

## SILENT WARRIORS: The Naval Security Group Reserve, 1945-2005

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### Foreword

Throughout my naval service, which began as a Seaman more than forty years ago, secrecy has been the trait most prized among cryptologists. During the first half of my career, the fact that the Naval Security Group, active and reserve, performed intelligence missions for the fleet and the intelligence community was considered very hush-hush. Only in the last decade has the curtain been lifted sufficiently to allow the public a glimpse, however fleeting, into our secret world.

Much of what we do must remain classified by necessity: lives depend on it. Secrecy is part of the air we information warriors breathe and with good reason. However, the time has come to shed some light on the history of Naval Reserve cryptology and allow the public to learn who we are, what we do, where we have been, and where we are headed. It is unfortunate that the secrecy we live with every day has prevented our story from being better known to the public we serve.

This volume is intended to tell at least some of our exciting story. The author is a historian and cryptologic officer in the Naval Reserve, and his presentation, telling what can be told of our history, should appear familiar to those who have served with us. Shipmates of all ranks and backgrounds will find some of their story in this work. It is particularly fitting that this volume appears now, as we transform our command and begin another chapter of our story. We will succeed in preparing ourselves for the challenges of the new century by working hard, placing duty over self, and remembering our rich heritage.



*Rear Admiral William D. Masters Jr.,  
USNR (Ret.), former Deputy Commander,  
Naval Security Group Command*



## Introduction

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This book recounts a unique and untold story, that of Naval Reserve (NR) cryptologists — the professional term for codebreakers and codemakers. This has always been a small and select community, one little known to outsiders, and even less understood. Cryptologists have long constituted the most secretive fraternity in America’s armed forces, and Naval Reservists permitted to enter the cryptologic ranks set sail on a journey that placed them apart from the rest of the Naval Reserve, and far apart from their civilian lives. For six decades, through the Cold War and into the age of terrorism, Naval Reserve cryptologists have stood the watch for the Navy and the nation. Yet the highly secretive nature of their work has rendered their service in defense of freedom almost unknown to the public.

This volume aims to fill this knowledge gap by telling their story. The Naval Security Group Reserve is an exclusive club with tight lips, and few of its exploits are discussed openly. This work cannot tell the full story — that will have to wait decades until archives are opened and top secret operations are declassified — yet it strives to illuminate what it can, and render an account of Naval Reserve cryptology and its sailors that will be accessible and accurate to all who served in silence.

A great many Naval Reserve shipmates helped with the production of this work, and without the contributions of Naval Security Group Reserve personnel, past and present, this volume would not have been possible. There simply are too many to list.

That said, Rear Admiral William D. Masters, Jr. and Captain Ronald E. Hecox deserve credit as the visionaries behind this project, whose assistance throughout ensured their vision became reality. Captain Daniel L. Schaefer, my skipper, supported this effort and helped me along the way at many points. I also wish to thank Captain (ret.) Raymond P. Schmidt, a gentleman and fine historian whose remarkable knowledge of matters naval and cryptologic guided me through rocky shoals many times. Finally, I wish to acknowledge those people whose current duties prohibit them from being thanked publicly.

*John R. Schindler, Ph.D. LTJG USNR*



## The Origins of a Special Program

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The Naval Security Group Reserve (NSGR) of today has a long and storied history that dates to the early years of organized codebreaking in the U.S. Navy. Although naval personnel had worked with codes and ciphers in the nineteenth century, the formal beginning of cryptologic work was the establishment of the Research Desk of the Code and Signal Section of the Department of Naval Communications in Washington, DC. This small, select organization — in its early years, all members could sit around a small table — was founded by the legendary Lieutenant (later Captain) Laurance F. Safford, and was soon redesignated OP-20-G. Safford's hand-picked team compensated for limited resources with talent and hard work, and before long OP-20-G was successfully exploiting the ciphers of the most likely adversary, the Imperial Japanese Navy. The pioneering code-breaking efforts of Safford's elite cadre in the 1920s, including the contributions of a gifted young officer named Joseph J. Rochefort, laid the cornerstone of the U.S. Navy's epic cryptologic feats during the Second World War.

