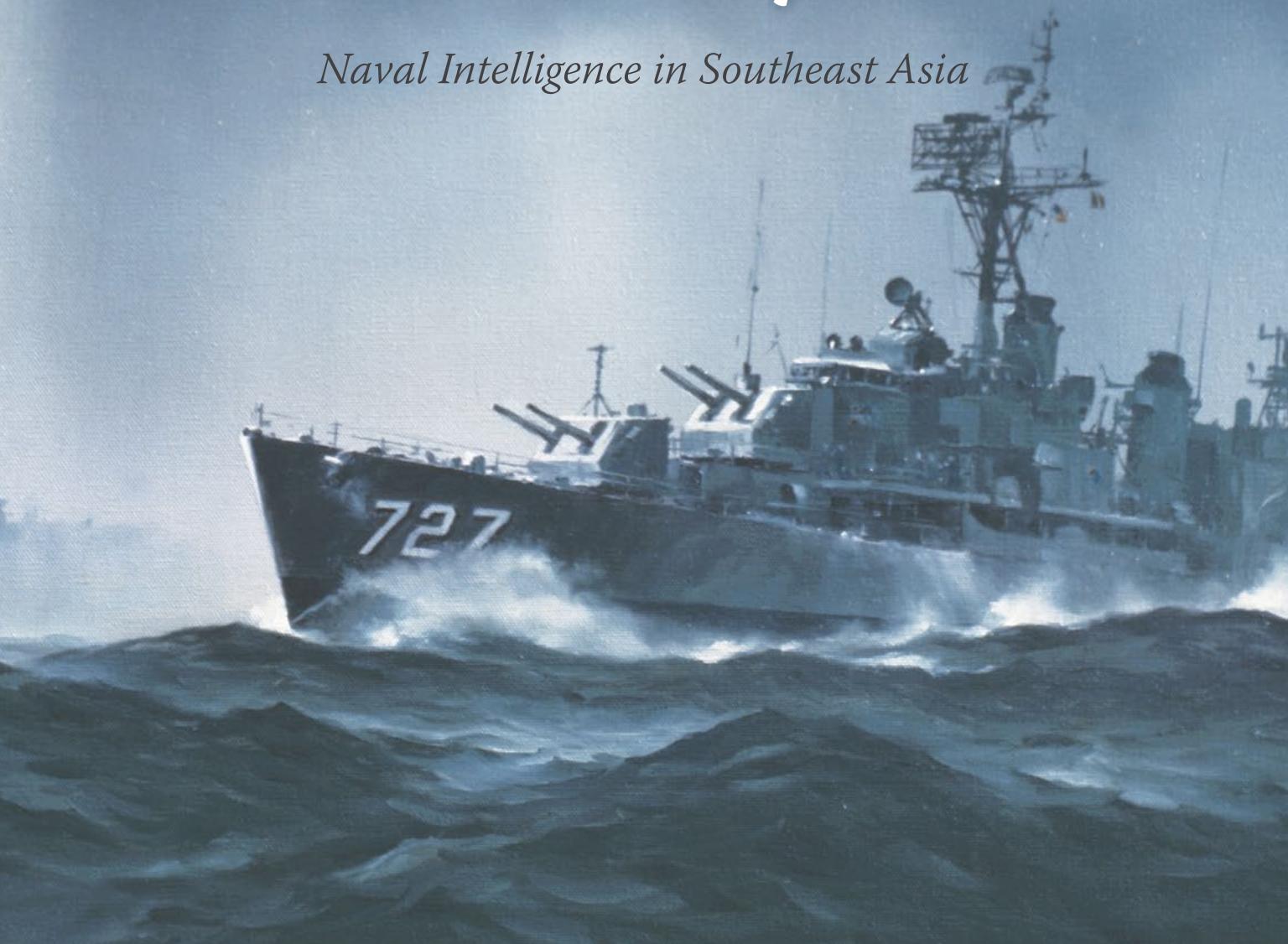




Knowing the Enemy

Naval Intelligence in Southeast Asia



Richard A. Mobley and Edward J. Marolda



Front Cover: Detail from *Sudden Squall* by R. G. Smith.

THE U.S. NAVY AND THE VIETNAM WAR
Edward J. Marolda and Sandra J. Doyle, *Series Editors*

Knowing the Enemy

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Richard A. Mobley and Edward J. Marolda



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President Lyndon B. Johnson, flanked by Secretary of Defense Robert S. McNamara (bottom right) and Chief of Naval Operations Admiral Thomas H. Moorer, during a visit to aircraft carrier *Enterprise* (CVAN-65).

INTRODUCTION

Intelligence figured prominently in the causes, evolution, and results of the Vietnam War. At the national level the National Security Council (NSC), the Central Intelligence Agency (CIA), the National Security Agency (NSA), the Defense Intelligence Agency (DIA), the State and Defense departments, government-contracted “think tanks,” and a host of other organizations gathered and analyzed intelligence. The Office of Naval Intelligence (ONI), while directly serving the Navy, also provided the national security establishment with comprehensive analyses of broad international developments. The dedicated professionals in these agencies labored to identify the nature of the threat faced by the United States in Southeast Asia. They debated whether North Vietnamese leaders took their orders from Moscow and Beijing or charted an independent course, and they argued over the extent of external support for the insurgency in South Vietnam. There were heated disagreements over how much control Hanoi exercised over the National Liberation Front (NLF) in South Vietnam (the Viet Cong [VC]). NSA, for instance, weighed in on this issue in 1961 when it discovered through communications intercepts that North Vietnam employed a clandestine radio network that linked Hanoi with 114 Viet Cong receiving stations in South Vietnam. Other agencies also drew conclusions about the enemy’s capabilities and intentions. Analysts attempted to discern which of the leaders in Hanoi had the most clout in guiding the strategy to be employed against the South Vietnamese and their American allies. A major question was the likelihood of the People’s Republic of China (PRC) or the Soviet Union (USSR) intervening directly in the conflict.

The United States and its allies lost the Vietnam War in large part because American leaders

failed to understand their primary opponent—the Democratic Republic of Vietnam (DRV). Presidents John F. Kennedy and Lyndon B. Johnson and their principal political and military advisors developed a strategy based on the assumptions that U.S. military power would in fairly short order compel North Vietnam to cease its support of the Communist insurgency in South Vietnam; that Hanoi would relent under a cascade of U.S. Navy and Air Force bombs; and that U.S. forces in South Vietnam would prevent a Communist victory there. In contrast, America’s enemies demonstrated that they intended to fight—despite the heavy cost in resources and their citizens’ lives—until they had united all of Vietnam under the Communist flag.

As Washington’s initial strategic assumptions proved false, and despite the national intelligence community’s accurate appraisal of the enemy’s determination to fight on to victory, Johnson and his successor, Richard M. Nixon, redoubled the military effort in hopes of compelling Hanoi to negotiate an end to the war—at an advantage to the United States. This goal also proved illusory because the enemy held the strategic initiative throughout the war and more often than not beat the forces of America’s Vietnamese, Laotian, and Cambodian allies on the battlefield. Nonetheless, devastating U.S. air strikes, the mining of Haiphong in 1972, and North Vietnam’s growing isolation from the international Communist movement persuaded Hanoi to sign the Paris Agreement on Ending the War and Restoring Peace in Vietnam on 27 January 1973.

The U.S. Navy’s intelligence establishment, while sharing in the overall national-level interpretive successes and failures, routinely provided good intelligence support to naval operating forces and saved American lives throughout the Vietnam War. Naval intelligence enabled the aircraft of Task Force

77 to operate effectively in the hotly contested skies of North Vietnam and over the heavily defended Ho Chi Minh Trail in Laos. Timely intelligence helped the ocean patrol forces of Operation Market Time negate the enemy's seaborne infiltration of war materials into South Vietnam. Intelligence support significantly aided the Navy's riverine units in their operations to deny the enemy control of the Mekong Delta. Finally, naval intelligence organizations in the United States, in the Western Pacific, and in South Vietnam provided vital information on the movement of Communist forces afloat and ashore and the importation of war materials into North Vietnam and Cambodia from the Soviet Union, the People's Republic of China, and other nations.

Through much of the Vietnam War, the national intelligence community had an uneven understanding of the other side. The Washington-based agencies developed a good appraisal of the North Vietnamese order of battle, support from the other Communist nations, and various enemy operational and tactical methods. On the other hand as Richard Helms, former head of the CIA, has observed, Washington failed to acquire solid intelligence on the enemy's decision-making process at the Hanoi level. No U.S. agents penetrated the leadership circle around Ho Chi Minh. The intelligence organizations, including those in theater, provided inconclusive evidence of the success or failure of U.S. attempts to interdict the Ho Chi Minh Trail and the enemy's capabilities and intentions prior to the Tet Offensive of 1968.

Since the war, scholars have been hampered by their inability to access sensitive documents held in the government offices, archives, research institutions, and libraries of the DRV, USSR, and PRC. So-called "Kremlinologists" and other Western analysts earned fame developing theories based on a small amount of credible information from various sources. Since the end of the Cold War, however, the release, and in some cases translation into English, of high-level strategy and policy documents housed in repositories in Hanoi, Beijing,

and Moscow have sparked a robust investigation of the events of the war. Numerous Russian, Chinese, and Vietnamese veterans have published memoirs, spoken publicly, and sat for interviews on their experiences in the conflict.

These materials, including the Socialist Republic of Vietnam's official history of the war, make it clear that Hanoi could not have prevailed against the United States had Moscow and Beijing not provided massive amounts of military assistance. These Communist countries helped North Vietnam build one of the world's most formidable air defense systems and armed Communist military forces with advanced aircraft, tanks, and artillery. China also helped North Vietnam rebuild the heavily bombed railroad and road systems, bridges, and industrial facilities. Of equal importance Mao Zedong's nation eventually deployed over 320,000 troops to North Vietnam, freeing the latter country to send most of its soldiers to fight in the South. The records released after the Cold War also detail the enemy's intelligence and counterintelligence programs, some of which proved especially effective in anticipating and thwarting U.S. operations.

The high security classification of U.S. information relating to the Vietnam War has until recently limited our understanding of how the naval intelligence community accomplished its secretive mission. Not only were day-to-day operations classified, but in most cases secrecy hampered a detailed public discussion of most of the organization's missions that contributed to the wartime intelligence effort. Consequently, the larger Navy and national populations often had little understanding of either the magnitude or impact of the Navy's multiple intelligence efforts. Following U.S. government declassification efforts spanning decades, we can at last acknowledge the efforts that demanded intellectual acumen, dedication to the profession, and on occasion the sacrifice of lives. The thousands of declassified documents now available afford us ample evidence to gauge the scope of naval intelligence efforts even though

some of the information on sources and methods of intelligence remain classified.

To capture the broad scope of multiple naval intelligence efforts, this study discusses the work of commands focused primarily on the collection or analysis of intelligence, whether or not they had the word “intelligence” in their names. The Naval Security Group (NSG), Naval Investigative Service (NIS), and Direct Support Units (DSU), for example, made huge intelligence contributions to the war effort. These and other organizations gathered different types of intelligence, for instance signals intelligence that included communications intelligence (COMINT) and electronic intelligence (ELINT), human intelligence (HUMINT), and imagery intelligence from satellites and aircraft.

Officer and enlisted personnel engaged in intelligence collection often did their dangerous but vital work in direct contact with the enemy. The naval aircrews of reconnaissance aircraft flying their missions over Southeast Asia suffered high casualty rates. For example, the highly secretive Aerial Observation Squadron (VO) 67 lost 20 air crewmen killed during only two months of sensor emplacement missions over North Vietnam and Laos. Combat took the lives of SEAL commandos and Naval Intelligence Liaison Officers (NILOs), whose primary duties entailed gathering intelligence on North Vietnamese and Viet Cong combat units and strongholds and the movement of supplies in the Mekong Delta.

Not only naval but national intelligence organizations served the Navy’s need for accurate, timely information on the enemy. The National Security Agency and associated field sites in the combat theater, including those of the Naval Security Group, directly supported warships and aircraft squadrons operating off North Vietnam’s shores and in the skies over Haiphong and Hanoi. CIA U-2 and A-12 aircraft provided film of enemy military concentrations in North Vietnam and southern China. The National Photographic Interpretation Center (NPIC), a forerunner to today’s National

Geospatial-Intelligence Agency, provided the fleet with comprehensive imagery readouts of North Vietnam’s naval and other military capabilities. ↴



Southeast Asia.

INTERPRETATION OF THE THREAT TO SOUTHEAST ASIA

In 1959 the U.S. national security establishment concluded that the People's Republic of China and the Democratic Republic of Vietnam had finally decided to achieve their foreign policy goals through violence and armed struggle. Mao Zedong publicly pledged China's support to Communist insurgent movements in Indonesia, Malaya, and Indochina, including Laos and South Vietnam. The Office of Naval Intelligence feared that "further development of the Chinese Communist hard line could lead to new emphasis on the development of indigenous Communist guerrilla capabilities in various parts of Southeast Asia, and possibly even to limited war

adventures" by Beijing. That May, Ho Chi Minh, Le Duan, and the other leaders of North Vietnam opted for armed struggle to destroy the non-Communist government of South Vietnam headed by President Ngo Dinh Diem. North Vietnam began construction of what later became known as the Ho Chi Minh Trail from North Vietnam, through southern Laos, and into Cambodia and South Vietnam. Communist training "cadres"—fighters steeped in guerrilla warfare—and military supplies began flowing down the trail. In 1960 Communists in South Vietnam, under Hanoi's guidance, created the National Liberation Front to fight the government of the Republic of Vietnam.



Admiral Harry D. Felt, Commander in Chief, Pacific, meets with Secretary of Defense Robert S. McNamara and Chairman of the Joint Chiefs of Staff General Lyman L. Lemnitzer in early 1962 to discuss the crisis situation in Indochina.

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To secure the Ho Chi Minh Trail, in 1959 North Vietnam and China began providing significant military assistance and advice to an indigenous Laotian Communist movement, the Pathet Lao. From 1959 to 1962 Pathet Lao guerrillas supported by North Vietnamese regular units battled the forces of the Royal Laotian Government. American leaders became especially concerned that a Communist victory in Laos would increase the threat to Thailand, Cambodia, and South Vietnam.

One of the first times the U.S. Seventh Fleet provided direct intelligence support to the South Vietnamese government occurred in late 1962. With the possibility of future U.S. amphibious, mine, and coastal patrol operations along the coast, Admiral Harry D. Felt, Commander in Chief, Pacific (CINCPAC), ordered a study of South Vietnam's beaches. In January 1962 high-speed transport *Cook* (APD-130) conducted a survey of beaches from the northern provinces of the country near the Demilitarized Zone (DMZ) to Vung Tao southeast of Saigon. Underwater demolition team (UDT) "frogmen" went ashore and gathered information on beach gradients, tides, and underwater obstacles. In early 1963 Marines from *Weiss* (APD-135) investigated other potential landing sites along the coast but this mission did not go unnoticed by the Viet Cong. Guerrillas sniped at the men when they went ashore near Danang and later near Vinh Chau in the Mekong Delta.

In 1962 Seventh Fleet reconnaissance planes completed the mapping of South Vietnam and other areas in Indochina. In addition, the Navy upgraded its photo production center at Naval Air Station (NAS) Cubi Point to a "Special Fleet Lab." The facility at the Naval Air Station Cubi Point in the Philippines and Heavy Photographic Squadron 61 (VAP-61) kept two photo interpretation teams in readiness for emergency Seventh Fleet requests. The Navy continued upgrading facilities at Cubi in 1964 by building a full-fledged photo interpretation center—Fleet Intelligence Center Pacific Facility (FICPACFAC). Throughout the war, FICPACFAC

would directly support the Seventh Fleet with detailed readouts of enemy installations, defenses, and lines of communication and rapid readouts of fleet photography of suspect infiltration vessels, among other products.

The primary mission of U.S. naval personnel in South Vietnam during the late 1950s and early 1960s was to serve as advisors and work to improve the operational effectiveness of the Vietnam Navy (VNN). After approval by Washington in September 1962, Captain Joseph B. Drachnik, head of the advisory group's Navy Section, established a two-week naval intelligence course for the VNN. Lieutenant Commander Philip B. Shepard and Lieutenant (j.g.) Ray B. Huttig provided instruction to more than 200 South Vietnamese officers by mid-1963. ♣



These RA-3B Skywarrior reconnaissance planes of Heavy Photographic Squadron 61 (VAP-61) operated in conjunction with the Special Fleet Lab at Cubi Point Naval Air Station in the Philippines to collect information on North Vietnam's air defenses.



A South Vietnamese officer of the Coastal Force uses his binoculars to detect suspicious activity by any of the fishing and commercial vessels moving along the shore.

THE QUESTION OF SEABORNE INFILTRATION

One of the most hotly contested issues of the Vietnam War was the extent of North Vietnam's use of the sea to transport arms, ammunition, and military supplies to Viet Cong units along the coast of South Vietnam. Early in the conflict, the South Vietnamese established a Coastal Force, often referred to as the "Junk Force" for its primary patrol vessel. Paramilitary sailors clad in black pajama-like uniforms and operating from junks all along the coast checked the identity papers of fishermen and other boatmen. During 1962 and 1963 the Coastal Force captured more than 300 enemy sampans and other vessels, and even though most were engaged in intracoastal movement, they discovered only a few boats that had begun their journeys in North Vietnam or Cambodia.

Admiral Felt doubted that there was significant seaborne infiltration from North Vietnam but decided to order a one-time patrol effort to affirm or deny its existence. Of more importance to him was to give the VNN an opportunity for training with the Seventh Fleet. In December 1961 U.S. and South Vietnamese units inaugurated surface and air patrols from the 17th parallel eastward to the Paracel Islands in the South



Mainland Southeast Asia.

China Sea. U.S. and South Vietnamese naval forces mounted a similar effort in the Gulf of Thailand to evaluate any infiltration from Cambodia. The two navies did not discover significant infiltration in either of the operational areas so the admiral discontinued the anti-infiltration patrols off South Vietnam on 1 August 1962. Captain Drachnik later observed



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A Neptune P2V patrol plane inspecting a suspicious junk in the South China Sea.

that “I was convinced in my mind . . . that during those years there was no effective infiltration by sea . . . and Mr. [Secretary of Defense Robert S.] McNamara told me later when I was on his staff in the Pentagon that he too was convinced.”

Ironically, and coincidentally, in 1963 North Vietnam launched a major seaborne infiltration effort with 50- to 100-ton vessels. North Vietnamese trawlers of the 125th Sea Transportation Unit made eight trips to South Vietnamese waters in 1963. The steel-hulled vessels transported tons of arms and ammunition to Viet Cong forces in the Mekong Delta and central South Vietnam. Sometimes these vessels flew the flag of the People’s Republic of China to conceal their origin. Typically, the trawlers sailed to points off South Vietnam beyond the patrol sectors of the VNN and on moonless nights quickly dashed to the beach to offload their cargoes. In other cases, the trawlers offloaded their cargoes to waiting

sampans and smaller vessels. U.S. intelligence agencies, including the Office of Naval Intelligence, later determined that the maritime infiltration of war materials by these ships increased sixfold from 1963 to 1964. But the Coastal Force did not discover any of the infiltrating ships during that period.

To determine the source and extent of the enemy’s transport of fighting men and war materials into the Mekong Delta, in January 1964 Admiral Felt dispatched a nine-man Navy team to Saigon. After visits with naval advisors and other naval personnel in-country, Captain Philip H. Bucklew’s group issued their findings, thereafter labeled the “Bucklew Report.” The report concluded that the Ho Chi Minh Trail was North Vietnam’s primary conduit for infiltration of men and supplies into the delta. Bucklew and his team added that in their view, the enemy used the sea route only for top priority items and key personnel, not high-volume traffic. ↴



A North Vietnamese trawler that attempts to deliver war materials to the Viet Cong during the war burns after U.S. Navy and U.S. Coast Guard patrol forces intercept the ship on the coast of South Vietnam.



A Chinese-supplied AK-47 assault rifle captured by allied forces in South Vietnam.

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An EA-3B signals intelligence aircraft of VQ-1.

USNI

INTELLIGENCE GATHERING IN LAOS

In the wake of President Diem's assassination by officers of his armed forces on 1 November 1963, Hanoi accelerated the movement of men and materials into South Vietnam via the Ho Chi Minh Trail. To secure that corridor North Vietnamese leaders ordered attacks on troops of the Royal Laotian Government. Alarmed by this development in Laos, supposedly neutralized by international agreement at Geneva in 1962, Laotian Prime Minister Souvanna Phouma authorized the United

States in May 1964 to conduct low-level aerial reconnaissance to gather intelligence on the North Vietnamese presence in his country. Washington readily agreed to this request because President Johnson and Secretary of Defense McNamara wanted one more means to pressure Hanoi to cease its support of the southern insurgency.

From a military standpoint, Washington needed accurate intelligence on both Pathet Lao and North Vietnamese capabilities and activities in the Plain of Jars in central and eastern Laos and the Ho Chi



An RA-3B Skywarrior of VAP-62 banks to the right, exposing the camera windows on its underside.

