped doom the enemy's Tet Offensive of 1968 in the delta and enabled the allies to keep their forces fighting at Hue and Khe Sanh supplied with ammunition and fuel. The success of SEALORDS and other operations helped the allies expand the Saigon government's political and military presence in southern Vietnam, secure the river approach to Saigon, mount the invasion of Cambodia in 1970, and frustrate the enemy's drive toward Saigon in 1972. Until the end, the Mekong River convoys defended by South Vietnamese and Cambodian river forces were the only feasible means for supplying the government in Phnom Penh with bulk supplies of fuel and ammunition. Partly because of the strength of the VNN river forces, the Mekong Delta was one of the last areas to fall into enemy hands in 1975.

With little modern river warfare experience and no doctrine of its own to follow, the U.S. Navy proved adept at organizing, equipping, training, deploying, and supplying combat-ready forces. The service skillfully adapted former civilian craft, such as the PBR, amphibious vessels, and aircraft, to the riverine combat mission or tested and dismissed other equipment as unsuitable, such as the patrol air cushion vehicle. Leaders and staffs developed the innovative MRF afloat base, mobile base, and advanced tactical support base concepts for the logistic support of river forces. The operators developed the tactics and procedures they considered the most effective based on experience for their particular unit, geographical area, or physical environment; typically, there was no one-size-fits-all solution.

By the end of the war, the Vietnam Navy, particularly its river command, had become a

combat-hardened force that fought and won many battles and secured the country's inland waterways. Capable leaders directed Tran Hung Dao operations (former SEALORDS operations). VNN units, liberally supplied by the Vietnamization program with first-line craft and weapons, secured the major delta population centers, rivers, and canals. Longtime problems of the VNN—politicization of the officer corps, sometime poor leadership, low morale, desertion, corruption, and indifference to preventive maintenance—continued to hamper the service, but they were much less in evidence in 1975 than they were in 1965. A more serious danger to the VNN's survival was the drastic cutback in military assistance by the U.S. government during 1973–1975 that starved the service of essential combat craft, ammunition, and fuel.

The Vietnam War ended long ago, but the experience and expertise gained by America's river warfare forces continues to enlighten more recent military operations. American military advisors worked closely with the armed forces of Columbia during the latter part of the 20th century in successful riverine campaigns against Marxist guerrillas. Based on the successful use of mobile bases and advanced tactical support bases in Vietnam, the U.S. Navy employed similar afloat bases in the Arabian Gulf during the Tanker War of the 1980s. Several river patrol squadrons carried out more than 2,000 patrol and interdiction missions on the broad rivers of Iraq during Operation Iraqi Freedom. In short, river warfare remains a significant aspect of modern armed conflict and draws from the experience of 20th-century armed conflicts, particularly the Vietnam War. ↴

## The Authors



**Edward J. Marolda** has served as Acting Director of Naval History and Senior Historian of the Naval Historical Center (redesignated in December 2008 the Naval History and Heritage Command). He has written a number of books on the U.S. Navy's modern experience in Southeast Asia, including *From Military Assistance to Combat, 1959–1965*, vol. 2 (with Oscar P. Fitzgerald) in the official series *The United States Navy and the Vietnam Conflict*; *By Sea, Air, and Land: An Illustrated History of the U.S. Navy and the War in Southeast Asia*; *Aircraft Carriers*, no. 4 in the Bantam series *The Illustrated History of the Vietnam War*; and *Operation End Sweep: A History of Minesweeping in North Vietnam*. He inaugurated and then served as series editor for the Command's commemorative

booklets on the Navy in Korea and the follow-on anthology *The U.S. Navy in the Korean War* (Naval Institute Press, 2007). In 2012 the Command published Dr. Marolda's *Ready Seapower: A History of the U.S. Seventh Fleet*, which covers the fleet's extensive Vietnam War experience. He is also coauthor (with Robert J. Schneller Jr.) of *Shield and Sword: The United States Navy and the Persian Gulf War* (Naval Institute Press, 2001). As an adjunct professor at Georgetown University, Dr. Marolda has taught courses on the Cold War in the Far East and the Vietnam War. He holds degrees in history from Pennsylvania Military College (BA), Georgetown University (MA), and George Washington University (PhD).



**R. Blake Dunnavent** is an associate professor of history at Louisiana State University in Shreveport. He is the author of *Brown Water Warfare: The U.S. Navy in Riverine Warfare and the Emergence of a Tactical Doctrine, 1775–1970*. He also authored chapters in two books: “Maverick—Elmo Russell Zumwalt, Jr. (1920–2000),” in *Nineteen Gun Salute: Case Studies of Strategic and Operational Naval Leadership during the 20th Century*, John B. Hattendorf and Bruce A. Elleman, eds. (Naval War College Press, 2010); and “Battle for the Mekong: The River War in Vietnam,” in *Rolling Thunder in a Gentle Land*. He has contributed chapters in other works and encyclopedia entries relating to the U.S. Navy and riverine warfare. A frequent lecturer, Dunnavent spoke at the U.S. Naval Institute's Applied Naval History Conference “Riverine Warfare: Back

to the Future” and at the Camp Lejeune Marine Corps base on the historical antecedents of riverine warfare as applied to contemporary operations. He earned a BA in broadcast journalism from Abilene Christian University (1990), and MA (1992) and PhD (1998) degrees in history from Texas Tech University.