In the interwar period, the Naval Reserve likewise was barely out of its infancy. Although the United States had possessed second-line maritime forces throughout much of its history, including the naval militias of many states, the United States Naval Reserve (USNR) dates only to August 1916, with the establishment of what was termed the Naval Reserve Force (NRF). The new force absorbed the state navies and was intended to bolster the fleet in time of war; however, limited budgets and America's entry into World War One only months after the NRF was created relegated it to very secondary status compared to the Navy's active forces. The small NRF was absorbed by the Navy in spring 1917, and many members made important contributions during the war (including Ensign Charles H. Hammann, USNR, of

Baltimore, Maryland, the only naval aviator to win the Medal of Honor in World War One), but the force had yet to prove itself, and training remained a challenge.

Nevertheless, when the Great War ended on 11 November 1918, the Naval Reserve was an established component of the U.S. Navy, one that would survive after the armistice. It was a small, under-funded organization (its 1920 budget was \$50,000), reaching a low of only 6,000 members in 1922, but it was capable of providing reserve crews for ships in limited numbers. In 1926, after several years of modest growth, the USNR included 1,332 officers and 13,544 enlisted men, most of whom trained on reserve ships distributed among 149 divisions nationwide.

Unfortunately, the slow but steady progress of the late 1920s was derailed by the Great Depression. As the nation's defense budget was slashed, the reserves were hit first and hardest. In 1933 the USNR's entire annual training budget — the then-princely sum of \$1 million — was eliminated. Overall strength plummeted, and Naval Reservists who stayed with their units usually did so without pay or benefits of any kind. By the mid-1930s, it was evident that the USNR was in dire straits and incapable of providing even minimal support to the active fleet without significant increases in personnel and especially funds. The need for a more robust force resulted in the Naval Reserve Act of 1938, which authorized more sailors and money and, just as important, streamlined pay, administrative, and training procedures. This step forward would ready the force for the great challenges ahead.

By 1939 Naval Reserve units were expanding with new recruits and junior officers in training. While most USNR sailors were preparing to support the fleet directly, small numbers of specialists

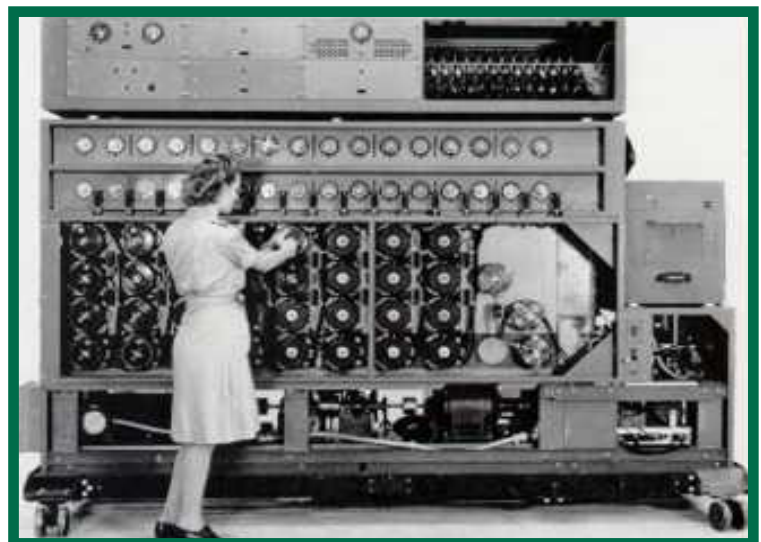


***Admiral Ralph E. Cook, USN (Ret.), enlisted in the U.S. Naval Reserve in 1934 and advanced to radioman third class before earning a commission in January 1941 on his way to service in the Philippine Islands. Evacuated from Corregidor by submarine in early 1942, he served the next 21 years as a Navy cryptologist. In 1963 he was selected as the director of the Naval Security Group, going on in July 1968 to become the first flag officer and the first officer to serve as the head of the newly established Naval Security Group Command.***

were recruited and trained, including in cryptology. Although OP-20-G heretofore had eschewed ties with the USNR on grounds of secrecy — the fact that the Navy was breaking and making codes was considered highly classified — by 1939 it had begun a tentative outreach program to the Naval Reserve. Sailors, especially junior officers or officer cadets who demonstrated promise in mathematics, were enrolled in correspondence courses sponsored by OP-20-G. These courses, though unclassified, taught the basics of codes, ciphers, and analysis; training in radio techniques was provided where possible. Although the numbers of Naval Reservists participating in this sensitive program were small, amounting to only a few dozen sailors (one was John Paul Stevens, a junior officer and future Supreme Court justice), their contribution when war came would prove significant.