USNI

A Recce Pilot in Harm's Way

On 6 June 1964 the Navy lost its first reconnaissance pilot and plane in the Vietnam War. That day, two officers of Light Photographic Squadron 63 (VFP-63), Lieutenant Charles F. Klusmann and his wingman, Lieutenant Jerry Kuechmann, flew their RF-8A Crusaders over Route 7 in Laos. This jungle road served as the enemy's main supply line from North Vietnam into the Plain of Jars. Klusmann's squadron mates on *Kitty Hawk* referred to the segment between Khang Khay and Ban Ban as "lead alley" because Communist antiaircraft guns lined the route.

Trying to capture the best images with his onboard camera, Klusmann took his chances and dropped down to a low level. A hidden 37mm gun suddenly opened up and riddled the Crusader. The young pilot wrestled the controls to keep the heavily damaged plane in the air, but northwest of Xieng Khouang all systems failed. Klusmann ejected from the doomed Crusader and parachuted to the ground, all the while under small arms fire from Pathet Lao guerrillas below.

Meanwhile, Klusmann's wingman called in search and rescue aircraft. Heavy ground fire prevented helicopters from reaching the pilot's position and fixed-wing planes that could have suppressed the enemy fire were too far away. Enemy troops surrounded Klusmann's hiding place and captured him. The Pathet Lao forced the injured officer to limp through the steamy, insect-infested jungle to a prisoner of war compound. In succeeding weeks, he suffered from the lack of sufficient or nutritious food and medical care while enduring solitary confinement. Ultimately, alone and weakened from hunger and exposure to the elements, Klusmann was compelled to sign a statement damning U.S. foreign policy.

Klusmann, however, did not give up. When the guards moved the pilot to another, less closely guarded compound, he made an escape attempt. He failed and suffered mistreatment for his efforts. But shortly afterward, Klusmann and five Laotian and Thai prisoners tunneled under the wall of their rudimentary



Reconnaissance pilot Lieutenant Charles F. Klusmann of VFP-63 describes his time in captivity and escape from Laos to Admiral Ulysses S. Grant Sharp, Commander in Chief, Pacific, left, and Vice Admiral Roy L. Johnson, Commander, Seventh Fleet, September 1964.

NHHC Vietnam Collection

hut and snuck past the sentries into the jungle. When the group separated to avoid a Communist patrol, three of the men disappeared into the forest. Another prisoner unwisely entered a village in search of food and shelter; Pathet Lao soldiers quickly captured him and led him away to an uncertain fate. Finally, on 21 August Klusmann and his lone companion made it to friendly lines near Bouam Long. Lieutenant Klusmann proved to be one of only two naval aviators who escaped from captivity during the entire conflict. ↴

Minh Trail in the southern “panhandle.” Acting swiftly, Admiral Felt ordered the start of joint Navy-Air Force Operation Yankee Team on 18 May. Carrier *Kitty Hawk* (CVA-63) and her task group immediately deployed to the soon-to-be famous Yankee Station at 16 degrees north/110 degrees east in the Gulf of Tonkin. Within days, Navy and Marine RF-8A Crusader and RA-3B Skywarrior reconnaissance planes began executing missions over Laos. Naval leaders considered the larger and slower Skywarrior the best plane for missions above 10,000 feet and the smaller and faster Crusader for low-level runs. A pair of EA-3Bs of Fleet Air Reconnaissance Squadron 1 (VQ-1) based in Japan complemented the Yankee Team effort with electronic intelligence collection.

On the 21st, two days after Air Force units inaugurated the operation, a pair of Chance-Vought RF-8A aerial reconnaissance planes of Light Photographic Squadron 63 (VFP-63) launched from *Kitty Hawk* for the first Navy mission. Gunfire from the ground put bullet holes in one plane and set it on fire but the naval aviator managed to nurse his Crusader safely back to *Kitty Hawk*. This mission demonstrated what would become clear throughout the Vietnam War: that gathering naval intelligence was hazardous work.

The enemy drove home that truism on 6 June. That day, a North Vietnamese antiaircraft unit operating in eastern Laos shot down the RF-8A of Lieutenant Charles F. Klusmann. The naval aviator had the dubious distinction of being the first naval aviator shot down in the long war in Southeast Asia. Pathet Lao guerrillas quickly captured Klusmann and force-marched him to a rudimentary jungle prison camp. After almost three months in harsh captivity, the daring pilot escaped through the jungle and reached friendly lines (see sidebar).

Following the shoot-down of another naval aviator soon after Klusmann’s loss, Secretary of Defense McNamara reduced the risk to Navy and Air Force aerial reconnaissance forces by ordering



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An RF-8A of VFP-63 passes over *Ticonderoga* (CVA-14) en route to a mission in Laos in late 1964.

them to fly beyond the range of enemy antiaircraft guns in the most heavily defended areas of Laos. This action reduced the loss of men and planes thereafter but significantly limited the worth of the intelligence acquired. Nonetheless, the 198 aerial photographic missions completed by Navy aircraft (approximately half of all photographic missions) during the Yankee Team program convinced Washington that the Ho Chi Minh Trail was North Vietnam’s major supply line to South Vietnam. ↴



USNI

An EC-121 Warning Star and an EA-3B Skywarrior, mainstays of the fleet's signals intelligence effort in Southeast Asia.

COLLECTING INTELLIGENCE ON THE ENEMY'S DOORSTEP

By 1964 American leaders had become increasingly concerned about North Vietnam's sponsorship and support of the conflict in South Vietnam and the possibility of war with Ho Chi Minh's nation. U.S. knowledge of the DRV's naval forces and coastal defenses was limited at that time. To increase the store of knowledge and not, incidentally, to put additional military pressure on Hanoi to restrain its bellicose activities in the rest of Indochina, the Johnson administration ordered the Navy to conduct Desoto Patrol missions in the Gulf of Tonkin.

The Desoto Patrol, in existence since 1962, entailed destroyer patrols along the coasts of China, the Soviet Union, North Korea, and North Vietnam. Rules of engagement for these missions stipulated that the ships approach no closer than 20 miles to the target countries. Frequently, Navy EC-121 and EA-3B electronic intelligence planes operated at the same times and, along with the destroyers, monitored emissions that pinpointed radar station locations ashore.

Key assets for the Desoto Patrol were Direct Support Units (DSU) of the Naval Security Group, comprising just a small number of U.S. Sailors embarked in the destroyers (other DSUs operated from the Seventh Fleet flagship, aircraft carriers, and cruisers). These DSUs could simultaneously monitor North Vietnamese manual Morse and voice transmissions and detect radar emissions. The men, usually communications technicians (CTs), worked in small, cramped, windowless vans usually tied down amidships for a particular mission. The DSU embarked in *Maddox* (DD-731) for a July–August 1964 patrol (the 18th mission since 1962), for example, comprised a Navy officer in charge, (the following were either Sailors or Marines) two electronic intelligence specialists, two radio/telephone intercept specialists, four manual Morse operators,

two analysts, two communicators, and a maintenance specialist. The highly trained intelligence professionals worked in watches over a 24-hour period, which was fortunate because only a few men at a time could fit into the cramped van.

While the DSU gathered intelligence for broader national-level and Navy-level use, its primary mission was to provide Captain John J. Herrick, the officer in tactical command for the Desoto Patrol mission, with timely warning of hostile enemy intentions. The team monitored North Vietnamese air and coastal defense and ship-to-shore as well as ship-to-ship communications. As a part of the Critical Intelligence Communication (CRITICOMM) system, the DSU could send and receive messages of relevance to Captain Herrick from the larger and more capable NSG stations in the Philippines and South Vietnam.

In January 1964 Commander, Seventh Fleet Vice Admiral Thomas H. Moorer, following guidance



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Maddox (DD-731) steaming in the Pacific in 1964 several months before naval intelligence installed a signals intercept van amidships.



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Captain John J. Herrick, Commander, Destroyer Division 192 and the on-scene commander of *Maddox*'s July–August Desoto Patrol in the Gulf of Tonkin, and Commander Herbert L. Ogier, commanding officer of the destroyer.

from above, issued revised instructions for future Desoto Patrols. He authorized the destroyers to approach up to 12 miles from the Communist countries. The goal of the missions was broadened to require the gathering of “all source intelligence,” including electronic, hydrographic, meteorological, and photographic information. Moorer was particularly interested in data on the location and capabilities of naval and air defense forces.

That same month, new requirements came from another source, Commander, U.S. Military Assistance Command, Vietnam (COMUSMACV) General Paul

D. Harkins, responsible for the covert Operation 34A. In this program, South Vietnamese commandos and sailors operating from Danang in “Nasty”-class fast-attack craft provided and maintained by the U.S. Navy, carried out sabotage and naval gunfire attacks against North Vietnam. Harkins needed a better appreciation of North Vietnamese defensive capabilities, however, for the program to be effective. In response, the Pacific Command tasked Army, Air Force, and Navy signals intelligence stations in the Philippines and South Vietnam to focus greater attention on the needs of the 34A maritime program.

Admiral Moorer also laid on a Desoto Patrol that could approach as close as 8 nautical miles to North Vietnam (he later also approved an approach of 4 miles to offshore islands). The warship was tasked with photographing items of military interest, locating radar transmitters, and reporting on “junk activity” and “Viet Cong supply routes.” From 25 February to 9 March 1964, destroyer *John R. Craig* (DD-885), with Lieutenant Commander Donald P. Darnell of the MACV staff on board to ensure General Harkins’ needs were satisfied, steamed along the North Vietnamese coast without incident.

The 34A teams had little success in their initial operations to the North, in part because they had insufficient information on North Vietnamese naval and coastal defense forces. Admiral Felt informed Washington that the “lack of adequate intelligence is a prime factor in the failure of maritime operations.” General William C. Westmoreland, who took over from Harkins in June, called for more detailed information on North Vietnamese forces ashore and fast-attack craft capable of intercepting the 34A force during their forthcoming missions near the islands of Hon Me, Hon Nieu, and Hon Matt. U.S. officials grew increasingly concerned in early July when MACV learned that more than a dozen Chinese-built Swatow motor gunboats had deployed to the southern waters of North Vietnam. San Miguel in the Philippines and other shore-based signals intelligence sites intercepted numerous North Vietnamese reports that spoke of commando raids, combat between small boats, and high-speed chases along the southern coast. On one occasion a Swatow motor gunboat chased a faster “enemy” vessel for 45 nautical miles before giving up.

For the late July Desoto Patrol, the new Seventh Fleet commander, Vice Admiral Roy L. Johnson, specifically directed the destroyer to locate North Vietnamese radar transmitters; chart navigational lights, landmarks, and buoys; gather current and tide information near river mouths; photograph landmarks, islands, and relevant radarscope displays; and monitor junk traffic.



NHHC Vietnam Collection

A pair of Norwegian-built “Nasty”-class fast patrol boats (PTF) proceed at high speed a few months before their deployment to Danang, South Vietnam, to take part in Operation 34A against North Vietnam.

General Westmoreland, however, began to doubt the value of the ship-based collection effort and suggested that it should be supplemented by submarine, high-altitude aircraft, and patrol plane missions. For that reason he did not assign a MACV officer to the next operation. Questions about the value of the Desoto Patrols came from another quarter, Chief of Naval Operations David L. McDonald. He wanted to be convinced that Seventh Fleet was not just “DeSoto patrolling once a quarter because it has been going on for some time.” Moorer, now the Pacific Fleet commander, responded that he favored the operation for three reasons: 1) the good training it provided to the Sailors operating in proximity to hostile forces; 2) the importance of highlighting the U.S. understanding of “freedom of the seas” in international waters; and 3) the intelligence collected on a potential enemy nation. Moorer’s boss, Admiral Ulysses S. G. Sharp, CINCPAC, endorsed a continuation of the patrol. ♦



Vice Admiral Thomas H. Moorer, Commander, Seventh Fleet, speaks to Admiral Ulysses S. Grant Sharp, Commander in Chief, Pacific, early in 1964. Both officers pushed for strong U.S. measures against North Vietnam to discourage Hanoi's support of the Viet Cong in South Vietnam.

INTELLIGENCE SUPPORT DURING THE TONKIN GULF INCIDENTS

Soon after *Maddox* entered the Gulf of Tonkin on 31 July 1964 for her Desoto Patrol mission, the signals and communications personnel on board the destroyer informed Captain Herrick that the North Vietnamese were tracking the ship's passage. Hanoi was also aware that "Nasty"-class fast patrol boats (PTFs) of the U.S.-supported 34A maritime program had just bombarded targets near Hon Me and Hon Nieu. During the next two days, Herrick learned from his DSU and from the NSA intercept stations at San Miguel and Phu Bai, South Vietnam, that the North Vietnamese were concentrating a force of P-4 torpedo boats at Hon Me to intercept the destroyer as she moved south along the coast. This vital information prompted Herrick to order a course change on the afternoon of 2 August that enabled *Maddox* to head away from the hostile shore. It also made catching the withdrawing destroyer and achieving the right angle to launch torpedoes difficult for the enemy fast craft. The North Vietnamese torpedoes missed their mark but return fire from *Maddox* and from carrier *Ticonderoga* (CVA-14) aircraft that sped to the scene damaged all three of the attacking P-4s. Vice Admiral Roy Johnson praised the NSG and other shore-based cryptologic elements for "absolutely invaluable" contributions during the crisis, particularly "in light of the general dearth of COMINT available on the DRV Navy not too many months ago." Admiral Moorer endorsed that appraisal, observing that "the Gulf of Tonkin operations were but an episode . . . of the silent war in the ether being continually and persistently being waged so well" by America's cryptologic organizations. NSA historian Robert Hanyok, in his exhaustive study of U.S. signals and communications intelligence during the Tonkin Gulf incidents, has aptly

concluded that "the SIGINT community could be proud of its efforts that day. . . . Everyone in the Pacific command [including Herrick] was aware of the approaching attack."

Determined not to back down in the face of Hanoi's challenge, President Johnson directed resumption of the Desoto Patrol. On 3 August *Maddox*, now accompanied by destroyer *Turner Joy* (DD-951), steamed back into the gulf. At midnight the South Vietnamese PTF force struck again, shelling a target near Vinh Son. U.S. communications intercepts made it clear that Hanoi considered 34A and the Desoto Patrol as connected operations. Analyses then emanated from the intelligence stations in South Vietnam and the Philippines that suggested that the North Vietnamese navy planned to launch another attack, this time on the night of 4 August. When *Maddox* and *Turner Joy*, then at a nighttime steaming area far out in the gulf, picked up suspicious radar contacts, they anticipated a repeat of the 2 August battle. For a few hours both ships took evasive action, called in air support, and fired on suspected targets. Neither destroyer sustained damage and by morning they had reached the fleet operating at the mouth of the gulf.

Not willing to let this supposed second attack go unpunished, President Johnson and Secretary of Defense McNamara ordered preparation for reprisal air strikes on naval bases and a fuel storage facility in North Vietnam. In the meantime Captain Herrick's reports to higher headquarters introduced doubts about the reality of the attack. For instance, the naval officer suggested that "overeager sonarmen" may have reported more enemy torpedoes in the water than was possible. Many *Maddox* and *Turner Joy* crewmen, fleet commanders, and others then and now, believed that the ships were attacked that night, and ample information existed to support that



Constellation (CVA-64), along with *Ticonderoga* (CVA-14), launch retaliatory air strikes in response to the North Vietnamese attack on the destroyer *Maddox* (DD-731).



NHHC Vietnam Collection

An officer gives the launch signal to the pilot of a *Coral Sea* (CVA-43) A-4 Skyhawk heading for a bombing mission in North Vietnam.

appraisal. Nonetheless, that evidence was anything but conclusive.

The President, his Secretary of Defense, and the military leaders of Pacific Command, Pacific Fleet, and Seventh Fleet then looked to the intelligence community to provide them with “smoking gun” evidence of an attack. The NSA and its field commands immediately gathered and analyzed what they considered to be the relevant intercepts and reports. NSA apprised the President and subordinate civilian and military leaders in the chain of command that the evidence confirmed a North Vietnamese attack on the destroyers. Only in the last decade has NSA admitted, through publication of Robert Hanyok’s formerly highly classified study, that the finding resulted from faulty analysis. Another historian of the NSA, Matthew Aid, has cogently explained that “under intense political

pressure, intelligence collectors and analysts will more often than not choose as a matter of political expediency *not* to send information to the White House that they know will piss off the president of the United States.” It is now clear that North Vietnamese naval units did not attack *Maddox* and *Turner Joy* on 4 August 1964.

Convinced at the time, however, that hostile forces had attacked warships of the United States on 2 and 4 August, President Johnson ordered carriers *Ticonderoga* and *Constellation* (CVA-64) to launch bombing strikes on 5 August against North Vietnamese targets ashore and afloat. More importantly, on 7 August, the U.S. House of Representatives and the U.S. Senate (with only two dissenting votes) passed the Tonkin Gulf Resolution empowering President Johnson to fight the Vietnam War. ♦



USNI

Vice Admiral Rufus L. Taylor, the Director of Naval Intelligence during the early years of the air war against North Vietnam. He suspected that the People's Republic of China was behind Hanoi's aggressive activities in Indochina.

PREPARATIONS FOR WAR IN SOUTHEAST ASIA

Communist attacks on *Maddox* in the Gulf of Tonkin in August 1964 and the killing of American service personnel in South Vietnam later in the year and in early 1965 convinced American military leaders that the outbreak of war was imminent. It was apparent that rather than buckling under U.S. military pressure, Hanoi had decided to take the offensive. CINCPAC noted in March 1965 a "shift of communist tactics" intended to "bring about the disengagement of the U.S. in South Vietnam." In a prescient statement, Admiral Sharp concluded that the North Vietnamese felt that "if they can kill Americans, harass U.S. personnel, and destroy U.S. facilities the American people will, in time, become so tired of the war that we will abandon our efforts there."

Chief of Naval Operations Admiral McDonald called on naval intelligence for an "honest, hard NON-EQUIVOCAL assessment" of enemy intentions." Rear Admiral Rufus L. Taylor, the Director of Naval Intelligence, responded with an appraisal that suggested China was emboldened by the political disarray in South Vietnam and weak U.S. counteractions to Communist attacks. The underlying assumption of Taylor's report was that China rather than North Vietnam was the prime motivator for bellicose actions in Southeast Asia. Taylor considered the Chinese determined to help the Vietnamese and Laotian Communists secure a victory over the United States and its allies. The admiral pointed to the recent buildup of military forces in southern China and the delivery of war materials to Hanoi as a clear sign of Chinese intentions. The Navy's top intelligence officer took the opportunity to make his own pitch for robust U.S. action, observing that "if we think it is important to us, as I do, to keep Southeast Asia out of Chinese

Communist hands, we must commit ourselves to extensive hostilities in that area."

A year's experience with the Yankee Team aerial reconnaissance program in Laos had enabled the Navy's intelligence establishment to hone its procedures for collecting, processing, and disseminating tactical intelligence even before the onset of the Rolling Thunder bombing campaign against North Vietnam in the spring of 1965. Seventh Fleet Commander Vice Admiral Johnson, however, realized that his carrier and surface forces needed even more precise information on potential targets and enemy air defenses ashore, the area's geography and hydrography, and the operating environment.

The Fleet Intelligence Center Pacific (FICPAC) in Hawaii, employing 270 personnel by 1967, stepped up to provide the aviation and surface ship combat units with updated maps, charts, targeting aids, pilot escape and evasion guides, and computerized orders of battle. The center also interpreted aerial reconnaissance imagery and produced an average of 27,000 photo prints each month in support of photo intelligence reports. The Naval Weather Center on Guam produced updated information on the climatological and weather characteristics in the Gulf of Tonkin. By the start of the Rolling Thunder bombing campaign in March 1965, naval intelligence had provided relevant and updated materials to the fighting squadrons and warships deployed off North Vietnam.

On the negative side, technology was such in the 1960s that it might take days for couriers to deliver raw photographic and audio information from the field, process it (including translating the communications intercepts from Vietnamese to English), interpret it, and send the finished product to the combat commands. On too many occasions, the intelligence product arrived too late for its optimum combat use. Excessive compartmentalization by



NHHC Vietnam Collection

Task Force 77, the Seventh Fleet's Attack Carrier Striking Force, steams in formation as it prepares for war in the early months of 1965.

the intelligence agencies of highly classified and sensitive information also sometimes prevented the combat commands from receiving a comprehensive picture of the enemy situation.