## Acknowledgments

We are especially grateful to Rear Admiral Jay DeLoach, USNR (Ret.), and Captain Henry J. Hendrix, USN (Ret.), successive directors of the Naval History and Heritage Command (NHHC), for their unstinting support of this project. Equally deserving of our thanks are Admiral Bruce Demars, USN (Ret.), Vice Admiral Robert Dunn, USN (Ret.), and Captain Todd Creekman, USN (Ret.), distinguished leaders of the Naval Historical Foundation who enthusiastically sponsored this booklet that recognizes the service and sacrifice in Vietnam of our river warfare Sailors. NHHC staff members Wendy Sauvageot, Debra Barker, Caitlin Conway, and Amy Carfagno; photo curator Robert Hanshew; scholars John Sherwood, Gregory Martin, and Tim Francis; and

series coeditor Sandra Doyle deserve high praise for helping to bring this booklet to fruition. The final product benefited greatly from the thorough critique by Dr. Sherwood, a distinguished historian of the U.S. Navy and the Vietnam War. We also thank the following Navy veterans of the river war for their incisive reviews of the manuscript: Jim Reckner, Tom Cutler, Peter Swartz, Tom Barnett, Frank Free, Gordon Peterson, Bruce McCamey, and Wey Symmes. Special thanks go to Michael Taylor for his personal insight and information on the Mekong River convoys and to Sharlyn Marsh who graciously approved our use of paintings by her father, renowned naval artist R. G. Smith. Lastly, we thank all of America's brown water warriors past and present for their courage, dedication, and service to the nation.

## Suggested Reading

Bruhn, David D. *The U.S. Navy's Coastal and Inshore Minesweepers, and the Minecraft That Served in Vietnam, 1953–1976*. Wooden Ships and Iron Men, vol. 3. Westminster, MD: Heritage Books, 2011.

Cutler, Thomas J. *Brown Water, Black Berets: Coastal and Riverine Warfare in Vietnam*. Annapolis, MD: Naval Institute Press, 1988.

Dunnavent, R. Blake. *Brown Water Warfare: The U.S. Navy in Riverine Warfare and the Emergence of a Tactical Doctrine, 1775–1970*. Gainesville: University Press of Florida, 2003.

\_\_\_\_\_. "Battle for the Mekong: The River War in Vietnam." *Rolling Thunder in a Gentle Land*. London: Osprey, 2006.

Friedman, Norman. *U.S. Small Combatants, Including PT-Boats, Subchasers, and the Brown-Water Navy: An Illustrated Design History*. Annapolis, MD: Naval Institute Press, 1987.

Fulton, William B. *Riverine Operations, 1966–1969* in series Vietnam Studies. Washington: Department of the Army, 1973.

Hooper, Edwin Bickford, Dean C. Allard, and Oscar P. Fitzgerald. *The Setting of the Stage to 1959*. The United States Navy and the Vietnam Conflict, vol. 1. Washington: Naval Historical Center, 1976.

Larzelere, Alex. *The Coast Guard at War: Vietnam, 1965–1975*. Annapolis, MD: Naval Institute Press, 1997.

Marolda, Edward J. *By Sea, Air, and Land: An Illustrated History of the U.S. Navy and the War in Southeast Asia*. Washington: Naval Historical Center, 1994.

Marolda, Edward J., and Oscar P. Fitzgerald. *From Military Assistance to Combat, 1959–1965*. The United States Navy and the Vietnam Conflict, vol. 2. Washington: Naval Historical Center, 1986.

Schreadley, Richard L. *From the Rivers to the Sea: The U.S. Navy in Vietnam*. Annapolis, MD: Naval Institute Press, 1992.

Sherwood, John Darrell. *War in the Shallows: U.S. Navy Coastal and Riverine Warfare in Vietnam, 1965–1968*. Washington: Naval History and Heritage Command, forthcoming.

Symmes, Weymouth D. *This is Latch: The Story of Rear Admiral Roy F. Hoffmann*. Missoula, MT: Pictorial Histories Publishing Company, Inc., 2007.

Veith, George J. *Black April: The Fall of South Vietnam, 1973–1975*. New York: Encounter Books, 2012.

Zumwalt, Elmo R., Jr. *On Watch: A Memoir*. New York: Quadrangle Press/The New York Times Book Co., 1976.

## Publisher's Note

The Naval History and Heritage Command extends a grateful thank-you to the Naval Historical Foundation for making the U.S. Navy and the Vietnam War series possible. They generously sponsored not only the authors' work on this booklet, but also the subsequent editorial services that helped make it a reality. The NHHC is grateful for the NHF's support, and its dedication to telling the story of this important era in the Navy's history.



NHHC K-40174

Front cover: A monitor of the Army-Navy Mobile Riverine Force (MRF) fires at the enemy in South Vietnam's Mekong Delta.







DEPARTMENT OF THE NAVY  
WASHINGTON, DC

[www.history.navy.mil](http://www.history.navy.mil)

ISBN 978-0-945274-73-5