The Navy's few trained cryptologists, active and reserve, were in high demand once America entered the Second World War following the Japanese surprise attack on Pearl Harbor on 7 December 1941. Even before that terrible day, USNR participation in the nation's defense was significant. Select call-ups of Naval Reservists began in early September 1939, a week after Germany invaded Poland, and the mobilization tempo increased through 1940, as the predicament of the Allies worsened; by November of that year, 24,000 Naval Reservists had been called to active duty. Soon all would be.

The contribution of the Naval Reserve to American victory in the Second World War would be difficult to overstate. As most of those who joined the Navy during the war were actually enlisted in the Naval Reserve, the USNR's role in the epic struggles in the Atlantic and Pacific was staggering. Of the three million American sailors serving in 1945, 2.6 million were USNR, as were 260,000 of the Navy's 300,000 officers (among them were five future presidents: John F. Kennedy, Lyndon B. Johnson, Richard M. Nixon, Gerald R. Ford, and George H.W. Bush). The Naval Reserve's war record included many milestones, including the enlistment of large numbers of women, known as WAVES (Women Accepted for



***One of the many WAVES who operated the U.S. Navy Bombes that helped decrypt Nazi messages during World War II.***



Volunteer Emergency Service). There were 91,000 serving by 1944, including many officers. The first African-Americans to receive commissions in the U.S. Naval service, the famous “Golden Thirteen,” were also USNR. There were thirty-seven African-American naval officers before the war’s end, all Naval Reservists.

The Naval Reserve’s impact on cryptology was no less impressive. The Navy’s small codebreaking effort — on the eve of Pearl Harbor it boasted only 300 personnel worldwide — needed rapid expansion, and reservists filled the gap. The few USNR sailors trained before the war in codes and ciphers were especially valuable, but the influx of talent from all walks of life into the Naval Reserve “for the duration” proved a priceless asset to the Navy’s cryptologic organization.

The wartime exploits of OP-20-G are legendary, most notably the war-winning contribution made by Commander Joe Rochefort’s Honolulu-based Station Hypo in leading Admiral Chester Nimitz to victory at Midway in June 1942. Less known is that of the more than 10,000 codebreakers who served in the U.S. Navy between 1941 and 1945, well over 90 percent were reservists. They played key roles in every aspect of what was then termed radio intelligence — interception, decryption, translation, and analysis — at sites around the world. Many were women: at the war’s height, four-fifths of the sailors serving at OP-20-G headquarters on Nebraska Avenue in Washington, DC (it was not just an administrative post, but also the central processing facility for radio intelligence against the German Navy) were WAVES.

After Allied victory in August 1945, virtually all Naval Reservists went home. They had served honorably and wanted to become civilians again. Many, particularly officers, believed they had been treated inequitably by the regular Navy, notably in matters of awards and advancement; only 2,200 USNR officers applied for regular commissions at the war’s end. Cryptology was no exception, and nearly the entire force demobilized within months

of victory, headed for home with top secret tales they could regale no one with. Retaining and maintaining the outstanding skills honed in war was now the challenge confronting the Naval Reserve.

### *The Early Years (1945-1955)*

The Navy was acutely aware of the dominant role played by reservists in wartime cryptology and of the need to keep the best codebreakers in the Naval Reserve. Captain Joseph N. Wenger, commander of OP-20-G in 1945, considered the development of a cryptologic reserve program one of his highest priorities. A visionary and superlative organizer, Wenger established a group to develop USNR cryptology even before the war’s end, explaining, “Certainly we must see that we never again have to depend on so small a number of reservists as we had in 1941.” For Wenger, soon to be selected as the Navy’s first cryptologic admiral, reservists constituted “our most important reservoir of personnel in the future.”