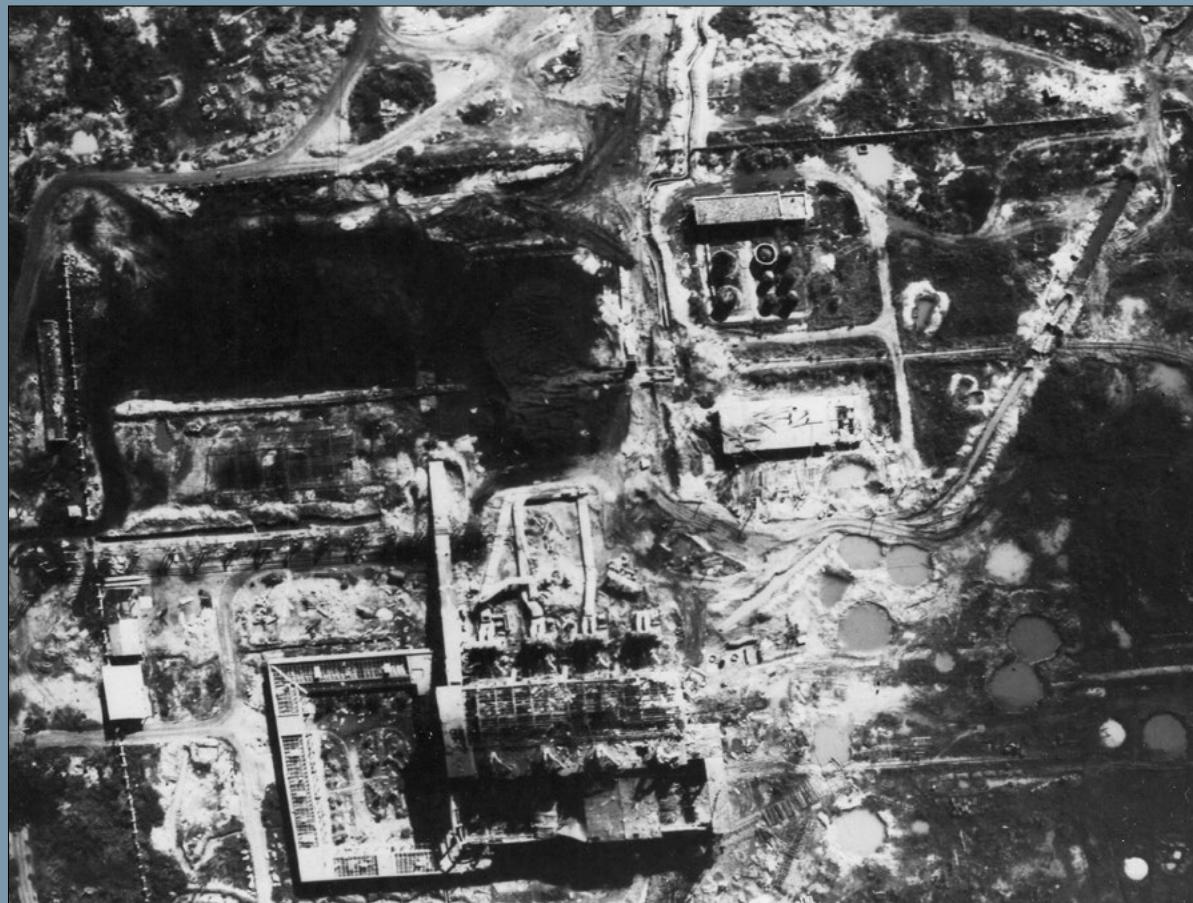
Much of the information on enemy defenses and weather in the operational area that would be provided to the Navy's intelligence analysis centers during the war came via the NSA, one of whose primary objectives was to "extend the eyes of American air surveillance." The agency's signals intelligence programs "revealed information about Vietnamese tracking of hostile and friendly aircraft over Laos, North Vietnam and the Gulf of Tonkin, SAM [surface-to-air missile] order-of-battle details, bomb damage reports, airfield status, and other data." NSA cryptologists gathered information on

the weather over North Vietnam from intercepts and passed it on to naval intelligence and hence the fleet. The agency's reports, called "Songbirds," relayed information on the location of downed fliers and attempts by the enemy to capture them. The Navy, however, generally found that the intercepts could not be translated fast enough for a timely response by the fleet's search and rescue forces. ↴



Refueling at Sea by Walter C. Brightwell.

Navy Art Collection



A poststrike photograph of the obliterated thermal power plant at Uong Bi in North Vietnam. A Vigilante assigned to RVAH-6 operating from *Constellation* (CVA-64) captures the image in August 1966.

NAVY TACTICAL RECONNAISSANCE

Along with the aircraft carriers, cruisers, and destroyers that deployed to the Gulf of Tonkin and the South China Sea in late 1964 and early 1965 were detachments from Seventh Fleet's specialized aerial reconnaissance squadrons. Units flying RF-8 Crusaders, RA-3B Skywarriors, and RA-5C Vigilantes photographed potential targets. Once those sites received the attention of the attack squadrons, the reconnaissance planes photographed the results, called "bomb damage assessments (BDA)." Flying over targets that had recently been struck and whose air defense forces were fully alerted was risky business. To get the clearest, most detailed pictures, the reconnaissance pilots had to fly a steady, unflinching course over the target even in the face of heavy antiaircraft and surface-to-air missile fire. Barrett Tillman, an authority on naval aviation, has aptly observed that "since anything worth photographing was likely well-defended, the best way to get the job done was to get in, get the pictures, and get out—fast." Despite this caution, aircrews and planes of the photo reconnaissance squadrons suffered high casualties. During the war the enemy shot down 12 RA-5Cs and 20 RF-8s, a significant loss in the relatively small aerial reconnaissance community. The enemy killed seven RF-8 pilots and captured another five, while U.S. search and rescue units plucked eight men from the sea or the jungle.

RF-8A and, later in the war, RF-8G Crusaders from Light Photographic Squadron 63 (VFP-63), nicknamed "Fightin Photo," were the mainstays of the carrier-based tactical reconnaissance force. RF-8As employed stationary cameras with 3-inch, 6-inch, and 12-inch lenses but upgraded RF-8Gs introduced panoramic cameras that swept from horizon to horizon. Both camera types worked well; former Crusader pilot Lieutenant (j.g.) Jay Miller related that the cameras rarely failed him. The best cameras, planes, and pilots, however, could not guarantee successful exploitation of the intelligence they captured. Rolling Thunder's overly restrictive rules of engagement required that combat aircraft could not strike a SAM battery, for instance, until



Members of RVAH-7 inspect damage from enemy fire to one of the squadron's Vigilantes that completed a mission in June 1967.



NHHC Vietnam Collection

An RF-8G photoreconnaissance plane (foreground) and its F-8 fighter escort operating from *Hancock* (CVA-19), head for a mission in Southeast Asia.

the Joint Chiefs of Staff in Washington authorized the mission, which, along with the Navy's need to recover the reconnaissance aircraft, process the film, interpret the imagery, and launch a reaction strike, could take hours if not days. Following the advice of their Soviet advisors, the North Vietnamese frequently moved their SA-2 surface-to-air missile battalions, which often negated U.S. reconnaissance efforts.

U.S. intelligence agencies devoted enormous resources to collection efforts not only with regard to North Vietnam but also the Ho Chi Minh Trail. Complementing Navy and Air Force aerial reconnaissance and Army special forces ground surveillance operations, the NSA monitored North Vietnamese

In a MiG's Sights

With the skies of North Vietnam teeming with MiG-17s and MiG-21s, it took courage of the first order for the photoreconnaissance pilots of VFP-63 to accomplish their missions. On 9 July 1968 Lieutenant William Kocar, flying an unarmed RF-8 Crusader, began a photo run in the southern panhandle of North Vietnam. Defending him against enemy interceptors was Lieutenant Commander John B. Nichols III piloting an F-8 fighter armed with AIM-9D Sidewinder missiles and 20mm guns. Nichols considered Kocar "one of the very best F-8 pilots" and already a veteran of the air war over Vietnam.

As Kocar photographed military sites below and the pair headed for Vinh, Nichols suddenly spotted a MiG-17 closing fast on Kocar's plane. The fighter pilot radioed Kocar to "break left"; he did so immediately and without a time-wasting rearward look. Nichols soon maneuvered his jet behind the MiG and prepared to attack. The first Sidewinder that Nichols fired missed the target but spooked the enemy pilot into a wrong turn that placed the F-8 1,200 feet directly behind the MiG. Compounding this error, the North Vietnamese aviator punched in his afterburner



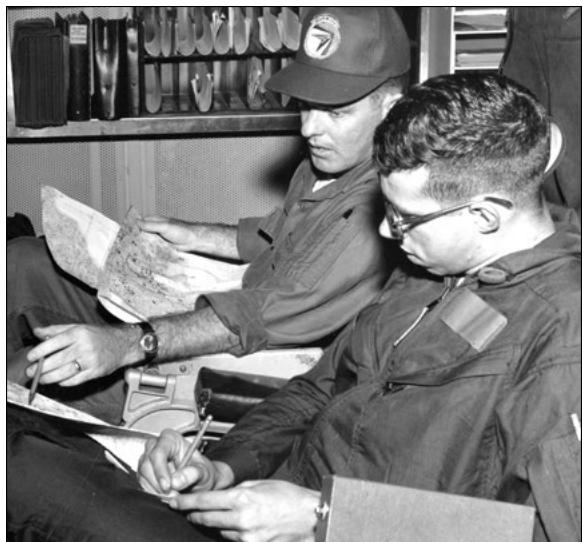
NHHC Vietnam Collection

A Soviet-made MiG-17 in flight.

that presented the heat-seeking AIM-9D missile with an almost unavoidable target. Nichols launched his second missile into the MiG's tailpipe and finished off the plane with 20mm cannon fire.

During the dogfight, Kocar had positioned his unarmed reconnaissance plane behind Nichols' to keep watch on the latter's "six." Kocar wanted the fighter pilot to go after another MiG that had flashed by during the melee. Low on fuel and ammunition, however, Nichols decided they should call it a day. Both planes then made it safely out to sea, took on fuel from a waiting aerial tanker, and recovered on board *Ticonderoga*. It had been just another day in the life of a Navy reconnaissance pilot and his defender in the lethal skies of North Vietnam. ♦

troop and supply infiltration activity on the trail. In late 1964 NSA reported the first major movement of troops on the trail when it identified the 325th Division of the North Vietnamese Army heading for South Vietnam. In October 1967 agency personnel intercepted the voice network used by way stations on the trail, opening what came to be known as the "Vinh Window." This coup enabled NSA to document which enemy units were on the trail, their probable destinations in South Vietnam, and their arrival times. Unfortunately, the intelligence gathered from this source did not provide information that was timely or that identified terrain features, routes, or kilometer posts that would have facilitated precise targeting information for air attacks on truck parks, way stations, or troop concentrations. The commanders of the Navy's carrier force appreciated all the intelligence they could get with regard to infiltration on the trail but, according to an NSA report, naval leaders "made it known that they were 'very unhappy' with the lack of support and targeting data."



USNI

Vigilante pilots of RVAH-12 study maps of North Vietnam to identify the areas they plan to photograph in a forthcoming July 1967 operation.

RA-3B Skywarriors operated by Heavy Photographic Squadron 61 (VAP-61, supported by the Atlantic Fleet's VAP-62) flew two-thirds of their missions at high altitudes during daylight hours. VAP-61 carried out the other third at night, when the planes employed low-level runs and their specialized infrared cameras to document enemy vehicular traffic on the trail. Each year of the war, RA-3Bs completed almost a thousand combat missions. VAP-61 also conducted oblique photography of the North Vietnamese coast from the DMZ to the 20th parallel in support of Task Force 77's Sea Dragon naval bombardment operation. The reconnaissance unit was especially adept at identifying river crossings or "choke points" where enemy vehicles often bunched up and offered the carrier forces lucrative targets.

RA-5C Vigilantes proved to be the Navy's most technologically advanced tactical reconnaissance



Camouflaged North Vietnamese trucks moving down the Ho Chi Minh Trail photographed by a naval reconnaissance aircraft in January 1970.

The Short, Dangerous Life of the Ghost Squadron

Disappointed with the Rolling Thunder results, Secretary of Defense McNamara concluded in 1967 that a barrier of acoustic and seismic sensors emplaced in the critical passes from North Vietnam into Laos and along the Ho Chi Minh Trail could seriously disrupt North Vietnamese infiltration into South Vietnam. With the Air Force temporarily lacking a number of relevant aircraft for the mission, McNamara directed the Navy to make an initial effort with its Lockheed SP-2E Neptune patrol planes. Accordingly, in February 1967 the Navy established Observation Squadron 67 (VO-67).

The Navy assembled, trained, and equipped the 300-man unit from scratch to meet a November 1967 operational deadline. The service tried to compensate for the lack of training and familiarization time by assigning many senior people to the squadron, including a captain, 11 commanders, 5 lieutenant commanders, and 23 chief petty officers. The men worked hard learning techniques for precisely dropping sensors but with World War II-era Norden bombsites. The first modified SP-2Es, redesignated OP-2Es, arrived on schedule at Nakhon Phanom Air Base in Thailand. VO-67, in time nicknamed the “Ghost Squadron” for its super-secret mission, went into combat soon afterward.

On a typical mission, the nine-man crew flying an OP-2E dropped one to three strings of seismic



NHHC Vietnam Collection

From a base in Thailand, OP-2E Neptunes of VO-67 carried out their dangerous sensor-placing missions along the Ho Chi Minh Trail in Laos.

detection devices (ADSIDs) or acoustic listening devices (acoubuoys; related to sonobuoys used against submarines). The acoubuoys were normally deployed at 500 feet. With the use of the bombsites,



NHHC Vietnam Collection

Crewmen load a camera into an RA-5C Vigilante prior to an aerial reconnaissance mission.

aircraft during the war. Like the Crusaders and Skywarriors, Vigilantes carried out intelligence collection flights along likely enemy logistics routes and poststrike BDA. The planes recorded imagery (black and white and color) with their KS-69 panoramic infrared cameras and side-looking radars, and electronic emissions with their Passive Electronic Countermeasures (PECM) system. The infrared cameras, even though they took hours to warm up before a mission, proved able to differentiate between natural vegetation and vegetation used to camouflage trucks, way stations, and pontoon bridges. The cameras, with 18-inch lenses, also provided horizon-to-horizon coverage. Nighttime and foul weather did little to impede a Vigilante’s

the Neptunes released their ADSIDs initially at 2,500 feet and later at a safer 5,000 feet. Once emplaced and active, the sensors related the relevant information to the Air Force base at Nakhon Phanom where it was stored on a computer and interpreted. The command in Thailand then used the analysis to direct air strikes against detected North Vietnamese vehicles and troops. Air Force forward air control planes, F-4 Phantom fighters, and A-1 Skyraider attack planes supported the VO-67 Neptunes on their missions.

The nature of VO-67's mission placed the men and their planes in great jeopardy. The OP-2Es routinely flew at low altitudes in poor weather over mountainous and jungle terrain thick with North Vietnamese antiaircraft guns. On 11 January 1968 soon after the start of operations in Laos, the squadron lost its executive officer, Commander Delbert A. Olson and the other eight men of his crew. Their Neptune probably slammed into a cliff on an acoubuoy-dropping mission in bad weather.

On 17 February the enemy shot down an OP-2E dropping sensors at 500 feet; the nine-man crew died in the crash. Little more than a week later, North Vietnamese ground fire knocked another Neptune out of the sky. The pilot, Commander Paul Milius, ordered his seven crewmen to bail out before he left the plane; they survived, but he did not. The Navy later named *Arleigh Burke*-class destroyer *Milius* after

the brave officer. During this period, antiaircraft fire damaged another four OP-2Es.

The Navy held a conference on 18 February to determine how to reduce the vulnerability of the Neptunes. Thereafter, squadron leaders directed that planes make only single passes over a target to reduce their exposure to enemy guns, identify alternative target areas, fly at higher altitudes, and avoid operating in especially bad weather. In March the Navy installed Loran [navigation] Assist Devices on the planes enabling the squadron to operate in high-threat areas in greater safety. With Air Force units then coming online, the Navy disestablished VO-67 in July 1968.

Although Observation Squadron 67 operated for only two months and suffered the loss of 20 crewmen killed in action and three OP-2E patrol planes, its exploits earned it a Presidential Unit Citation. The sensors emplaced by the unit helped target enemy forces converging on the Marine outpost at Khe Sanh and surging down the Ho Chi Minh Trail during the Tet Offensive of 1968. Warned by the emplaced sensors, Air Force, Navy, and Marine attack squadrons dropped more than one hundred thousand tons of bombs that decimated North Vietnamese infantry units moving south. In this way, VO-67 helped save the lives of many American and South Vietnamese soldiers and marines. ↴

photographic work.

Director of Naval Intelligence Rear Admiral Rufus L. Taylor related that in a 54-day deployment off Vietnam in 1965, *Ranger* (CVA-61)'s Vigilantes carried out 42 reconnaissance missions that resulted in the collection of 174,355 linear feet of photography. A combat leader of carrier *America* (CVA-66) reported that 13 of 19 reconnaissance missions captured infrared imagery that helped his strike group destroy a number of enemy targets. As another example, in April 1966 the equipment carried by an RA-5C of Reconnaissance Attack Squadron 13 (RVAH-13) discovered a well-hidden coal complex near Cam Pha, a North Vietnamese port close to the border with China. Acting quickly on the

intelligence, ten carrier planes destroyed the target. In another instance, this time in 1968, infrared images revealed suspicious truck movements around a cathedral in Vinh, an unlikely site for such activity. A surprise photo run at dawn the next morning by Vigilantes of RVAH-1 caught North Vietnamese troops moving SA-2 missiles onto the grounds of the cathedral. Strike aircraft from Carrier Air Wing 9 soon followed and destroyed the missile battery without damaging the building.

One of the keys to the accurate and timely exploitation of camera footage and taped electronic intelligence data captured by the RA-5Cs was the Integrated Operational Intelligence Center (IOIC). The Navy established computer-enhanced IOICs on



NHHC Vietnam Collection

A Vigilante recovers on board *Kitty Hawk* (CVA-63) after completing a flight over North Vietnam in April 1966.

the large-deck carriers off Vietnam. In less than ten minutes, IOICs could produce photographic prints and readouts of vast amounts of information that significantly improved the bombing effectiveness of Task Force 77's carrier planes. In June 1967 the IOIC on board nuclear-powered *Enterprise* (CVAN-65) found on photographs captured by RVAH-7 Vigilantes a surface-to-air missile battery so well camouflaged that it escaped initial detection. But, armed with the new analysis, the carrier's combat squadrons soon afterward visited the same site and caught the enemy unawares. As U.S. bombs ignited fuel on the ground, aerial observers watched as some of the site's ten SA-2 missiles exploded or skittered along the ground in their death throes. BDA photos taken by following Vigilantes confirmed the success of the mission.

Other aviation detachments operating from the carriers and from shore bases focused on



USNI

The Fleet Intelligence Center Pacific Facility at Cubi Point prepared this especially detailed and annotated prestrike image of the thermal power plant at Bac Giang before a strike in August 1966.



Navy Art Collection

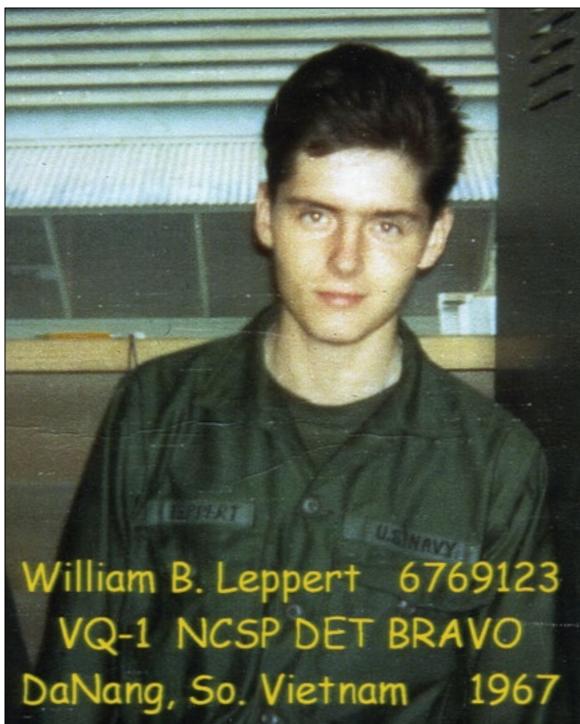
Enterprise on Yankee Station by R.G. Smith.

the collection of signals intelligence. Fleet Air Reconnaissance Squadron 1 (VQ-1), the Navy's largest aviation unit, handled the vital responsibility for collecting signals intelligence from North Vietnamese air defense radars. Based at Atsugi Naval Air Station, Japan, VQ-1 deployed detachments to the carriers and shore bases in Southeast Asia throughout the war and also retained responsibility for monitoring Soviet, Chinese, and North Korean emissions. Naval Security Group communications technicians complemented the squadron's naval personnel. During the war the Navy reinforced the unit's initial 13 EA-3B Skywarriors and EC-121M Warning Stars, the latter converted from Lockheed Super Constellation passenger planes, with more than 30 EA-3Bs, EKA-3Bs, and E-1Bs, some from the Rota, Spain-based VQ-2. The unit focused its efforts on the Tonkin Delta of North Vietnam, the DMZ,

and the Ho Chi Minh Trail.

The primary mission of the airborne intelligence squadrons was to provide U.S. combat units with almost immediate warnings, and VQ aircrews cumulatively issued thousands of near real-time warnings of threats posed by North Vietnamese SAMs, MiGs, and antiaircraft artillery. Captain Sidney Wood, an intelligence officer with VQ-1 throughout Operation Rolling Thunder, later observed that he and his VQ-1 EC-121 crewmen flew their tedious 10- to 12-hour-long missions in the gulf within sight of North Vietnam seven days a week. Wood related how crews on the EC-121s, with "six to eight ELINT positions and a like number of COMINT positions correlated intelligence [on enemy SAM, MiG, and antiaircraft threats] in near real time and [provided] it to the U.S. aircraft over the beach."