***Captain Joseph N. Wenger, USN, led U.S. Navy cryptology to success in World War II, earned selection as the first Navy cryptologic flag officer, and established a reserve program after the war to retain many of the uniquely talented personnel for mobilization in future conflicts.***

OP-20-G, known euphemistically in the initial postwar era as Communications Supplementary Activities (CSA), envisioned a reserve structure

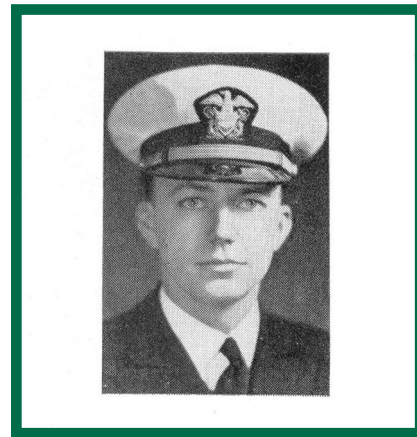
that would include a communications intelligence (COMINT) staff in each Naval District, with a cryptologic officer in charge of relevant training for all personnel. Veteran codebreakers advocated for a “live” mission for USNR cryptology, not just training — an admirable goal that would prove difficult to realize. Wenger’s vision of a CSA reserve was sweeping; he wanted 5,000 drilling reservists, viewing the considerable cost involved as a necessary expenditure, given how valuable USNR codebreakers had been in the Atlantic and Pacific campaigns. There were thousands of experienced cryptologists in the Naval Reserve, which was over a million strong on paper, but not enough were serving in organized NR units (i.e., in paid status).

There were additional challenges. COMINT units of the Organized Reserve in the postwar years were frequently without adequate drilling space, much less secure areas or proper equipment; drills therefore tended toward the haphazard, and most units were fortunate to complete required training. Some units were known to hold drills in officers’ houses, with sailors bringing their own typewriters, paper, and other necessary items. In a typical case, the CSA Reserve unit in Richmond, Virginia, began modestly in 1948, drilling in the offices of the state Division of Motor Vehicles until space could be found at a proper Naval Reserve center.

What operational work existed was modest, and some was downright casual. Lacking proper drill sites and equipment, units organized “ham” radio efforts, monitoring frequencies (sometimes on Navy-supplied radios residing in reservists’ homes) and copying signals on frequencies assigned by CSA. For want of other options, the USNR allowed select members to conduct this classified work from home and send the results to Washington, DC, via registered mail.

Recruitment into the program was informal and functioned mostly on the basis of personal contacts. Nevertheless, by mid-1948 the CSA Reserve had eighty units across the United States, including several in Hawaii, with 2,000 sailors. By

early 1950 there were 2,700 participating in the Organized Reserve program, one thousand of them officers, most of them war veterans. Interestingly, there were 575 female members, 375 of them officers — all veterans of the war. By the summer, Admiral Wenger, head of the newly established Naval Security Group (NSG, as CSA was renamed in 1950), had fended off an attempt by the Bureau of Personnel to cut drill hours for his reserve, and the Chief of Naval Operations had recently recommended an expansion to ninety-five units. In only five years, Wenger’s vision of a nationwide Naval Reserve force of trained cryptologists had been realized, at least in embryonic form, and the foundation of a robust organization had been laid. It was not to last.



***Walter Sherman Gifford, Jr., was appointed to the rank of ensign in the U.S. Naval Reserve 15 December 1941. He served in the Office of the Chief of Naval Operations until July 1944 when he was ordered to the Pacific for duty with the Fleet Radio Unit of the Seventh Fleet. He attained the rank of lieutenant on 1 October 1942. Lieutenant Gifford was killed when a plane in which he was a passenger crashed on take-off in Funafuti Lagoon, Ellice Islands Group, 31 July 1944.***

***It was in Lieutenant Gifford’s honor that the trophy (See p. 13) was named. The award is made by the Navy Department on the basis of performance, including enrollment, attendance at drills, annual active duty for training, and advancement in rating. The first award was made in 1953.***



On 25 June 1950, the North Korean People's Army burst across the South Korean border, steamrolling over U.S.-backed forces and taking Seoul. South Korean units retreated south in a shambles. Only the rapid dispatch of several U.S. Army divisions staved off total defeat. America was again at war. President Truman authorized the call-up of all needed reservists, and large categories of part-time sailors, soldiers, airmen, and Marines reported for duty en masse. In mid-1950 the Navy's Organized Reserve consisted of 25,000 officers and 153,000 enlisted sailors; within a year, the Navy had recalled 182,000 reservists, including some inactive members. Essentially the entire NSG Reserve was recalled, and across the country cryptologic units disappeared into the active Navy. Many NR cryptologists were dispatched to the fleet, while others reported to NSG field sites or headquarters on Nebraska Avenue in Washington, DC, or to the nearby Armed Forces Security Agency, which would be renamed the National Security Agency (NSA) in November 1952.