As related by William B. Leppert, a former VQ-1



William B. Leppert 6769123
VQ-1 NCSP DET BRAVO
DaNang, So. Vietnam 1967

Courtesy William B. Leppert

William B. Leppert, a member of VQ-1 and survivor of an enemy attack on his Danang base in July 1967.

petty officer who flew 38 missions off Vietnam, the plane also embarked Russian, Chinese, and Vietnamese linguists and personnel to operate the KW-7 crypto equipment and a teletype, which enabled the plane to send messages to the fleet below. Speed was essential, so the VQ-1 crew sent their warning messages in clear, unencrypted voice with reference to a previously established and daily-changing code word for a reference point ashore. For instance, the warning might be “SAM Bullseye [cover name for Phuc Yen airfield],” with the range, bearing, and time to the surface-to-air missile battery protecting the airfield. The Navy awarded senior evaluator Lieutenant Charles Templin a Distinguished Flying Cross for developing an intelligence picture that helped carrier forces shoot down one—and possibly two—enemy MiGs. In 1970 alone VQ-1 sent out more than 1,000 such warnings. As soon as the plane landed, the crew prepared comprehensive, all source Electronic Warfare Operational Reports for use with the next day’s strikes.

Despite the advanced age of the EC-121s,



USNI

An air intelligence officer listens as a reconnaissance pilot, safely on board his carrier after a mission, provides a debrief. The information derived will help the air wing staff develop a more comprehensive picture of enemy targets and defenses.

continuous technological upgrades of the aircraft enabled their Brigand intercept systems to identify and locate radiating enemy Fansong missile guidance radars to within 50 yards. The equipment receivers had “astronomical gain” according to one former crewman, and also could detect the presence of an enemy radar at 150 miles even when the systems were not in full radiation mode. VQ-1 collected and analyzed an enormous number of intercepts—10,000 in 1967 alone—for use by Navy and national intelligence organizations. VQ-1 aircraft provided 24-hour coverage of key areas in Vietnam during periods of crisis. During the Tet Offensive of 1968, for instance, a total of five EC-121s and EA-3Bs operated daily over the Gulf of Tonkin. As an example of the unit’s busy schedule, in 1969, the squadron’s detachments in Danang, other bases in the region, and several carriers completed 1,587 missions.

Squadron and NSG personnel who served with VQ-1 knew that the enemy could shoot down their planes (as occurred in 1969 off the Korean peninsula when North Korean MiGs destroyed an EC-121 and her 31 crewmen). Enemy fire also threatened the shore-based detachments’ aircraft and personnel. The July 1967 rocket attack (see

CT Duty at “Rocket City” by William B. Leppert

(Reprinted with permission of the author and the publishers of CRYPTOLOG)

When one hears the name Rocket City, places like Titusville, Florida, or Houston, Texas, may come to mind due to their association with the NASA space program. Rocket City, however, had nothing to do with America's space program. It was the name given to the U.S. air base at Danang, Vietnam, during the Vietnam War, one of the largest U.S. bases in South Vietnam. During the years 1965–1973, there were 87 rocket attacks with a total of 996 rockets fired against the Danang air base by enemy forces. These 996 rockets killed 45 and injured 586 Americans. In addition to the number of casualties inflicted on U.S. personnel, a total of 30 aircraft were destroyed and 256 were damaged. So, why, you ask, am I presenting this data about the rocket attacks against the Danang air base?

During the six months I served at Danang, there were three rocket attacks. The most severe attack at Danang during the Vietnam War had occurred on 15 July 1967 when the enemy forces fired 83 rounds of 122mm and 140mm Russian-made rockets onto the air base. There were 175 casualties during that attack and 44 of them were personnel of Det Bravo and VQ-1. Our barracks happened to be located about 50 yards from a bomb storage area that was ignited by one of the rockets. The bunkers we had constructed did not have roofs on them at the time, so the shrapnel from the exploding bombs rained down into our bunkers. Fortunately, no one was killed but our barracks was totally destroyed. After the attack, the personnel of Det Bravo were transferred to another area located near Danang Harbor called Camp Tien Sha. It was near the R&R area at China Beach.

Ron Virgin and I happened to be the two CTs [communications technicians] on duty the night of the rocket attack on 15 July 1967. We were in the communications shack about a mile away from our barracks, which was destroyed that night. We were fortunate, however, since a piece of shrapnel had penetrated the roof of the small structure we occupied and landed within a few feet of us.

I was only at Danang for six months of my life but it was six months that I will never forget. I am proud that I served four years in the Navy and I am especially grateful that I was fortunate enough to have served my time as a CT with the Naval Security Group. ↴



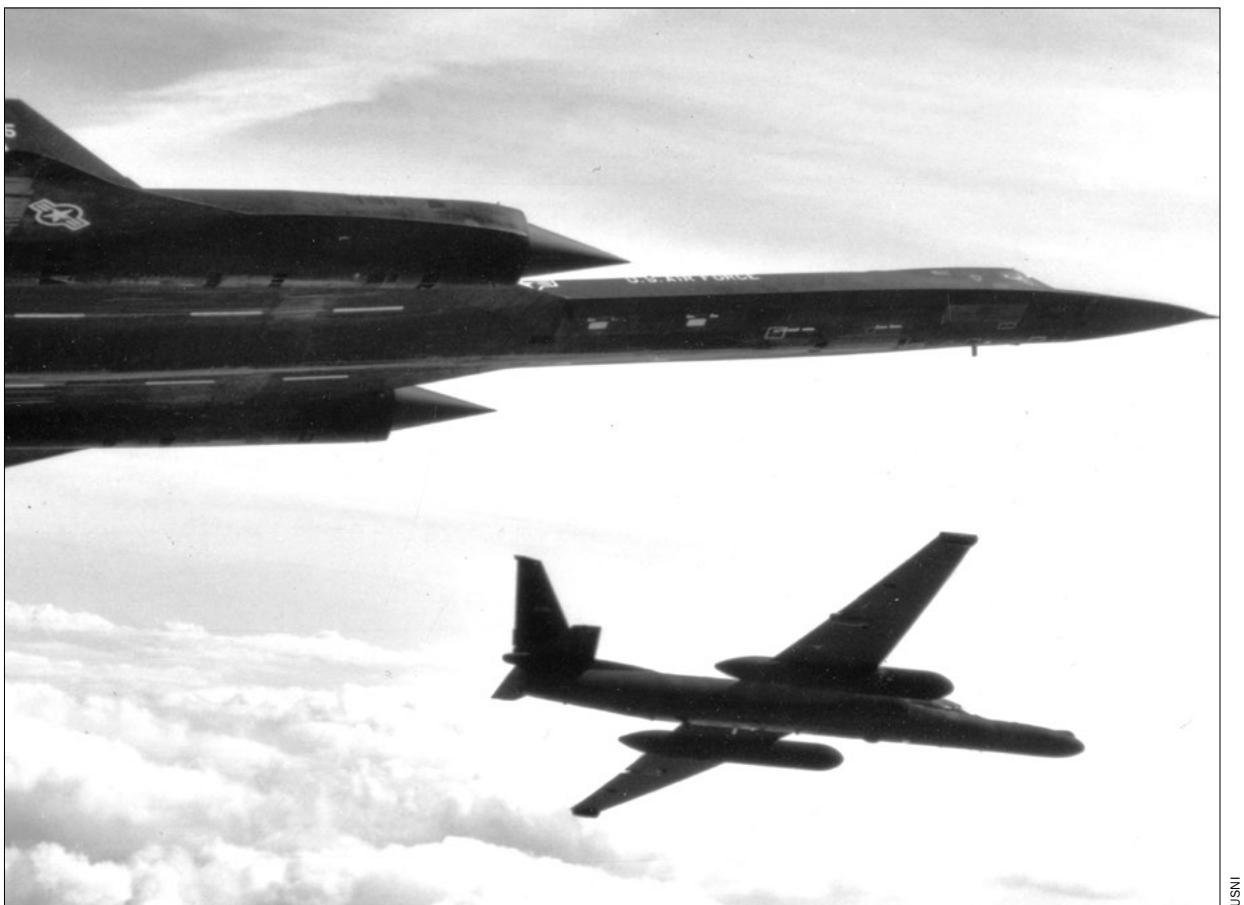
NHHC Vietnam Collection

Chinese-made 122mm rockets that the enemy often employed against the airfield and other base facilities at Danang. A Marine patrol discovered these weapons in 1968 before they could be launched.



Courtesy William B. Leppert

The barracks of VQ-1 at Danang, destroyed during the enemy rocket attack of July 1967.



NSA

An SR-71 (foreground) and a U-2 high-altitude photoreconnaissance plane that operated in the skies of mainland Southeast Asia.

sidebar) that wounded 44 VQ-1 personnel, damaged four EC-121s, and destroyed squadron barracks and support buildings was not the only such incident during the war.

The CIA and the Strategic Air Command (SAC) inaugurated operations that complemented Navy and Air Force tactical reconnaissance efforts with high-altitude photography of North Vietnam. Agency crews flying A-12 aircraft at Mach 3 speeds on "Black Shield" missions and Strategic Air Command aviators piloting SR-71 Blackbirds (two-seat variants of the A-12) on "Giant Scale" operations covered all of North Vietnam. A CIA report asserted that the Black Shield program "reduced the requirement to expose vulnerable [Navy and Air Force tactical] reconnaissance aircraft to collect necessary [bomb damage

assessment] photography and has made it possible to assess the status of target systems rather than individual targets." The report went on to stress that "our requirement for coverage of the SAM defended portion of North Vietnam will not be met by any combination of reconnaissance assets without inclusion of Black Shield."

From 1965 to 1969 NSA deployed to the Western Pacific signals intelligence ships *Oxford* (AGTR-1) and *Jamestown* (AGTR-3), one of which operated in the South China Sea at all times. The agency took this move in response to Admiral Sharp's fear for the vulnerability of the SIGINT stations in South Vietnam and to reinforce the overall collection effort. Manning these ships were more than 300 Sailors and other personnel, 130 of whom operated from 85 individual work stations (compared to four or five



USNI

Jamestown (AGTR-3), along with *Oxford* (AGTR-1), steamed off Vietnam through much of the war enabling naval and other intelligence specialists to intercept enemy communications.

on a destroyer) to gather strategic-level information from North Vietnamese and Cambodian communications systems on military, internal security, and naval forces. NSA often used the ships as “firemen,” positioning them in areas poorly covered by the shore-based sites. The Navy valued the intelligence gathered from these ships but wished more of it could have been related to the fleet’s tactical needs. ♦



INSU

A Soviet-made MiG-21, 17 of which fell to carrier-based F-8 Crusaders and F-4 Phantoms in air-to-air combat during the war.

A HELPING HAND TO HANOI: SINO-SOVIET BLOC MILITARY ASSISTANCE

The war materials, military advisors, troops, and diplomatic support provided to Hanoi by the Soviet Union and the People's Republic of China were significant factors in North Vietnam's victory over the United States and its South Vietnamese ally.

From 1959 to 1964, hoping to be recognized as the leader of the Communist world in its fight with American "imperialism," Mao Zedong championed national liberation movements and insurgencies in Vietnam, Laos, and other Southeast Asian nations. He urged Hanoi to pursue an aggressive strategy against America's ally, the Republic of Vietnam. Chinese recoilless rifles, small arms, ammunition, and supplies flowed to the Viet Cong via North Vietnam. The day after Navy carrier planes executed the post-Tonkin Gulf incident retaliatory strike on North Vietnam in August 1964, China dispatched 17 MiG-15 and MiG-17 fighter planes to its southern neighbor and provided 36 more in December. Throughout the war, the PRC supplied Hanoi with roughly 30 percent (a total of \$665 million in 1960s currency) of its military needs; this assistance included aircraft, antiaircraft guns, field artillery, armored vehicles, small naval craft, rocket propelled grenades, small arms, and ammunition.

During the course of the war, more than 320,000 Chinese troops operated antiaircraft guns, repaired and rebuilt bombed-out railroads and bridges, and constructed coastal fortifications. Chinese sources later confirmed that in 1968 alone, 170,000 Chinese air defense, engineering, mine-sweeping, and logistic troops operated in North Vietnam. U.S. air attacks killed 1,000 Chinese military personnel during the war.

China also afforded North Vietnam strategic depth. In 1964 the PRC linked its air defense network to that of North Vietnam. Vietnamese

pilots trained in China and periodically fled there when U.S. fighter defenses became too lethal or American strike aircraft put some of Hanoi's airfields out of action. During the war, Chinese fighters shot down five Navy aircraft and two Air Force planes that inadvertently strayed over the island of Hainan or southern China. Only one naval aviator returned from his mission in these cases; in 1973 the Chinese government released Lieutenant Robert Flynn of Attack Squadron 196 (VA-196) from captivity. Moreover, hundreds of thousands of People's Liberation Army soldiers set up camp in southern China, ready to deploy to North Vietnam if Mao gave the word.

The U.S. national intelligence establishment's reports about the Chinese military presence in North Vietnam and southern China prompted Johnson and McNamara to resist calls for an all-out war against North Vietnam. They feared a repeat of the PRC's intervention into the Korean War little more than a decade before.

Succor to North Vietnam also came from North Korea. Documents contained in an official North Vietnamese historical publication reveal that in 1966 Pyongyang agreed to provide pilots for a fighter regiment that included two MiG-17 companies and one MiG-21 company. Beginning in the spring of 1967, North Korean-piloted jets operating from Kep Airfield in the Tonkin Delta tangled with American aircraft. The North Koreans shot down three U.S. Air Force planes for the loss of eight of their own. According to postwar reports, North Vietnamese leaders were unimpressed with the North Korean performance and after a decent interval sent the allied pilots home.

Because of a bitter ideological fight between the PRC and the USSR for leadership of the international Communist movement, shortly after ousting Premier Nikita Khrushchev from power in October



An SA-2 Guideline surface-to-air missile and its mobile launcher. The enemy fired thousands of these formidable weapons at Navy and Air Force aircraft but antiaircraft artillery and automatic weapons claimed more victims in the skies over Indochina.

Courtesy Richard Mobley

1964 Moscow offered the USSR's considerable resources to Hanoi's war effort. In February 1965 the USSR and the DRV signed a formal defense and economic cooperation agreement. Soon afterward, Moscow deployed an early-warning system to North Vietnam, which covered not only that country but also the Gulf of Tonkin, Laos, northeast Thailand, and northern South Vietnam. CINCPAC's intelligence staff also identified 16 actual or suspected fire control radars positioned near Hanoi and on the coast. From mid-1964 to March 1965, the Communist countries more than doubled the number of antiaircraft guns in Hanoi's arsenal.

Approximately 85 percent of Soviet military aid went to the North Vietnamese air defense system that proved increasingly difficult for U.S. forces to penetrate. The Defense Intelligence Agency reported in 1970 that North Vietnam then operated 257 mostly Soviet-supplied combat aircraft; 35 to 40 SA-2 battalions; 1,847 antiaircraft guns (37mm and larger); and 471 fire control, missile control, and ground control intercept/early warning radars.

The mainstay of the enemy's air defense system was the 35-foot, two-stage SA-2 Guideline surface-to-air missile that packed a 349-pound high-explosive warhead. American aviators referred to the feared weapons as "flying telephone poles." The USSR also provided Hanoi with advanced delta-wing MiG-21 fighters. However, Soviet and Chinese pilots avoided combat over Vietnam.

U.S. intelligence knew that at any one time there were 2,000 to 3,000 Soviet military advisors (it was later learned that 22,000 Soviet military advisors served in Vietnam) training the North Vietnamese to operate the air defense aircraft, missiles, radars, and antiaircraft equipment. Beginning in 1965 hundreds of North Vietnamese pilots learned both in Vietnam and in the USSR how to pilot IL-28 light bombers and MiG-17 and MiG-21 fighters. ♦



This image taken in August 1965 by an Air Force photoreconnaissance plane shows in sharp detail command vehicles, radar equipment, and two SA-2 missiles on their launchers at a SAM site in North Vietnam.

USNI

THE DEFENSE OF NORTH VIETNAM

While the Communist countries provided Hanoi with an impressive arsenal, they would have wasted their resources if the North Vietnamese had proven unable to use the weapons and equipment effectively. The U.S. intelligence community and America's air warriors, however, grew to respect the ingenuity, flexibility, resilience, and determination of their enemy. The North Vietnamese exploited the heavy weather that posed a serious challenge to U.S. intelligence gathering in North Vietnam. For instance, the CIA reported in 1965 that American high-level reconnaissance of Hanoi was possible only 65 days that year. The agency observed further that the weather had "a particularly serious impact on satellite coverage and, to a lesser degree, upon manned and drone reconnaissance coverage." The CIA analysis added that "the major factor limiting high-altitude photoreconnaissance is cloud cover of the middle latitudes."

The enemy also exploited restrictive U.S. rules of engagement to great effect. The enemy routinely positioned SAM batteries and antiaircraft guns in populated areas or in proximity to hospitals, foreign embassies, prisoner of war camps, sports stadiums, and agricultural dikes, which were off-limits to attacking American aircraft. The North Vietnamese defenders lured U.S. search and rescue helicopters into elaborate antiaircraft ambushes. The enemy also used deception to complicate air attacks, even though the National Photographic Interpretation Center concluded from aerial photographs that these measures, at least in 1967–1968, had been "somewhat successful in diverting air attacks but in general their efforts have failed." On the other hand the North Vietnamese developed a radar and communication system that within five minutes



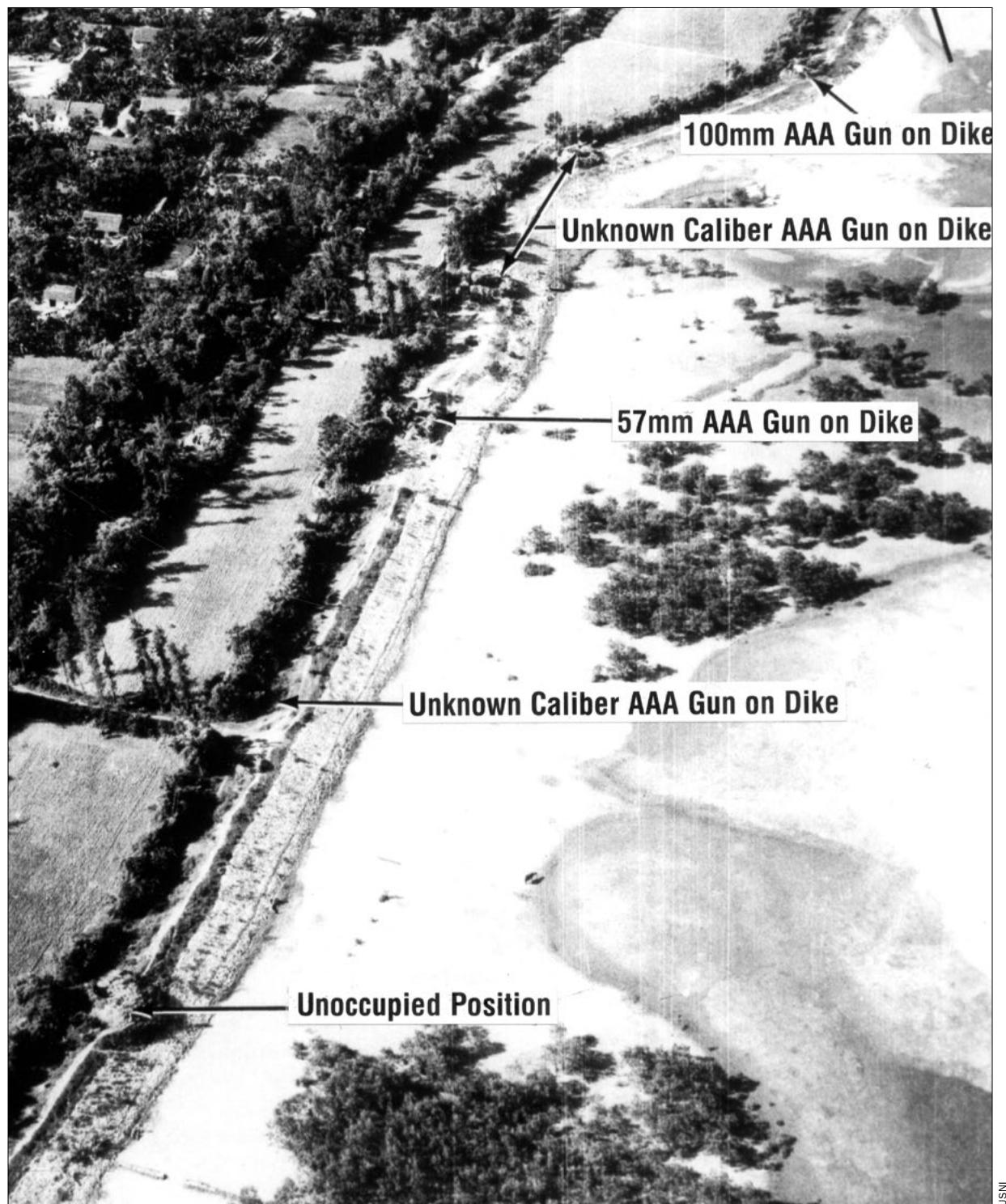
Sudden Squall by R.G. Smith.

Navy Art Collection

could alert air defense forces nationwide of the direction and probable targets of approaching U.S. strike formations. Ground control intercept radar operators grew adept at vectoring MiG pilots to or away from attacking U.S. formations. Fearful of SA-2 missiles that often emerged from the cloud cover to destroy unwary aircraft at high altitudes, many American naval aviators chose to approach targets at low level. Antiaircraft guns, machine guns, and even an odd farmer's rifle, however, brought down more U.S. planes in the war than did SAMs.

Small Soviet ships loaded with communications gear routinely operated in proximity to the U.S. warships so they could observe and report on fleet operations. Similar ships steamed off Guam to alert Hanoi when Air Force B-52 bombers took off for their strikes in Indochina.

The North Vietnamese, with the help of Soviet advisors, also proved adept at intercepting U.S. communications in part because American battle commanders, aircrews, and even radio operators



USNI

Aerial reconnaissance in July 1970 discovered these North Vietnamese antiaircraft guns near Thai Binh emplaced on an agricultural dike, off-limits to U.S. air attack by the rules of engagement.



USNI

The Chinese launch of a Soviet-designed Styx surface-to-surface missile. U.S. naval leaders were concerned that the Soviet Union would provide these weapons to North Vietnam for attacks on the Seventh Fleet.

often ignored the requirements of communications security or because encryption technology failed to protect the information. The Navy later concluded that operational commanders finally, if belatedly, impressed on subordinates the importance of communications security because it was “not really appreciated at the lower levels” early in the war.

U.S. intelligence also monitored North Vietnamese military forces that posed a threat to

Seventh Fleet. At one point, the CIA assessed that “U.S. ships in the Gulf of Tonkin are in range of all [North Vietnamese] aircraft. The psychological effect of achieving a degree of damage or destruction to a U.S. naval ship would probably be considered by Hanoi to be worth the risk.” Hanoi took that risk only once, with minimal result. In April 1972 a trio of MiG-17s attacked destroyer *Higbee* (DD-806) and one of the planes scored a hit on the ship’s stern with a 550-pound bomb, wounding four Sailors and



USNI

A 5-inch mount on destroyer *Mansfield* (DD-728) opens fire against a target near Dong Hoi in North Vietnam on 25 October 1966.

knocking out a gun turret. Seventh Fleet surface-to-air missiles destroyed two of the attacking MiGs. North Vietnamese leaders usually reasoned that the odds were low that one of their precious aircraft would penetrate the fleet's defensive screen of combat aircraft, ship-based surface-to-air missiles, and PIRAZ (positive radar advisory zone) or "Red Crown" fleet-alert ships. American intelligence worried throughout the war that the Soviet Union would provide North Vietnam with surface-to-surface missiles to threaten fleet warships. That only happened, however, after the U.S. withdrawal from Vietnam when they supplied Hanoi with Komar missile boats and Styx antiship missiles.

When North Vietnamese naval vessels attacked destroyer *Maddox* in August 1964 and throughout the war, U.S. naval intelligence paid particular attention to the location and movement of the enemy navy's Swatow motor gunboats and P-4 and P-6 torpedo boats. On occasion strike aircraft discovered and attacked North Vietnamese naval units that had attempted to hide under camouflage but were spotted by U.S. reconnaissance aircraft.

At other times, combat forces foiled attacks by enemy vessels with no help from naval intelligence. In July 1966, for instance, alert U.S. naval aircraft thwarted an attack by three P-4s that targeted guided missile destroyer *Coontz* (DLG-8) and destroyer

Rogers (DD-876) steaming 55 miles east of Haiphong. Carrier planes sank the trio and American boat crews retrieved 19 surviving North Vietnamese sailors from the sea. The prisoners provided useful information to the U.S. intelligence agencies. In August 1972 a squadron of Soviet-built P-6s came out to challenge heavy cruiser *Newport News* (CA-148) and three other U.S. warships engaged in a nighttime shore bombardment mission near Haiphong. Carrier aircraft dropping Rockeye cluster bombs and warship gunfire destroyed all three of the attackers.

Naval intelligence had difficulty gathering precise information on another enemy threat to

the fleet, coastal artillery. The North Vietnamese either emplaced their long-range guns in virtually impenetrable caves along the country's southern coastline or frequently moved field artillery batteries to different locations. Timely intelligence, however, did alert the U.S. cruisers and American and Australian destroyers engaged in the Sea Dragon bombardment and coastal patrol program to the likely presence of hostile guns in their operating areas. North Vietnamese shell fire hit and damaged ships and near misses killed and wounded a number of Sailors, but enemy coastal guns failed to sink a single allied ship during the war.

Moreover, the Americans and Australians carried out their operations without serious enemy interference. The Sea Dragon forces severely limited the intra-coastal movement of North Vietnamese junks, sampans, barges, and other waterborne logistics craft (WBLCs), pronounced "wiblics." The allied cruisers and destroyers also restricted the enemy's use of roads and railroads within reach of their guns. ♦



USNI

Captain E.M. Rosenberg (holding pointer), the commanding officer of heavy cruiser *Canberra* (CA-70) engaged in Operation Sea Dragon during May 1967, selects targets for his warship's guns.



NSU

A high-flying SR-71 Blackbird, one of the most capable planes of the U.S. aerial intelligence fleet.

THE POST-1968 AIR WAR IN NORTH VIETNAM AND LAOS

Despite the cessation on 31 October 1968 of the Rolling Thunder bombing campaign against North Vietnam, intelligence of enemy intentions and capabilities remained vital. The Strategic Air Command redoubled its efforts to inform Washington, the Navy, and the other military services of the enemy's compliance or noncompliance with the terms of the cease-fire. SAC's high-flying SR-71 Blackbird aircraft used infrared and side-looking radars in addition to conventional cameras and signals intelligence equipment in their coverage of sites in North Vietnam. An SR-71's sweep could cover a much larger area than that

of a conventional reconnaissance aircraft. In one instance, an SR-71 mission produced a composite picture that identified 133 occupied and unoccupied SAM sites in North Vietnam.

In so-called "Buffalo Hunter" missions, high-level and low-level drones operated by the Strategic Air Command were dropped from DC-130 planes in Thailand; directed over portions of southern North Vietnam, Laos, and the Gulf of Tonkin; and recovered at Danang, South Vietnam. In contrast to the SR-71s, the drones routinely flew as low as 500 feet and collected high-resolution images of especially critical individual targets. As related by some naval analysts, the film from the drone and SR-71 flights "might have



President Richard M. Nixon and Chairman of the Joint Chiefs of Staff Admiral Thomas H. Moorer on board carrier *Saratoga* (CVA-60) in May 1969. The two leaders operated closely on issues relating to naval operations in North Vietnam.

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been of use to the Navy, [but it] never got to the carriers or arrived too late." It did, however, prove useful to the Washington agencies and the fleet intelligence centers for interpreting broad trends and enemy preparations for offensive actions.

During these post-Rolling Thunder years, unarmed photoreconnaissance planes flew the majority of their missions (as many as 5,000 each year) over North Vietnam. President Nixon and National Security Advisor Henry A. Kissinger contended that Hanoi understood the U.S. need to verify compliance with agreements reached in Paris. Hanoi, however, did not agree with or ignored this interpretation, since North Vietnamese air defense forces often shot at and downed reconnaissance planes.

In November 1968 the enemy fired on 29 Navy reconnaissance planes and shot down an RA-5C. In response Washington ordered fighter escorts to ride "shotgun" on the missions and for the latter to attack North Vietnamese antiaircraft and missile sites if the enemy fired on the U.S. planes. On occasion Navy and Air Force units took the opportunity to attack SAM and antiaircraft artillery sites when the enemy did not open fire but only "painted" the U.S. aircraft with their fire-control radars. MiGs continued to be a threat to reconnaissance aircraft as well. On 28 March 1970 Lieutenant Jerome Beaulier and his radar intercept officer, Lieutenant Steven Barkley, flying an F-4 Phantom, destroyed a MiG-21 that menaced U.S. reconnaissance operations in southern North Vietnam.

A few months later, in conjunction with the allied invasion of Cambodia (during which tons of Communist supplies were captured), Navy and Air Force planes hit North Vietnamese logistics sites and stores near the passes between North Vietnam and the Ho Chi Minh Trail. Both operations set back enemy plans for offensives in 1970. In November 1970 Navy and Air Force tactical aircraft carried out a two-day bombing of targets near Hanoi and Haiphong in Operation Freedom Bait in order to divert enemy attention from a raid to free American prisoners at the Son Tay camp in North Vietnam

(however, the mission failed to discover POWs there). U.S. reconnaissance planes continued to gather intelligence that North Vietnam was deploying strong military forces and stockpiling military stores in southern North Vietnam. Despite this evidence of North Vietnamese perfidy, Secretary of Defense Melvin R. Laird did not want to hinder negotiations in Paris so he disapproved an open-ended program of "protective reaction" strikes. He did authorize one-time attacks in North Vietnam and by the end of 1971 U.S. aircraft had conducted over 100 such missions. In Operation Proud Deep, authorized in late 1971 by President Nixon to counter the enemy's increasing aggressiveness, Navy and Air Force planes carried out a five-day bombing campaign against military targets below the 20th parallel of North Vietnam.

The Navy sometimes ordered reconnaissance missions in the vicinity of known enemy air defense sites in North Vietnam, and when radars at those locations locked on the aircraft, attack planes launched strikes. This tactic certainly increased the danger to the intelligence-gathering units and stretched but did not contravene the protective reaction rules of engagement. Air Force General John D. Lavelle, Commander, Seventh Air Force, however, went further. Frustrated with the limited nature of the U.S. retaliatory actions and thinking he had the tacit approval of his superiors, he ordered preplanned attacks on North Vietnamese SAM and antiaircraft batteries. The Secretary of Defense fired him.

Despite the great danger and difficulty Navy and Air Force reconnaissance units experienced operating over North Vietnam and Laos from late 1968 to late 1971, they provided Washington with ample and compelling evidence that the enemy would initiate a massive invasion of South Vietnam in 1972. Well-trained, well-fed, and armed with Soviet-made T-54 tanks, PT-76 armored vehicles, 130mm artillery pieces, and other advanced weapons of war, the soldiers of the North Vietnamese Army readied themselves for a campaign that Hanoi believed would finally bring victory. ♦



Operation Market Place [sic] by Eugene Klebe.

INTELLIGENCE AND THE WAR ON THE COAST

Long before 1972 and simultaneous with the air operations against North Vietnam, the U.S. Navy fought alongside the other services and America's allies to win the struggle in South Vietnam. The Navy launched its first major operations in South Vietnam in March 1965 when Seventh Fleet landed the 9th Marine Expeditionary Brigade at Danang. For the rest of the war, the 1st Marine Division and the 3d Marine Division of the III Marine Amphibious Force (III MAF) battled North Vietnamese Army and Viet Cong troops in the northern provinces of the Republic of Vietnam. Marine generals reporting to CINCPAC, not Navy



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A Vigilante of RVAH-7 takes on fuel from an A-4 Skyhawk after the photo reconnaissance plane completed a mission over South Vietnam in April 1966.



USNI

Cubi Point Naval Air Station in the Philippines hosted the Fleet Intelligence Center Pacific Facility, which provided critical support to Task Force 77.



Indochina.

admirals headquartered in Saigon, directed combat operations in the I Corps Tactical Zone. Naval intelligence units of III MAF organic to the Marine units, as well as Pacific Command intelligence centers (including Fleet Intelligence Centers at Cubi and Pearl Harbor), supplied these fighting forces with information relevant to the ground war in I Corps and the infiltration of troops into that region from North Vietnam and Laos.

The Navy played a more direct role in countering North Vietnam's seaborne infiltration of supplies into South Vietnam's coastal provinces, a mission unanticipated in early 1965. Between 1963 and 1965 North Vietnam dramatically increased its use of the sea to arm and supply Viet Cong forces in South Vietnam, even though U.S. intelligence agencies in Washington and the military commands in Hawaii and Saigon discounted the existence of significant seaborne infiltration.

That all changed on 16 February 1965 when a U.S. Army helicopter pilot spied men unloading a camouflaged, steel-hulled vessel beached in Vung Ro, an isolated bay on South Vietnam's central coast. South Vietnamese air and naval forces soon converged on the site. For the next three days and nights, the attacking forces fought Viet Cong guerrillas for possession of the ship and its cargo. After the battle, the South Vietnamese and their American military advisors discovered on board the captured ship and in lay-down areas ashore 100 tons of munitions, including 1 million rounds of small arms ammunition, more than 3,500 rifles and submachine guns, 500 pounds of TNT, 2,000 mortar rounds, 1,500 grenades, and 1,500 rounds of recoilless rifle ammunition. Captured documents confirmed that the ship and the mostly Chinese- and Soviet-made war material originated in North Vietnam.



Chinese and North Vietnamese small arms, mortar rounds, rocket propelled grenades, explosives, and other munitions recovered after a trawler's unsuccessful attempt to land supplies in South Vietnam.



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General William C. Westmoreland, Commander, U.S. Military Assistance Command, Vietnam (COMUSMACV), strides across the flight deck of *Ranger* (CVA-61) during his visit to the ship in March 1965.

Seventh Fleet commander Vice Admiral Paul P. "Brick" Blackburn Jr. apprised his superiors that the "event at Vung Ro Bay . . . is considered to be positive proof that sea infiltration is occurring and raises the strong possibility that at least a portion of the unconfirmed reports of the past were, in fact, true. Sea infiltration into RVN [Republic of Vietnam] is now proved."

Armed with this confirmation, despite continued doubts in Washington and even among naval



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An SP-2 Neptune patrol plane of Operation Market Time inspects a junk in the South China Sea.

officers in Vietnam, General Westmoreland called for establishment of a major allied coastal patrol effort. Blackburn's boss, Admiral Moorer, heartily endorsed Westmoreland's call for action, stating that the fleet was "on the scene with the capability and . . . we are ready to go." Wasting no time, on 9 March Westmoreland flew out to *Ranger*, flagship of Commander Task Force 77, and observed to Rear Admiral Roger W. Mehle that "he needed help from all the resources in the . . . area in order to beat the VC military machine and to inspire or shame the Vietnamese, particularly the [navy], into doing a better job, since they were about the worst of the three services in VN." Responding to the call, on 11 March the Navy inaugurated Market Time, an operation that would engage the U.S. Navy and its intelligence community for the duration of the long conflict.

The U.S. and South Vietnamese forces initially deployed all along the 1,200-mile coastline from the DMZ to the border with Cambodia in the Gulf of Thailand included destroyers, minesweepers, and shore-based SP-2H Neptune patrol planes. Carrier RA-3B reconnaissance aircraft photographed major segments of the coastline. The Navy provided the surface forces with additional units, including destroyer escorts, Swift boats, patrol gunboats, LSTs, and Coast Guard high-endurance and 82-foot cutters. The VNN contributed coastal patrol ships and its junk fleet. P-5B Marlin seaplanes and eventually P-3A Orions flying from bases in South Vietnam and the Philippines eventually reinforced the air patrol.

Market Time covered South Vietnam's maritime approaches in three general zones: 1) an air patrol sector farthest out to sea; 2) an outer surface barrier mounted by large U.S. ships; and 3) an inner, or "green-water" barrier patrolled by U.S. and South Vietnamese boats and junks. Radar and communications-equipped coastal surveillance centers established at Danang, Qui Nhon, Nha Trang, Vung Tau, and An Thoi coordinated the overall U.S.-South Vietnamese patrol effort.

Vice Chief of Naval Operations Admiral Horacio Rivero suggested that Market Time should be directed by the Pacific Fleet rather than "some other command, such as COMUSMACV." Accordingly, Seventh Fleet ran the operation until 31 July 1965. By then, however, it was clear that since the coastal

patrol directly supported Westmoreland's war effort in South Vietnam, the Navy subordinate on his staff should direct Market Time. Rear Admiral Norvell G. Ward, as Chief of the Naval Advisory Group and, after 1 April 1966, as Commander Naval Forces, Vietnam (COMNAVFORV), took on that responsibility and established the Coastal Surveillance Force (Task Force 115).

The early Market Time experiences of the U.S. Navy made it abundantly clear that without precise intelligence, the chances of allied air and naval forces intercepting the arms-bearing ships of North Vietnam's 125th Naval Transportation Unit were slim. The enemy command ultimately operated as many as 67 vessels, including 18 trawlers of 8 different classes ranging from 95 to 400 metric tons.



Off the coast of South Vietnam, a U.S. Swift boat pulls alongside a junk to inspect its cargo and the identification papers of its crew.

NHHC Vietnam Collection



USNI

A NAVFORV intelligence officer, standing next to a chart identifying the location of various Sino-Soviet bloc merchant ships, briefs crewmen of Patrol Squadron 40 who will shortly conduct an airborne patrol along the South Vietnamese coast.

These ships normally operated from the port of Haiphong, although some intelligence reports suggested that at the height of the Rolling Thunder campaign, China allowed the North Vietnamese to operate from ports on the island of Hainan. Routinely, infiltrating trawlers headed east through the narrow channel between Hainan and the mainland of China steamed southward and far out to sea, and only in the dark of night steered a course undetected for the South Vietnamese littoral. Market Time forces had

great difficulty locating and tracking the infiltrators, identifying them as North Vietnamese ships, and coordinating their capture or destruction. CIA, DIA, and NAVFORV intelligence determined from documents captured in early 1965 and a prisoner interrogated in June that for some time as many as two trawlers a month had been delivering supplies to VC-controlled areas near the mouths of the Mekong River. In June allied forces discovered a large arms cache in Kien Hoa Province southwest of Saigon.



The Mekong Delta.

Included in the haul were six Chinese-made flame-throwers. A VC prisoner verified that Kien Hoa had become a primary delivery point on the coast. Despite this evidence and following the Vung Ro interception, not until the last day of 1965 did the patrol forces discover an infiltrating trawler, in this case off the coast of An Xuyen in the far south of Vietnam. Knowing he had been "made," the ship's skipper reversed course and aborted his mission.

One problem with the U.S. interdiction program might have been a lax attitude toward communications security. A Naval Security Group investigation discovered that some naval officers provided over

unsecure nets a "wealth of information" on which ships and craft formed their patrols, where they operated, and where they expected to be in the near future. On receiving the NSG report, one commander told his subordinates that he had learned more key information from the enemy intercepts of U.S. communications than from his own subordinate's situation reports.

The naval intelligence community dramatically improved coordination with the operational commands in Vietnam, exploited all sources of intelligence, and developed a sophisticated analytical and interpretive process. Eventually, Market Time

intelligence officers, using pattern analysis, achieved a comprehensive understanding of what routes the infiltrating ships would take and what sites on the coast of South Vietnam they would attempt to reach.

Between the spring of 1966 and summer of 1967, concrete results began to accompany the coastal patrol effort. In May 1966, Market Time forces destroyed an infiltrating ship and in June forced another trawler to run aground, both on the Mekong

Delta coast. Recovered from these ships were tons of munitions manufactured in China in 1965 and 1966. Beginning in November 1966 U.S. and Australian ships engaged in Operation Sea Dragon off the coast of North Vietnam complemented the Market Time patrol by intercepting and destroying scores of junks and sampans attempting to move supplies into South Vietnam or forcing them to abort their missions. On New Year's Day 1967, Coast Guard cutter *Point*



USNI

Crewmen of a South Vietnamese Coastal Force junk work to put out the fire on a North Vietnamese trawler intercepted by allied forces in May 1966.

Gammon (WPB-82304) got into a running fight with an infiltrator, compelling the North Vietnamese crew to scuttle their ship. Another crew took similar action when Task Force 115 units intercepted their trawler off Quang Nhai Province in northern South Vietnam in March.

In a desperate attempt to supply North Vietnamese and Viet Cong forces, fighting for survival during the Tet and post-Tet offensives of 1968, Hanoi dispatched five trawlers to the south—not one of them completed the mission. Allied patrol forces destroyed or captured three of the vessels and forced the other two to give up their infiltration attempt.

The U.S. naval command in Saigon enhanced the interception effort by providing more timely communications intelligence reports to the coastal units. Part of Market Time's success during and after 1968 can be attributed to NSA which, through intercepts, identified the communication network of North Vietnam's 125th Sea Transportation Unit. In 1970 NSA installed equipment in a pair of P-3

Orion coastal patrol aircraft that enabled the crews to home in on the radio frequencies employed by infiltrating trawlers. As a result of the allies' comprehensive counterinfiltration efforts, between March 1968 and August 1969, not one North Vietnamese trawler eluded the Market Time patrol.

The success of Market Time resulted not only from the operational skill and bravery of the allied patrol forces and support from the intelligence community but also from the failure of U.S. strategy in Southeast Asia. Hanoi discovered it did not need the sea to keep up the fight in South Vietnam's northern and central provinces. The massive, multiyear U.S. effort to interdict the Ho Chi Minh Trail failed to prevent the enemy from exploiting that line of communications. Despite the heavy and sustained U.S. aerial interdiction campaign, which destroyed thousands of enemy trucks and other means of transport and killed thousands of enemy troops in transit, Hanoi managed to keep its forces in South Vietnam armed, supplied, and able to launch one major nationwide offensive after another. ♦



U.S. Coast Guard cutter *Point Barnes* during a patrol near An Thoi in the Gulf of Thailand. Coast Guard units played a major role in Operation Market Time.



A merchant ship unloads its cargo in Cambodia's port of Sihanoukville.

Courtesy Lawrence Serra

CAMBODIA'S OPEN DOOR: SIHANOUKVILLE

The Johnson administration also made a major mistake by allowing Cambodia to assert neutrality in the Southeast Asian conflict while that country provided Communist forces sanctuary in its jungle-covered eastern and southern borderlands. Throughout the war from these sophisticated supply bases, North Vietnamese forces staged major offensives into South Vietnam and retreated there for recovery from battle, reinforcement, and resupply.

Moreover, an interpretive failure by the U.S. national intelligence establishment for years prevented the Johnson and Nixon administrations from shutting down a major Communist source of supply: the Cambodian port of Sihanoukville. From 1966 to 1970 multiple sources of intelligence reported that Chinese and other Communist-bloc merchant ships routinely unloaded cargoes of arms and other military supplies at the port. Cambodian companies then loaded trucks with the war material and delivered it to designated points on the border with South Vietnam. North Vietnamese and Viet Cong units then took charge of the stores of rocket propelled grenade launchers, AK-47 assault rifles, mortar and rocket rounds, and other munitions and transported them to their combat units throughout the Mekong Delta. The United States could have severed this enemy supply line in one day by blockading the port, but blockades are an act of war and neither the Johnson nor Nixon administrations was prepared to take that step unless they had incontrovertible proof that the "neutral" Cambodian port served America's enemy.

The intelligence staffs of the U.S. military organizations in the operational theater, including those of the Pacific Command, MACV, and Naval Forces, Vietnam, suspected that Sihanoukville supplied the bulk of the enemy's logistic support in the delta and the Saigon area. For many years, however, the



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Rear Admiral Kenneth L. Veth (left), who led U.S. naval forces in South Vietnam from April 1967 to September 1968, walks with Captain Paul N. Gray, in charge of Operation Game Warden.

military commands lacked conclusive proof of the extent, and even the existence, of this enemy line of communications. Information from agent accounts, aerial reconnaissance, communications intercepts, and other sources proved fragmentary, unsubstantiated, and sometimes contradictory.

The military commands responded by intensifying their collection efforts. MACV's Blackbeard collection program integrated information from manned aircraft, agents, and intelligence teams sent into Cambodia. In the spring of 1968,

COMNAVFORV Rear Admiral Kenneth L. Veth persuaded Seventh Fleet to deploy a submarine 15 miles off Sihanoukville. From that distant and fixed position, however, onboard observers could not determine which or how many merchant ships actually entered the port. The Naval Security Group also mounted an effort to gather signals intelligence related to Sihanoukville but local atmospheric conditions limited the value of the information.

In July 1969, however, a task force of MACV, NAVFORV, and Seventh Air Force intelligence analysts concluded that Sihanoukville was a major port of entry for enemy supplies and that the Cambodian government was complicit in their delivery to the enemy. Human intelligence reports made it clear that Cambodia was importing far more military supplies than were needed by its minuscule armed forces. One of the more successful clandestine agent networks was “Sunshine Park,” overseen by the NAVFORV intelligence chief, Captain Earl F. Rectanus. He used agents in Cambodia and periodically sent other spies 10 kilometers into the country’s border areas. In supporting Blackbeard, the theater commander’s overall collection program, he tasked U.S. naval intelligence officers with gathering precise information: the infiltration of North Vietnamese personnel and equipment through Cambodia; enemy base camps; Cambodian government interactions with the enemy; waterway movement from Cambodian ports to the South Vietnam border; and potential North Vietnamese targets in Cambodia.

Reports from 34 reliable sources determined that eight ships had unloaded 7,500 tons of ordnance at the port between October 1966 and July 1969. Another six ships were suspected of delivering 10,500 tons of munitions. The Cambodian armed forces required only 700 tons annually. The task force also learned from North Vietnamese and Viet Cong prisoners, former enemy soldiers in South Vietnam, and from 436 reports from agents in Cambodia that the enemy moved massive amounts of war material into the delta from Cambodia. One hundred and thirty-six of these reports alluded to

Sihanoukville as the point of origin for the material and only four as the Ho Chi Minh Trail.

Before 1969, however, the CIA, the DIA, and the State Department in Washington did not believe that Sihanoukville served as a major entry point for enemy war material. A CIA study concluded that “a rigorous examination of our intelligence holdings failed to unearth any reliable evidence of a significant and organized flow of ordnance during 1966–1967.” CIA historian Thomas Ahern related that agency analysts were besieged by a “welter of raw reports, some of them alleging an arms traffic that did not exist for a full two years after the first claims to it.” He added, “even the best of the reporting, up to the spring of 1969, was low level and incomplete.”

Captain Rectanus, head of NAVFORV’s intelligence staff during 1968 and 1969, related that even after 50 or more briefings of Washington-based intelligence officials, he failed to convince them of the credibility of the locally developed information. He observed that “the analysts that they [CIA and State] sent out there on numerous occasions just couldn’t be budged. Now [I don’t know] whether it’s because the analysts themselves really didn’t believe us, didn’t believe that our analysis was good as it was, or whether they were told by Washington.” He continued, “the second thing that they could never accept is the evidence we had that . . . the actual crates and guns that were in Sihanoukville went this way and ended up in the delta, which we could document. And we fought this battle certainly for the time I was in Vietnam, never really successful in getting State and CIA to recognize it.”

By mid-1969, even the Washington agencies had come to accept the evidence that Sihanoukville supplied most of the arms that flowed into the delta. Unsure of the reliability of the military’s sources of information, the CIA belatedly developed its own agent net in Cambodia. Richard Helms, Director of the CIA at the time, wrote in his autobiography that “dawn broke in late June [1969] when CIA operatives recruited an agent with direct access to the bills of lading that provided



NHHC Vietnam Collection

A P-3 Orion of Patrol Squadron 1, operating from the airfield at Sangley Point in the Philippines, trails a suspicious vessel in the South China Sea in 1971.

documentary evidence on the shipping passing through Sihanoukville.” Helms admitted to having “egg on our [the CIA’s] collective faces.” The agency later concluded that there is “now no doubt that elements of the Cambodian Army, acting under the authority of Chief of State Sihanouk, have supervised the movement of substantial quantities of arms and munitions from Sihanoukville to communist forces in South Vietnam.”

The overthrow of Sihanouk by members of his armed forces in March 1970 and the subsequent U.S. and South Vietnamese invasion of Cambodia erased all doubt about the port’s vital worth to Hanoi. In

December 1970 the CIA reported that its review of more than 12,000 pages of captured material (and 32 cases holding cryptographic equipment) documented Sihanouk’s perfidy and Hanoi’s strategic coup.

Between December 1966 and April 1969, ships delivered 21,690 tons of military supplies to Sihanoukville, most of which soon found its way into South Vietnam. Rectanus later observed that “our analysis was 5 percent off of what actually came in through” Sihanoukville. DIA historian Michael B. Petersen related that the agency received a “blow when it was revealed, despite its claims to the contrary, that most of the North Vietnamese supplies moving

south were coming through the Cambodian port of Sihanoukville, not down the Ho Chi Minh Trail."

One cannot know if the Johnson or Nixon administrations would have taken diplomatic or military action against the Sihanouk government for enabling North Vietnam's military use of Sihanoukville and other Cambodian territory before 1970. After the war, however, the President's Foreign Intelligence Advisory Board, headed by Army General Bruce Palmer, took the larger intelligence community to task for "a major intelligence failure which resulted from deficiencies in both intelligence collection and analysis." This failure by the U.S. intelligence agencies to develop a more systematic and reliable intelligence-gathering process and failure to settle their interpretative differences over the course of many years poorly served the National Command Authority.

Denied access to Sihanoukville when Sihanouk temporarily halted operation of the port in the fall of 1969 and after his ouster in the spring of 1970, the North Vietnamese resumed their use of trawlers to deliver supplies to the Mekong Delta. According to a VC prisoner, the enemy's Central Office for South Vietnam (COSVN) established Rear Service Group 962 for receiving, distributing, and storing seaborne munitions in the delta. Hanoi sent 15 trawlers south between August 1969 and the end of 1970, and all but two of the ships were compelled to return home without accomplishing their mission. A single trawler probably got through in August 1970 and Market Time forces sank another one off Kien Hoa Province in November.

In late 1970 COMNAVFORV changed tactics. Previously, Market Time aircraft had to track a suspected trawler departing North Vietnam (or Hainan) and throughout its passage. Allied rules of engagement prohibited the destruction of a ship in international waters (beyond South Vietnam's 12-mile territorial limit) unless it was positively identified as a North Vietnamese ship intent on infiltration. When trawlers discovered they were under surveillance, they routinely ended their missions

in hopes of later successfully evading patrols. The U.S. operational approach resulted in an enormous expenditure of patrol time to say nothing of wear and tear on the planes and crews.

In the new tactic COMNAVFORV arranged with CINCPACFLT for the latter's naval units to track a trawler's passage sight unseen. Reconnaissance planes photographed the ship departing Haiphong and passed images to a submarine deployed east of the strait between the Chinese mainland and Hainan. Then the submarine worked in tandem with P-3 Orion patrol planes as the suspected vessel headed south. Only when the infiltrator made a dash for the coast of South Vietnam did the trailing unit notify COMNAVFORV so he could concentrate his forces to capture or destroy the ship. A trawler managed to evade that surveillance and deliver its cargo to a point in An Xuyen Province in March 1971. In succeeding months, however, the system worked as planned. Market Time forces destroyed three vessels, one of which was a new SL-8 trawler with a carrying capacity of 400 tons. Apparently discouraged by this loss, Hanoi did not send another ship south for another six months. The most successful application of this tactic occurred in April 1972 with the sinking of an enemy trawler off the Mekong Delta (see sidebar).

Seaborne infiltration increased with the turnover of coastal surveillance resources to the Vietnam Navy and the departure of U.S. forces from the war in 1973, but that development had little strategic impact on the war. By 1975 the Ho Chi Minh Trail had literally become a logistics superhighway that enabled the Communist forces to overwhelm the Republic of Vietnam and win the war. ♦

Sculpin and the Sinking of an Infiltrating Trawler

In the spring of 1972, the Navy exploited the superb tracking ability and stealth of its submarine force to interdict seaborne infiltration into South Vietnam. Beginning on 10 April, nuclear-powered attack submarine *Sculpin* (SSN-590), skippered by Commander Harold Mathis, tracked a suspected North Vietnamese trawler as it exited the Chinese island of Hainan and headed south for points unknown. Admiral Bernard A. "Chick" Clarey, the Pacific Fleet commander, notified MACV headquarters near Saigon of the surveillance mission. MACV, in turn, assigned operational control of the submarine mission to COMNAVFORV, Rear Admiral Robert S. Salzer. In coming days the admiral monitored the mission almost on a minute-to-minute basis.

For 11 days and remaining out of sight, the submarine followed the infiltrator as she made a circuitous passage through the South China Sea, along the island of Borneo, up the coast of the Malay Peninsula, and into the Gulf of Thailand. P-3 Orion patrol planes maintained contact with the trawler when the ship entered the "Dangerous Ground" (an area about 180 nautical miles wide and 300 miles long) and other shallow waters unsafe for submarines.



USNI

COMNAVFORV Rear Admiral Robert S. Salzer, who oversaw the successful tracking and destruction of the enemy ship that tried to evade the Market Time patrol in April 1972.



NHHC Photo Collection

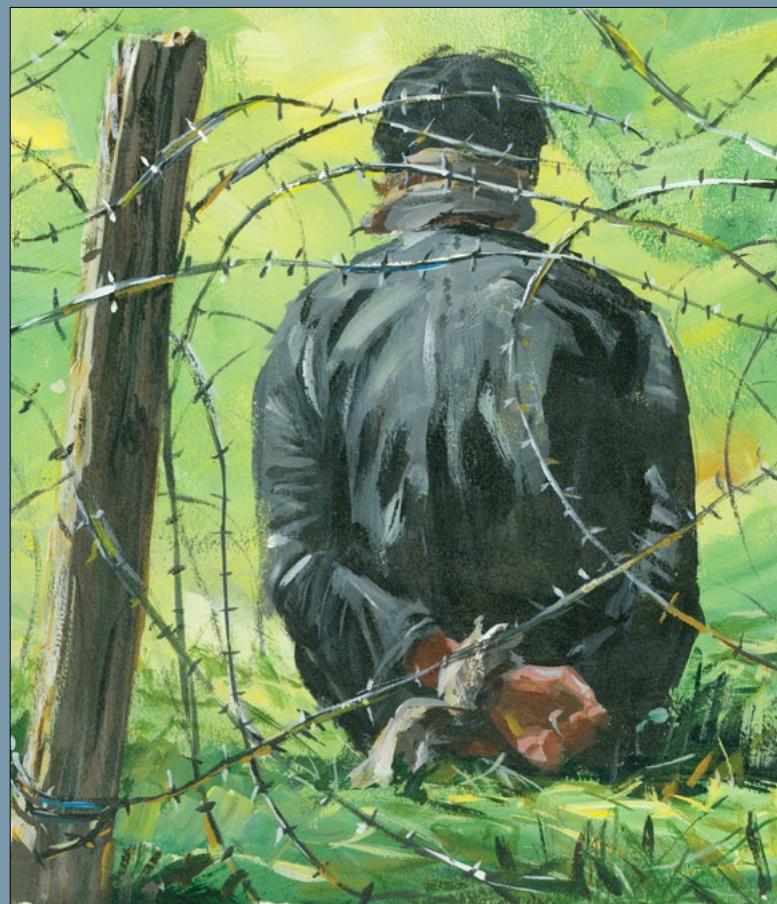
Nuclear-powered attack submarine *Sculpin* (SSN-590) underway. The ship trailed a trawler from the ship's point of departure off North Vietnam to the Mekong Delta coast in April 1972.

Before the trawler reached the Mekong Delta coast of South Vietnam, Salzer insisted that *Sculpin* photograph the ship and positively identify her as the one that they had been following from Hainan. Commander Charles R. "Chuck" Larson, executive officer of *Sculpin* and future Commander in Chief, Pacific, recalled that the commanding officer and he informed NAVFORV that "we are absolutely sure" about the identity of the ship. Communications intelligence personnel on board the submarine intercepted a message from the trawler that made clear the enemy was unaware of the submarine trailing her until the last hours of the mission. During the passage from Hainan, the submarine's sonarmen became intimately familiar with the trawler's distinctive shaft and propeller sounds. Periscope photographs of the white-colored trawler confirmed their analysis.

The trawler finally made a run for the coast of South Vietnam. Until disapproved by CINCPAC, Admiral John S. McCain Jr. considered ordering *Sculpin* to sink the ship with a torpedo. Nonetheless, Rear Admiral Salzer alerted Market Time patrol forces, including Vietnam Navy submarine chaser

Tran Khanh Do (HQ-4) and U.S. destroyer escort *McMorris* (DE-1036), to intercept the ship. On 24 April in international waters, *Tranh Khanh Do* hailed the trawler, which promptly hoisted the flag of the People's Republic of China and refused to stop. The Vietnam Navy warship then opened fire with her 3-inch guns. Larson recalled that as *Sculpin*'s officers watched the action thorough the submarine's periscope and the crew observed it in their mess on TV monitors, "the trawler exploded and disintegrated as its cargo [mostly ammunition] detonated [and] flames leaped hundreds of feet in the air."

The trawler's master and navigator were among the 16 crewmen who survived the blast and were rescued by allied forces. The survivors spoke a North Vietnamese dialect, not Chinese. According to Larson, the captives verified that they had tried to infiltrate guns and ammunition, enough to "supply the Viet Cong in IV Corps [the Mekong Delta] for at least 60 days." In recognition of *Sculpin*'s stellar accomplishment, the Republic of Vietnam awarded the ship the Cross of Gallantry, the only U.S. submarine to be so honored during the war. ♣



VC Prisoner by John Steel.

Navy Art Collection

THE NAVAL WAR IN SOUTH VIETNAM

In 1965 and 1966, even as Seventh Fleet executed the air campaign against North Vietnam, deployed Marine forces ashore in South Vietnam's I Corps, and developed the Market Time coastal patrol, General Westmoreland called on the Navy to inaugurate combat operations in the Mekong Delta. This lush agricultural region, rightly called the "breadbasket of Vietnam," with its 3,000 nautical miles of rivers, canals, and other inland waterways, was a logical venue for naval operations. French naval forces had successfully battled Viet Minh guerrillas there during the First Indochina War. The Vietnam Navy's River Force held sway there during the 1950s and early 1960s but by 1965 clearly needed help to stem the rising Viet Cong tide. The enemy disrupted commercial traffic on the waterways, established tax collection points, and undermined the authority of the government of the Republic of Vietnam.

Accordingly, on 18 December 1965 MACV and the command's naval staff established the River Patrol Force (Task Force 116) to regain control of the Mekong River, its main tributaries, and the Rung Sat forest between Saigon and the sea. In Operation Game Warden, the task force employed heavily armed 32-foot, fiberglass-hulled, Jacuzzi jet pump-powered river patrol boats (PBRs), minesweeping boats, and UH-1B "Huey" helicopters to accomplish the mission. The Viet Cong resisted fiercely, frequently ambushing PBR and minesweeping units,



Navy Art Collection

but ultimately the Game Warden forces established a strong presence on the major rivers. The Sailors, who sported black berets, interrupted enemy logistics traffic, reasserted the government's writ, and facilitated the free flow of commerce.

The Navy's second major operation in South Vietnam evolved in response to General Westmoreland's determination to reinforce Army of South Vietnam (ARVN) forces operating in the delta with U.S. ground troops. Westmoreland recognized that waterway movement of this force was essential, since few roads existed in the region. The upshot was establishment of the Mobile Riverine Force (MRF) that consisted of one, and later two, brigades of the 9th Infantry Division and the Navy's Riverine Assault Force (Task Force 117). The MRF's major purpose was to locate, surround, and destroy the enemy's main force battalions and other large formations. To accomplish that task the Navy created a contingent of heavily armed and armored river craft that included command-communications boats, monitors, armored troop transports, and armored support patrol boats. Supporting the MRF were teams of Army Security



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A monitor of the Army-Navy Mobile Riverine Force fires at enemy forces ashore during operations in the Mekong Delta.

Agency voice intercept and short-range direction-finding teams that worked with naval intelligence field officers. In one instance, a team on board the MRF's "flagship" *Benewah* (APB-35) jammed the radio transmissions of a Viet Cong headquarters and tracked its movements, enabling a force of PBRs to locate and destroy the enemy command group.

Throughout 1967 the MRF engaged in numerous pitched battles that severely depleted enemy strength. During the Tet and post-Tet offensives, the joint Army-Navy force moved all about the delta as General Westmoreland's "fire brigade," decimating Viet Cong units and recapturing overrun cities and towns. MRF monitors and other combatants and Game Warden PBRs also helped keep river supply lines open to Marine and Army troops fighting hard against the North Vietnamese Army in the northern provinces of South Vietnam.

In the aftermath of the Tet offensives of 1968, during which the enemy suffered horrendous casualties at the hands of allied forces, the new COMNAVFORV, Vice Admiral Elmo R. Zumwalt Jr., with the enthusiastic support of the new COMUSMACV, General Creighton W. Abrams Jr., decided on a new strategy for the Mekong Delta. Zumwalt concluded that his offshore and river patrol forces had largely accomplished the interdiction of enemy resupply traffic along the coast and on the major rivers of the delta.

In Operation Sealords (for Southeast Asia lake, ocean, river, delta strategy), the admiral concentrated strong naval resources along the border with Cambodia and in the delta's smaller rivers and canals. The new approach generated fierce combat, since the enemy recognized the peril to the supply lines of Viet Cong and North Vietnamese forces deep in the delta. When U.S. forces withdrew from the

war as part of the Vietnamization program, the Vietnam Navy and the other branches of the South Vietnamese armed forces took over full control of the mission. The hard fighting of American and South Vietnamese naval and military forces employing the Sealords strategy from 1969 to 1973 helped secure the Mekong Delta for the government of the Republic of Vietnam. The defeat of South Vietnam in 1975 occurred in the northern and central reaches of the country, not in the Mekong Delta. ♦



NHHC Photo Collection

Vice Admiral Elmo R. Zumwalt Jr., COMNAVFORV from September 1968 to May 1970 and architect of the successful Sealords anti-infiltration campaign, receives information on the enemy situation directly from one of his combat officers.



NHHC Photo Collection

General Creighton W. Abrams Jr., COMUSMACV (left) and Vice Admiral Zumwalt at the ceremony marking the latter's departure from South Vietnam in May 1970. The two leaders worked especially well together.



A SEAL scans the surroundings during his unit's intelligence-gathering mission in a Mekong Delta village.

NAVAL INTELLIGENCE AND THE FIGHT FOR SOUTH VIETNAM

Vital to allied success in securing the Mekong Delta and South Vietnam's waterways was accurate and timely intelligence. Gathering that intelligence began in the field, where naval combat forces came face-to-face with the enemy. Each day of the war, coastal and river patrol, MRF, and naval aviation units dispatched operational reports to NAVFORV headquarters in Saigon that included intelligence information. These commands also depended heavily on actionable intelligence to carry out their duties.

The Navy's SEAL commandos not only used tactical intelligence with devastating effect on their Communist foes but also gathered information that was vital to the operation of the combat commands they supported. Despite their Hollywood image, SEALs in Vietnam did not set out to engage in heavy combat with North Vietnamese and Viet Cong troops, even though that occurred often enough, but rather to collect intelligence on the location, resources, movement, and leadership of enemy forces. Few other allied organizations surpassed the SEALs in capturing or killing key enemy leaders, retrieving battle plans and political documents, and gathering human intelligence.

In one instance, the naval command tasked a contingent of SEALs with capturing VC leaders reported to be meeting near Phan Thiet, east of Saigon. At night on 4 July 1967, several SEALs swam ashore and, once they determined the beach to be free of enemy lookouts, signaled more special warriors embarked in a rubber boat to join them. The group captured three Viet Cong leaders, killed another who attempted to escape, and gathered a trove of political and military papers. The team then moved swiftly back to the beach. Protected by lively naval gunfire from destroyer *Brush* (DD-745),

the ship that had transported them to the location, the SEALs safely embarked along with their haul of prisoners and documents.

SEALs in the Mekong Delta used different tactics to carry out their intelligence-gathering duties. Sometimes, small SEAL teams followed up on reports locating VC camps deep in the jungle to surprise and snatch their human prey. At other times, the SEALs set up ambushes with South Vietnamese special forces, knowing that some enemy troops would survive the ensuing firefight and provide useful information. For instance, in the early weeks of the Tet Offensive of 1968, a 60-man South Vietnamese Provincial Reconnaissance Unit (PRU) led by a SEAL officer killed 20 Viet Cong soldiers but captured another 23. Shortly afterward, SEALs detained an enemy guerrilla who enabled the unit to ambush and kill his battalion's deputy commander, a company commander, three other officers, and a reporter from Hanoi apparently seeking news at the front. The successful operation foiled a planned attack on Binh Thuy, headquarters of the Navy's River Patrol Force. In another operation that year, SEALs exploited the information from a VC defector to identify more than 100 Communists who had infiltrated U.S. combat units and agencies around the town of My Tho.

In the Phoenix Program, SEALs often teamed up with PRUs to capture or kill members of the Viet Cong Infrastructure (VCI), identified as enemy military leaders, political operatives, intelligence agents, tax collectors, and other key personnel. Exploiting information from prisoners, former enemy soldiers, and villagers, SEALs and South Vietnamese military, police, and internal security forces registered significant success in the counterinsurgency struggle. Phoenix, a responsibility of the CIA's William Colby, was responsible for the capture of



USNI

A trio of heavily armed SEALs tries to make headway through the mud as they begin a December 1970 patrol in the Ca Mau Peninsula, a region of mangrove swamps and especially difficult terrain that concealed enemy guerrilla units.

almost 30,000 members of the VCI. Another 17,000 former antagonists accepted an amnesty offered by the South Vietnamese government. In addition, the Phoenix forces killed more than 20,000 Communists who fought to resist capture. Hanoi later admitted that the Phoenix Program seriously threatened the cohesion of their insurgency effort. Unfortunately for the allies, sometimes harsh and abusive interrogation practices, extrajudicial killings, and general disinterest in the program by the South Vietnamese government mitigated much of that success.

One goal of Vice Admiral Zumwalt's Sealords strategy was to establish a permanent South Vietnamese government presence in areas of the Mekong Delta long dominated by the enemy. Before dispatching Swift boat and other naval forces into the Cua Lon, a river in the Ca Mau Peninsula,

the naval command needed good intelligence on physical obstructions that might hinder navigation. A SEAL contingent sent to investigate not only identified a number of Viet Cong-built barriers in the waterway but determined that their destruction would not be easy. The barriers proved impervious to air strikes and the SEALs' own explosives. Enlightened by intelligence reports provided by the SEALs, allied forces later entering the river employed sufficient amounts of explosive to demolish the structures. Thereafter, naval operations on the river went ahead unhindered.

One of the most dramatic operations of the war was an attempt to capture several key Communist leaders located on an island near Nha Trang on the central coast. It was hoped that interrogation of these men would lead to the

unmasking of an entire network of agents that had infiltrated the city. On the dark and moonless night of 14 March 1969, Lieutenant (j.g.) Joseph "Bob" Kerrey and a squad of SEALs disembarked from a small craft, soundlessly scaled a 350-foot cliff hand-over-hand, and approached the VC camp barefoot to lessen the noise.

Despite the SEALs' best efforts, however, an enemy sentry saw them and raised the alarm.

Although badly wounded by a grenade and in pain, Kerrey continued to lead the operation until almost collapsing from blood loss. His men killed seven enemy soldiers and captured others. The intelligence gathered from that mission was significant and included documents that listed Communist agents working in the city. For his heroic leadership under fire, Kerrey was awarded the Medal of Honor, the first of only three SEALs so recognized during the



President Richard M. Nixon at the White House ceremony where he presented Lieutenant (j.g.) Joseph R. Kerrey (right) with the Medal of Honor for his bravery under fire in an intelligence-gathering mission. In the background is another recipient of the nation's highest honor, Navy Lieutenant Thomas G. Kelley.

NHHC Photo Collection



USNI

Amphibious transport submarine *Grayback* (LPSS-574), one of several specially configured boats that landed SEAL and UDT Sailors on the beach for intelligence-gathering prior to amphibious operations.

war. Kerrey demonstrated his qualities of leadership many years later as a Democratic Governor and Senator from Nebraska and contender for the presidency of the United States.

The Navy awarded SEAL Team One and SEAL Team Two, both of which dispatched platoons to Vietnam throughout the war, a total of five Presidential Unit citations. The naval warriors killed or captured 4,000 enemy leaders and troops. More importantly but less quantifiably, SEALs saved hundreds of American and South Vietnamese lives by alerting allied commands to enemy movements, concentrations, and attack plans. The accomplishment did not come cheaply. A total of 48 members of the Navy's special warfare community made the ultimate sacrifice.

The Navy and Marine Corps would have been hard-pressed to carry out one of their most important responsibilities in Vietnam—major amphibious assaults and smaller raids—with intelligence collection by other naval special warfare units, specifically, the underwater demolition teams. Much like their elders in World War II and the Korean War, the UDT frogmen paddled ashore in rubber boats or swam to the beach in the dead of night and in all kinds of weather to gather precise information on the tides, beach gradients, underwater hazards, and enemy defenses before fleet leaders gave the

traditional command to “land the landing force.” Often the frogmen deployed ashore from *Perch* (APSS-313), *Tunny* (APSS-282), or *Grayback* (LPSS-574), submarines that were specially configured to support naval special warfare. UDT 11 and UDT 12 frogmen carried out their dangerous mission in Starlite, Jackstay, Dagger Thrust, Blue Marlin, and scores of other amphibious operations during the war. The naval service awarded both units Navy Unit Commendations for their combat actions and their surveillance of hundreds of miles of South Vietnam’s beaches, harbors, and rivers.

Beginning in June 1966 the Naval Investigative Service, a field component of the Office of Naval Intelligence, sent its first contingent to work in South Vietnam. From 1968 to 1970, 6 officers, 12 enlisted personnel, 21 special agents, and 8 Vietnamese served with the Naval Investigative Service Office (NISO), Vietnam, in Saigon, Danang, and five other locations. These in-country operatives focused for the most part on criminal investigations of U.S. naval personnel.

When they had the time, NISO team members also worked with South Vietnamese national police and intelligence agencies to gain an understanding of tactics used by Viet Cong sapper units to infiltrate and attack allied military facilities. For instance, Lieutenant James Law, NISO Vietnam’s executive officer in 1968, spearheaded an effort to document

sapper attacks that both succeeded and failed during the Tet offensives of 1968 and disseminated his findings throughout MACV.

NISO also recruited Vietnamese informants on U.S. naval installations and in contiguous towns and villages to help identify Viet Cong spies among the civilian workforce. Despite NISO's best efforts, however, few U.S. military leaders believed they knew the identities of the enemy informants in their midst. Indeed, it was widely understood by Americans during the war that the enemy learned of allied plans soon after operational information reached South Vietnamese commands. Vice Admiral Zumwalt later elaborated: "The VC were also getting a lot of intelligence from people who were supposedly on our side. There were two or three officers in the Vietnamese Navy that turned out to be a real surprise to all of us, that we would have all sworn were loyal to us that were actually VC agents." Captain Rectanus made a similar point: "After the war was over, we found even some of the most trusted Vietnamese that we thought would die for South Vietnam were deep informants all along. We were never sure, and I don't think that the [South] Vietnamese themselves were ever sure that they weren't infiltrated."

The naval intelligence community both in Vietnam and the United States focused much attention on one aspect of warfare particularly relevant to naval forces operating in South Vietnam's waterways—mines. These included acoustic-magnetic influence mines using Soviet-designed firing mechanisms and mines command-detonated from shore. Viet Cong swimmers emplaced limpet mines on the hull of aircraft ferry *Card* that sank the ship at the dock in Saigon in May 1964. Other enemy mines exploded against merchant ship SS *Baton Rouge Victory* as she transited the river between Saigon and the sea in August 1966 and *Westchester County* (LST-1167) in November 1968. The latter action killed or wounded 52 soldiers and Sailors. Mines sank scores of other U.S. and South Vietnamese combat craft as well. NAVFORV counted more than 100 incidents involving mines in 1968 alone. The intelligence staffs in



USNI

A 1,000-pound, Soviet-made contact mine recovered by Navy mine countermeasures forces in South Vietnam before the enemy could detonate it.



NHC Vietnam Collection

Westchester County (LST-1167) 11 months before Viet Cong swimmers/sappers detonated a mine that caused U.S. casualties and severe material damage even though they failed to sink the ship.

Saigon, Pearl Harbor, and Washington accomplished numerous studies of the problem and their advice helped the operating forces devise tactical solutions to negate the enemy's mine campaign. Indeed, despite the enemy's best efforts, mines never denied allied forces' use of the rivers, canals, harbors, and coastal waters of South Vietnam. ↴



Naval intelligence officers of the 3rd Coastal Zone pose for a group photo.

NILOS IN ACTION

Also instrumental to the collection of intelligence at the operational level was the Naval Intelligence Liaison Officer. COMNAVFORV assigned individual NILOs to many of South Vietnam's provinces. These men gathered information from the combat units and human intelligence from captured enemy soldiers, former enemy soldiers, and the local population. Deployed early in the war to Vietnam, NILOs supported the Market Time and Game Warden patrol forces and the Army-Navy Mobile Riverine Force.

Vice Admiral Zumwalt's aggressive Sealords campaign to destroy enemy supply lines emanating from Cambodia and base areas deep within the Mekong Delta demanded accurate and responsive intelligence support.

When the admiral withdrew some Swift boat units from the Market Time patrol and armored combat craft from the MRF and concentrated them in key areas of the delta, he had his intelligence staff put many of the seven coastal zones/riverine zones and 28 NILOs directly under his control. Captain Rectanus recognized that field intelligence officers' past emphasis on advising their local

commands would not work well for Sealords. He asserted firmer and more centralized control to the intelligence process. Rectanus directed his subordinates to promptly relay their reports to Saigon to help his staff develop comprehensive and timely analyses of the enemy situation.

One of Captain Rectanus' greatest accomplishments was to provide Zumwalt with reliable information on what means and routes enemy forces used to transport recoilless rifles, rocket propelled grenade launchers, small arms, ammunition, and medical supplies from the Cambodian border to the Viet Cong strongholds in the Ca Mau Peninsula and U Minh Forest deep in the delta. Armed with that intelligence, Zumwalt's combat forces ambushed



NHHC Vietnam Collection

Viet Cong guerrillas taken prisoner in the Mekong Delta. Intelligence obtained from men such as these was essential to successful allied naval operations.



Vietnamese-American Navy Intelligence Office by Marbury Brown.

trained to speak Vietnamese, understand ground combat, develop networks, or handle agents. Surprisingly, fewer than 25 percent of the officers sent to serve as intelligence officers had backgrounds in intelligence. The standard one year in-country tours for U.S. military personnel and the constant turnover also hampered the mission. Rectanus later observed that even at the end of his time in Vietnam, “our naval intelligence organization operated, on a scale of ten, maybe at [an] effectiveness of five.”

The captain developed an approach to his mission that relied most heavily on human intelligence collected by networks of Americans and South Vietnamese working together. He developed a theater-wide intelligence picture based primarily on human intelligence, although information from aerial reconnaissance, captured documents, and interviews with POWs and former enemy soldiers changing

sides also proved essential.

Rectanus’ actions certainly pleased in-country naval leaders, including his boss. Admiral Zumwalt related that Rectanus “had a very good network of agents in Cambodia. . . . We were getting, generally, very good intelligence. And we knew pretty well where to strike; we knew pretty well where the major infiltrations were occurring.” Captain Arthur Price, commander of Task Force 116, observed that because of Rectanus’ efforts, there was “a major improvement in the timeliness of agent reports” and “a marked increase in both the quality and quantity of intelligence received by the Game Warden forces from the NILOs.”

enemy sampans and human porters making their way south along narrow canals and jungle paths. Such actions, Rectanus understood, could disrupt logistic operations for weeks as the enemy was forced to develop new routes through unfamiliar villages and terrain.

The Navy had trained Rectanus and other members of the intelligence community how to collect information using imagery and signals intelligence for a conventional war on Soviet, Chinese, and Cuban military forces that might figure prominently in a conventional war, but precious little on a counterinsurgency conflict. Few NILOs dispatched to South Vietnam early in the war had been

Zumwalt's Eyes and Ears

Earl Frank "Rex" Rectanus was key to the success of Vice Admiral Zumwalt's Sealords Campaign, a new dynamic approach to winning the naval war in South Vietnam.

Born in 1926 Rectanus joined the Navy in World War II as an enlisted Sailor and later earned a commission in the Naval Reserve. Rectanus handled a number of increasingly challenging surface navy and intelligence billets that well prepared him for his duties in Vietnam. He served as assistant naval attaché in Moscow at the height of the Cold War, followed by an assignment as Deputy Assistant Chief of Staff for Operations with the Naval Security Group. Rectanus later observed that in that billet, "much of our emphasis was placed on trying to assist the forces in Vietnam as best we could." The captain then served as an intelligence officer on the staff of CINCPAC, Admiral Ulysses S. G. Sharp, who directed the air war against North Vietnam. Each day, Rectanus briefed the admiral on air operations and later recalled that during the two-year tour, most days began at 0200 and were "totally consumed by Vietnam." He added, somewhat ruefully, that "in those days, we were talking about the tremendous pressure that we were putting on the North Vietnamese, how they would soon find out that it wasn't worth the cost to continue the war." They never did find that out.

Taking over as head of NAVFORV's intelligence section (N-2) in the pivotal spring of 1968, Captain Rectanus immediately worked to ensure that his subordinates, most of whom had little background in counterinsurgency operations and served only one-year tours in-country, honed their professional skills. One fellow staff officer related that "Rectanus kept a good handle on his intelligence officers and demanded of them the most rigorous analytical standards." One step he took was to tighten control of the in-country naval intelligence process. In the past, NILOs and naval intelligence officers assigned to the coastal and riverine zones provided their local commands with intelligence from external sources but rarely developed their own information. Rectanus demanded that each NILO become "an active, aggressive collector and analyzer working the trade rather than just advising." The captain organized 180 agents into independent collection teams. He also fostered a much closer relationship with the intelligence staffs

of the Vietnam Navy, sharing sophisticated radio equipment and even sanitized communications intercepts with the allied service and benefitting from their knowledge of the country, its people, and the enemy.

Rectanus soon gained an appreciation of how intelligence could be employed

to best effect on the enemy. When Zumwalt came on board in September 1968 as the new COMNAVFORV and decided on an offensive against enemy forces in the delta, Rectanus was able to provide the admiral with an especially precise and accurate picture of enemy dispositions, unit strengths, and lines of communication. Howard Kerr, Zumwalt's aide, remembered that the admiral had "great confidence in what he was told by Rectanus. He'd move on that very quickly, and I think it proved to be correct."

Armed with good intelligence, Zumwalt launched his campaign that disrupted enemy supply lines from Cambodia, penetrated their base areas deep in the mangrove swamps and forests of southern Vietnam, and enabled the Vietnam Navy to continue the fight when the U.S. Navy withdrew from the conflict in 1973.

In recognition of his major contribution to the success of the Sealords campaign, the Navy promoted Rectanus to Rear Admiral and named him Commander, Naval Intelligence Command in 1969. He became the Director of Naval Intelligence in Washington in 1971. Rectanus retired from the Navy in 1976 but went on to serve as Deputy Assistant Secretary of Defense for Intelligence. The consummate naval leader and intelligence professional died in 2009. ♦



USNI

The intelligence support provided by Earl F. Rectanus (shown here as a vice admiral) proved to be one of the primary reasons for the success of the Sealords campaign.



NHHC Vietnam Collection

Captain Arthur A. Price, in charge of Operation Game Warden, inspects the model of a PBR, his command's primary fighting vessel.

NILOs, along with riverine and coastal zone intelligence officers, formed part of the Naval Intelligence Field Organization, Vietnam. Most NILOs, about 150 of whom served in Vietnam, shared the danger and discomfort of the combat units with which they served but, since these men often operated alone, they also had to endure loneliness and isolation. To collect intelligence, the young officers rode armored craft, PBRs, and other combat vessels into narrow rivers and canals that were subject to sudden, deadly Viet Cong ambushes. Communist fire killed NILO Kenneth Tapscott and four hours later an enemy bullet shattered the jaw of his replacement. In the late 1960s enemy action wounded all seven NILOs (two men were double recipients of the Purple Heart) who served in the Third Riverine Zone. Other NILOs lost limbs or had to be evacuated because of tropical diseases.



Courtesy William Steshko

Comrades in arms: NILOs Lieutenant Ross Peterson (left), Lieutenant William Steshko, and Lieutenant (j.g.) Gregory Arthur and Vietnamese intelligence officer Lieutenant Ban.

Jack Graf: A Naval Intelligence Hero

In a community that was no stranger to courage under fire in Vietnam, John “Jack” Graf stood out.

Before volunteering for Vietnam duty, Graf served for two decades in the Navy as an enlisted Sailor and chief petty officer. During 1957 Graf wintered over in Antarctica in Operation Deep Freeze. He then took a commission as a Limited Duty officer, joined an A-3D Skywarrior squadron as a bombardier/navigator and focused on air intelligence. But the young officer wanted more action, and he got it when he volunteered for Vietnam duty. He was assigned as the NILO for An Xuyen Province, the most forbidding Viet Cong-held base area in the southern Mekong Delta. One of the first NILOs in-country, Graf earned a Bronze Star with Combat V in 1967 by calling in naval gunfire that helped allied forces destroy a North Vietnamese trawler attempting to land weapons and ammunition on the coast. On another occasion that year, Graf flew as an observer on board an Army propeller-driven O-1 Bird Dog looking for signs of the enemy. He later related the details of his experience on that harrowing day:

We were taking a good look at a small hamlet when the jokers started shooting at us. The pilot put in a rocket, then I fired a machine gun, and I think I got some good hits. We then came around to fire another rocket. We were in the dive when the pilot took a hit. He had a startled look on his face, then collapsed. I immediately unstrapped, reached over, and grabbed him and the stick at the same time to get control of the airplane. I headed for Ca Mau and started making preparations to make a landing. I would have been in good shape except the radios went out and part of the controls were gone. I circled and made pass after pass, then finally brought the thing in. I skidded down the runway, through a fence, and came to rest in a rice paddy.

The Navy awarded Lieutenant Graf the Distinguished Flying Cross for his bravery and coolness under great stress. Over the course of his Navy service, Graf also earned a Purple Heart, six air medals, and other American and Vietnamese decorations.

In 1969 Graf volunteered for a second tour in Vietnam and this time served as a naval advisor and intelligence officer in the coastal zone that included Saigon and the upper delta. On 15 November



NHF Photo Collection

Jack Graf, one of the most dedicated and courageous NILOs who served in South Vietnam.



USNI

An Army O-1 Bird Dog inspects the area below marked by colored smoke before artillery or air strikes are called in on the enemy. On one such mission, Graf saved his life and that of his wounded pilot through remarkable self-composure and flying skill.

now-Lieutenant Commander Graf went aloft from his base at Vung Tau in an O-1 piloted by Army Captain Robert White for an aerial reconnaissance mission. Enemy ground fire shot up the Bird Dog, forcing both men to parachute from the heavily damaged plane.



NHF Photo Collection

An officer of the armed forces of Vietnam awards Graf the Vietnamese Cross of Gallantry.

Quickly captured and imprisoned in a miserable jungle cage, Graf resisted his captors' torture for over three months and then broke out. White, who survived captivity, later reported that the fearless officer made for a river and jumped in with Viet Cong guerrillas hot on his trail. Enemy gunfire wounded him and he drowned before his pursuers could recapture him. Before this fact became known, however, U.S. and Vietnamese air, naval, and ground forces mounted a month-long, but ultimately unsuccessful, effort to find the officer. Jack Graf's remains were never recovered.

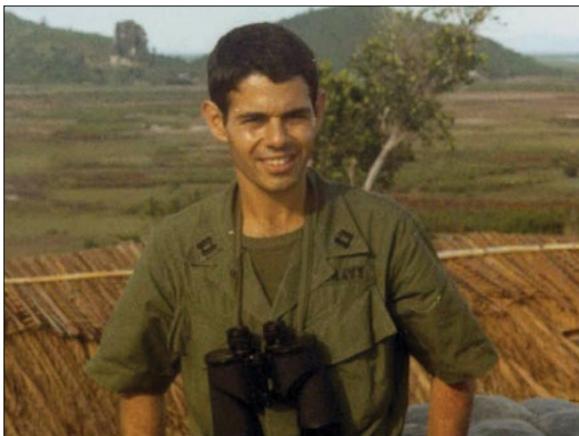
Robert Melka, a naval intelligence officer who served during 1969 with Graf (promoted commander posthumously), penned a fitting epitaph for the courageous and dedicated American: "He had one ambition—serve his country and do it well. That he did, and he put up one helluva good fight right to the end." ↴

Other men hopped on Army O-1 Bird Dog aircraft to get a better picture of the territory for which they were responsible. Some NILOs routinely flew three or four missions daily. Enemy fire shot down planes carrying NILO Peter Decker three times and NILO John "Jack" Graf twice. A midair collision with another aircraft killed NILO Al Hollowell.

NILOs in Vietnam did not have access to information sources, later common to the intelligence profession, that could help them in their work. As related by Peter Decker, operational intelligence support to forward units in 1969 meant that the "NILO briefed what he could divine from pattern analysis and surmise from prisoner interrogation." To accomplish the mission in an isolated post demanded that an officer employ professional skill, initiative, and adaptability. NILO William Steshko observed that "to be on your own with few rules and lots of power when the stakes are high is an adrenaline rush that cannot be topped." NILO Donald Brady enjoyed the independence: "What a great job for a junior officer to be able to pursue the war as I saw fit with only general guidance from a distant headquarters; and, quite a contrast to my Army friends who were operating under a very strict and unforgiving command structure."

Some NILO outposts were remote, austere, poorly supplied, and vulnerable to enemy attack. NILO John Vinson characterized his advanced tactical support base at Tra Cu (close to the Cambodian border) as a "hellhole." The small riverside complex of barges and rudimentary structures lacked all amenities and reliable communications and suffered North Vietnamese attacks "with appalling regularity." As Vinson related, the meals were grim, too: "The guys ate C-rats or North Vietnamese Army rations more often than anything else."

Many NILOs relied on Army units for protection, berthing, messing, and logistics support, and the better NILOs worked to fit in as part of a joint team. To get a better understanding of the intelligence picture in their area, NILOs reached out to the intelligence personnel of the other services, the CIA, and



courtesy Lawrence Serra

NILO Lawrence Serra operated on both sides of the nearby Cambodian border during a time of heavy fighting in the remote northwestern corner of the Mekong Delta.



courtesy Lawrence Serra

NILO Lawrence Serra went on board this corvette of the Cambodian navy in May 1970 to facilitate the transfer of arms to pro-American forces in Cambodia.



courtesy Lawrence Serra

Haywood Gay, Senior Naval Advisor (left); Serra; and Frank Brown, U.S. Army 525th Military Intelligence Group, coordinated their intelligence-gathering operations from Ha Tien on the Gulf of Thailand.

the State Department. NILO Nicholas Carbone, for instance, during 1969 and 1970 met with Army and CIA intelligence personnel, read intelligence reports, interviewed defectors and PBR crews, and flew in surveillance aircraft to identify enemy crossing points on the Saigon River. In addition to supplying NAVFORV with information to facilitate a coherent assessment of the enemy in the delta, NILOs offered tactical intelligence in support of ongoing combat operations. NILO Peter Decker said he lived “in the realm of the now” so the combat units could know what they might encounter and where. As related by Dewey Feuerhelm, an intelligence officer with Task Force 116, “we needed to know which canal, which village, which house, which person, and when to strike. How far was the target house/storage site/person from the insert site? Was there frequent nighttime activity in the area? Were VC known to be in the area?” NILOs answered such questions and “became a primary source of synthesized intelligence for our operational planning.” Without the NILO input, Feuerhelm wrote, “TF 116 operations would have been significantly degraded.”

NILO Lawrence Serra, posted to the naval base at Ha Tien on the Gulf of Thailand during 1969 and 1970, later revealed that he was involved in a number of sensitive missions after the Cambodian military’s overthrow of Sihanouk. Serra related that while embarked in a Cambodian naval vessel, he negotiated with Cambodian military officers and facilitated the transfer to them of U.S. arms. He emplaced electronic sensors on likely infiltration routes on the border, oversaw a network of agents in Cambodia, performed a port survey of Sihanoukville Harbor, and accompanied the 9th ARVN Division in its sweep of a North Vietnamese base area in western Cambodia. In short, NILOs significantly enhanced the U.S. Navy’s in-country and cross border fight. ♫

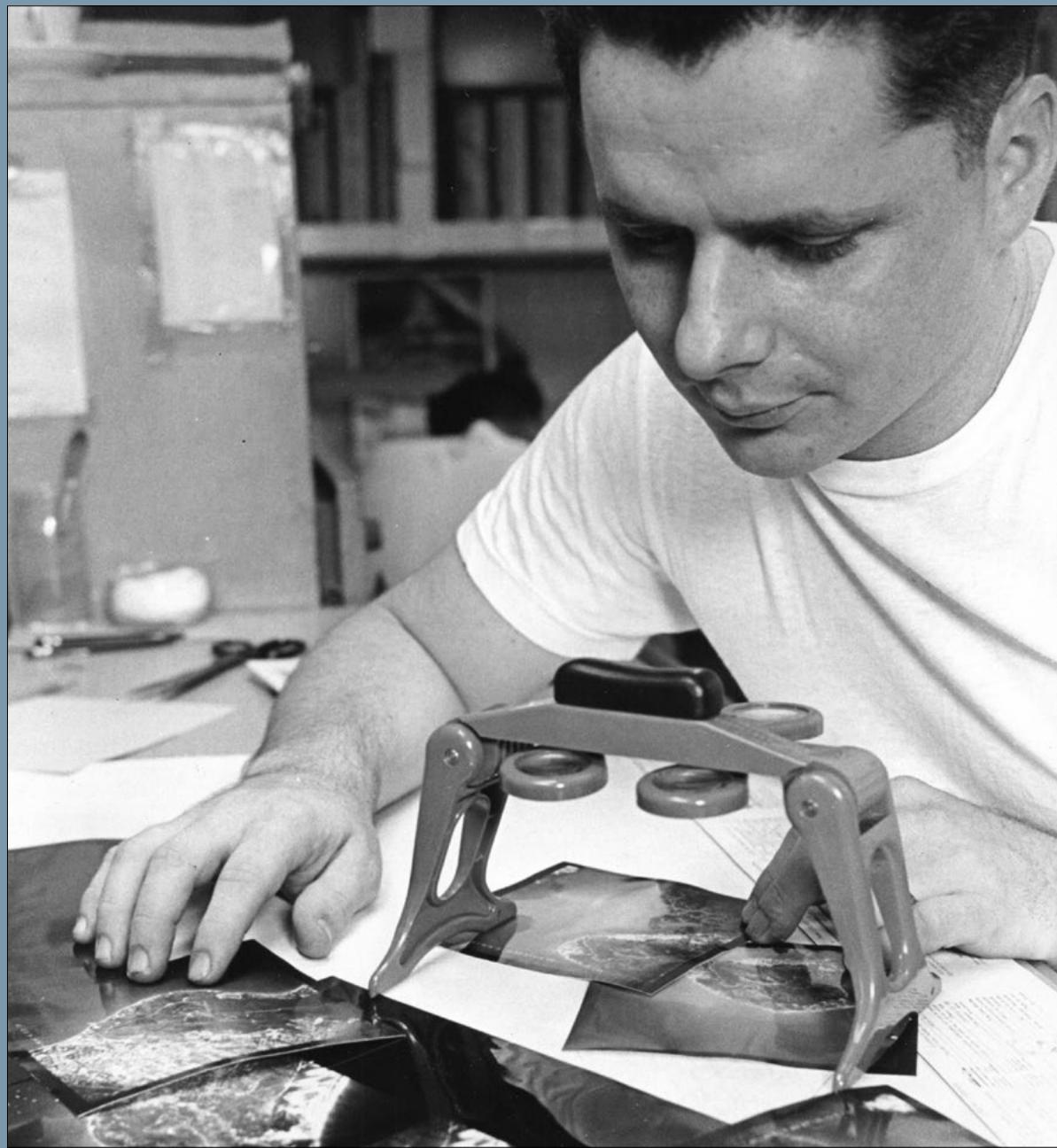


Photo intelligenceman 3rd Class Charles R. Pearson uses his stereoscopic equipment to analyze an aerial image of an enemy site in Vietnam.

INTELLIGENCE IN THE LINEBACKER CAMPAIGN

In the spring of 1972, the leadership in Hanoi concluded that the time was ripe for a massive invasion of South Vietnam. The United States had withdrawn all but a few thousand military advisors and the staying power of the South Vietnamese armed forces was suspect. On 30 March enemy divisions launched powerful attacks across the DMZ into Central Vietnam, near Pleiku and Kontum, and against An Loc only a few miles north of Saigon. The Easter Offensive violated the terms of earlier U.S.-North Vietnamese diplomatic understandings and posed the Nixon administration with hard choices: let America's allies fend for themselves and probably suffer defeat or reenter the war in force.

Choosing the latter option, President Nixon ordered full-scale air and naval support to South Vietnam and resumption of the bombing of North Vietnam. B-52 bombers and tactical aircraft soon appeared over the battlefields of South Vietnam in support of hard-pressed ARVN units. Every day as many as 20 Seventh Fleet cruisers and destroyers armed with 8-inch and 5-inch guns ranged the coast of I Corps, raining fire down on advancing enemy units. In mid-April, B-52s, carrier aircraft, and Seventh Fleet warships carried out surprise strikes against targets near Haiphong. The naval intelligence community responded with alacrity. The Naval Security Group increased its DSUs on board Seventh Fleet ships from 6 to an unprecedented 20. These elements provided the fleet and national command authority with timely signals and communications intelligence support. The newly established Fleet Ocean Surveillance Information Facility, based at Kami Seya, Japan, kept the fleet well informed about the movements of foreign warships and merchantmen off Indochina.

FICPACFAC at Cubi Point in the Philippines proved especially valuable to the Navy in 1972,

producing and disseminating information related to the air and naval bombardment operations against North Vietnam. The command operated around the clock processing raw intelligence photography, interpreting it, and using it to prepare targeting lists. Dozens of photo interpreters (PIs) in the Philippines scanned miles of film to discern the movement of enemy logistics vessels and trawlers and fixed targets such as bridges, rail lines, antiaircraft guns, SAM batteries, and munitions depots. Commander Blake Field, FICPACFAC's officer in charge during this period, remembered that photo interpreters beginning their shift had to "literally drag the off-going PIs from the light tables."

The command's Linebacker Analysis Group processed film from as many as ten daily reconnaissance missions and produced weekly reports on the results of air interdiction operations and potential strike targets. FICPACFAC also provided the Seventh Fleet's coastal bombardment ships, which received an average of 1,500 rounds of North Vietnamese counterbattery fire each month, with detailed information on enemy coastal defense sites. While some Seventh Fleet recipients of the command's intelligence found hard copy products that had to be couriered out to sea untimely, Commander Field observed that "nowhere else in the intelligence community could a man spot a target, have it verified, have a strike called on it, and then in a day or so see the strike results."

With the hard fighting of South Vietnamese troops and their American advisors, by the summer of 1972 the combined forces had blunted each of the Communist drives. During this period the Nixon administration deployed a total of six aircraft carrier groups to the Gulf of Tonkin and land-based bomber and attack squadrons to airfields in Guam, Thailand, and South Vietnam.



Ordnancemen attach sea mines to a *Coral Sea* Corsair prior to the mining of Haiphong by Navy and Marine attack squadrons on 9 May 1972.



NHHC Vietnam Collection

A pair of F-4 Phantoms from *Enterprise*'s VF-92 in the skies over Vietnam. Phantoms were the workhorses of Task Force 77 and claimed 38 MiGs and other enemy aircraft in air-to-air combat during the war.

On 9 May nine *Coral Sea* (CVA-43) Corsairs and Intruders led by Commander Roger Sheets seeded the approaches to Haiphong with powerful sea mines. Over 85 percent of North Vietnam's supply of surface-to-air missiles, tanks, heavy artillery, and fuel entered the country via Haiphong. In succeeding weeks additional naval aircraft mined the other ports of North Vietnam. In Linebacker I that began on 10 May, massed U.S. carrier and land-based air forces employed new precision-guided munitions in a punishing effort to interdict the enemy supply lines to South Vietnam. On that opening day alone, U.S. fighters shot down 11 MiGs. Lieutenants Randall Cunningham and William Driscoll, graduates of the Navy's famed Top Gun school, became the war's first aces that day when they bagged the last of their five kills.

The punishing U.S. air and sea campaign, the failure of the Easter Offensive in South Vietnam, and waning Soviet and Chinese support persuaded the North Vietnamese to negotiate seriously with U.S. diplomats. Sensing a more cooperative spirit on the other side, on 23 October President Nixon ended bombing north of the 20th parallel in North

Vietnam. Opposition to the likely terms of a cease-fire agreement by America's South Vietnamese ally as well as second thoughts by the leaders in Hanoi and Washington, however, dashed hopes for a settlement.

Exasperated with the course of events and determined to end the conflict, on 18 December Nixon ordered Linebacker II, sometimes referred to as the "Christmas Bombing" of North Vietnam. B-52 bombers dropped their huge bomb loads, for the first time in the war, in close proximity to Haiphong and the North Vietnamese capital. Enemy air defenses downed 15 Super Fortresses during the 11-day operation but the big bombers carried out their massive strikes in the heart of North Vietnam. Eventually, enemy supplies of surface-to-air missiles, the only real threat to the bomber fleet, dried up. Finally convinced that the disadvantages of continued military struggle outweighed the advantages, North Vietnamese diplomats took up serious negotiations, which included the release of all American prisoners of war. On 27 January 1973 the United States and the other belligerents signed the Paris Agreement on Ending the War and Restoring Peace in Vietnam. ♦



A photo interpreter at work.

USIA

CONCLUSION

In the Vietnam War the U.S. naval intelligence establishment accomplished its primary mission of arming Navy operational forces with information that, for the most part, improved their battle performance, understanding of the enemy, and prospects for survival in combat.

From the start of major combat operations in 1964 and 1965, the carrier- and shore-based intelligence-gathering squadrons presented the National Command Authority with a reasonably accurate picture of North Vietnam's air and coastal defense forces, activities in central and southern Laos, military assistance from the Sino-Soviet bloc, and the buildup of ground forces in southern China. The communications and signals intercept personnel operating at bases in the Philippines and South Vietnam and on the ships and aircraft of the Seventh Fleet provided destroyer *Maddox* with timely warning of an impending attack by North Vietnamese naval forces on 2 August 1964. Less praiseworthy, NSG and its parent National Security Agency erred in telling President Johnson that the enemy navy had attacked *Maddox* and *Turner Joy* on the night of 4 August.

The naval intelligence units in support of the Rolling Thunder bombing campaign kept Washington informed of the steady buildup of increasingly effective and deadly North Vietnamese MiGs, surface-to-air missile batteries, high-altitude antiaircraft artillery, and sophisticated air defense radars. Naval intelligence also routinely helped the carrier and naval bombardment forces avoid the most dangerous defensive concentrations in North Vietnam and Laos. The RF-8s, RA-3Bs, RA-5Cs, EA-3Bs, EC-121Ms, and other intelligence-gathering aircraft employed infrared and wide-angle cameras, night vision devices, radars, electronic intercept, and other advanced equipment to great effect. The

OP-2E Neptune proved unequal to the critical task given VO-67, but the squadron's personnel more than compensated for that with their courage and dedication to the mission. Given the technology of the time, the product of the intelligence centers in Hawaii and the Philippines and the IOICs on board Seventh Fleet carriers got to the operators in reasonable time for them to act on it.

From 1965 to 1968 Navy attack squadrons, along with Air Force bombing units, destroyed most of North Vietnam's rail and highway bridges, fuel storage facilities, and thermal power plants, and decimated the enemy's truck fleet on the Ho Chi Minh Trail. Despite this deluge of fire from the air and from the sea, Rolling Thunder failed to compel Hanoi to end the war or stop the flow of troops and supplies into South Vietnam. While the Navy and the Air Force cannot be absolved of responsibility, that failure resulted primarily from a faulty analysis by President Johnson and Secretary of Defense McNamara of North Vietnam's will and capability to resist American military power. U.S. air and naval power proved more effective in defeating the enemy's Easter Offensive of 1972 and with the Linebacker operations compelling Hanoi to agree to terms ending the war.

A flawed U.S. national strategy influenced the failure to defeat North Vietnam's seaborne infiltration of war materials into South Vietnam. Between 1965 and 1972 the U.S. Navy, the U.S. Coast Guard, and the Vietnam Navy mounted the Market Time coastal patrol that, with few exceptions, severely limited, and at times completely stopped, enemy trawlers from delivering their cargoes of weapons and ammunition to North Vietnamese and Viet Cong troops. Naval intelligence figured prominently in this successful operation. But President Johnson's unwillingness to challenge the

false “neutrality” of Prince Sihanouk’s Cambodia simply allowed the enemy to skirt the allied patrol and offload war materials at Sihanoukville for subsequent movement into the Mekong Delta. The military intelligence organizations in Hawaii and Saigon, including NAVFORV’s intelligence staff, correctly identified Sihanoukville’s importance to the enemy but failed to develop a case strong enough to convince the doubters at CIA, DIA, and the State Department in Washington.

Naval intelligence support for the war effort in South Vietnam from 1965 to 1968 helped enable the River Patrol Force and the Mobile Riverine Force to secure the country’s major waterways, defeat the enemy’s main force units in the Mekong Delta, and carry out Navy-Marine amphibious operations on the coast. SEAL and UDT units, headquarters intelligence staffs, and individual naval intelligence liaison officers sometimes made mistakes in the collection of tactical intelligence. Over time, however, these Sailors, who frequently fought face-to-face with the enemy, became especially skilled at their work. The intelligence community’s provision of accurate and timely intelligence made possible Vice Admiral Zumwalt’s audacious and energetically executed Sealords campaign that strengthened the South Vietnamese government’s presence in the Mekong Delta for the remainder of the war. The enemy’s success infiltrating the allied commands and the lax American attitude toward communications security tempered the generally positive in-country intelligence effort.

Key to the operational and tactical successes of naval forces in the Vietnam War were the intelligence-gathering Sailors who served in the reconnaissance planes and warships, headquarters staffs, and the Pacific intelligence centers and the SEALs, UDT frogmen, and NILOs who operated in the hot, wet, insect-infested, and war-torn Mekong Delta. Thousands of naval personnel served with distinction in support of the Navy’s intelligence effort in Southeast Asia: reconnaissance aircrewmen like Charles Klusmann, who endured harsh enemy

captivity; William Kocar, who braved enemy fire over North Vietnam; William Leppert, who survived rocket attacks at his base in Danang; Paul Milius, who sacrificed his life to save his men in Laos; SEALs like Bob Kerrey, who suffered serious wounds to gather intelligence; NILOs like Jack Graf, who gave his all for the mission; and leaders like Earl Rectanus who helped bring success to American arms in the vital fight for the Mekong Delta. These men and many others in the Navy’s intelligence community answered the call in Vietnam when it counted and served their country with courage, dedication, and professional skill. ↴

The Authors

Richard A. Mobley retired as a commander in the Navy in 2001 and has since worked as a military intelligence analyst for the government. During his career as a naval intelligence officer, he worked closely with many of the organizations discussed in this book. He participated in the evacuation of Saigon in 1975 while serving in the intelligence center aboard *Enterprise* (CVAN-65). Subsequent Pacific tours included Chief of the Analysis Section in the Fleet Ocean Surveillance Information Facility WESTPAC in Kami Seya, Japan, in the mid-1980s, and Chief of Indications and Warning, U.S. Forces, Korea, in the mid-1990s. Mobley has written *Flash Point North Korea: The Pueblo and EC-121 Crises* (Annapolis: Naval Institute Press, 2003) and over a dozen professional articles dealing with intelligence, crisis decision making, and military history in the Middle East and Korea. He is a graduate of the National War College, Georgetown University (MA, History), and University of California, Davis (BA, Political Science).

Edward J. Marolda has served as the Director of Naval History (Acting) and the Senior Historian of the Navy at the Naval Historical Center, renamed the Naval History and Heritage Command (NHHC). He has written or edited a number of books on the U.S. Navy's 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*; and *Aircraft Carriers*, no. 4 in the Bantam series The Illustrated History of the Vietnam War. Dr. Marolda serves as coeditor with Sandra J. Doyle of this series, The U.S. Navy and the Vietnam War, and has authored or coauthored a number of its titles. In 2012 NHHC published Marolda's *Ready Seapower: A History of the U.S. Seventh Fleet*, which covers the fleet's extensive Vietnam War experience. As an adjunct professor at Georgetown University, Dr. Marolda has taught courses on the Cold War in the Far East. He holds degrees in history from Pennsylvania Military College (BA), Georgetown University (MA), and George Washington University (Ph.D.).

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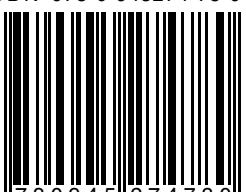




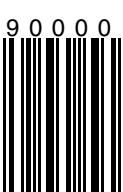
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