Many NSG Reserve units were called up in toto, with no members left behind; others retained small cadres to provide continuity of operations at home stations. In a typical case, every sailor with the Denver unit was mobilized, and the zero-strength outfit shut its doors, including the burning of all classified and sensitive documents before the command group shipped out. In 1952 recalled reservists began to be sent home, as the Korean War was on the wane and the needs of the global confrontation with Soviet Union — the Cold War — could be met by America's active duty military. For some Naval Reservists, however, two wars were enough, and many had no desire to stay in the organized reserve. Thus did the NSG Reserve (NSGR: it was formally the Naval Reserve Naval Security Group, but this work will cite the less cumbersome abbreviation in use today) lose large numbers of trained personnel who could not be easily replaced. Just as pernicious was the abandonment of the "ham" radio-like monitoring mission by the mid-1950s. This effort, while almost laughably informal by today's standards, with its home-based COMINT

suites, nevertheless gave NSGR units a real mission that was useful and enjoyable for many reservists. Its abandonment left the Navy's cryptologic reserve force without a "live" mission, an unfortunate situation that would last for over a decade, damaging both relevance and retention.

Despite these formidable challenges, the NSGR benefited from the reconstitution of the Naval Reserve that took place in the mid-1950s. The Armed Forces Reserve Act of 1952 standardized administrative procedures across the services, and the Navy made a concerted effort to determine what the USNR should consist of and what missions it should prepare for. For cryptologists, the result was an effort to streamline the system and ensure training met the needs of the service and likely wartime missions. As Korean War veterans returned home, new NSGR units sprouted across the country, while others were reconstituted after being shut down in 1950-51 by mobilization. Denver's unit, which had been entirely called up, attempted a rebirth, but encountered opposition from the local Naval District; many ex-members drilled with other NR units, or left the reserve altogether, until the unit's reestablishment was approved in early 1954. However, in line with NSGR policy, the reconstituted unit had no operational mission, and focused instead on training, especially of enlisted members, the Communications Technicians (CTs: in 1976 the title was changed to Cryptologic Technician) who formed the bulk of the unit. The post-Korean War NSGR made a major push to bring CTs up to standards through rigorous training, a major challenge since many NSGR sailors had served in non-cryptologic ratings in the active Navy, or in some cases had never served on active duty at all. Before Korea, officer training was accorded a higher priority, but beginning in the mid-1950s, enlisted training was a larger task since the lion's share of NSGR personnel were now seamen or petty officers, and significant functions such as language analysis and other advanced COMINT analysis were no longer considered "officer's work."

## *The Height of the Cold War (1955-1965)*

By the mid-1950s, the NSGR had returned to its pre-Korea strength and nationwide presence. It stood ready to bolster the Naval Security Group's global posture at sea, in the air, and at many field sites in the event of mobilization. Yet it cannot be denied that the program had lost a key component of Admiral Wenger's vision, namely, the operational focus that ought to have been the organization's primary mission. Instead, NSGR units had become little more than training groups designed to bring CTs up to minimum standards of proficiency in basic cryptologic tasks. At the Cold War's height, the CT rating was divided into four branches: A, which performed administrative functions; M, responsible for maintaining equipment; O, which were essentially communicators; and R, which were cryptologic radiomen charged with some analytical tasks. In the 1960s, the CT rating added two additional branches: I, for language work; and T, for non-Morse intercept and the operation of technical equipment.

NSGR units were usually small, with a commanding officer, an executive officer, and officers responsible for training and administration but no officer in charge of operations. Indeed, NR cryptologists of the era would have found the notion odd for the simple reason that the NSGR performed no operations. The activities of most units, customarily performed during three-hour drills in the evenings, centered on lesson plans and correspondence courses. Lectures and hands-on learning were provided when possible, but few units possessed modern intercept equipment (some units trained sailors in Morse code using ancient 78 rpm records). Additionally, many

NSGR sailors lacked the full security clearance required to undertake operational work.

Discipline in many units was relaxed — it looked slack to those coming from the fleet — with officers and enlisted sometimes on a first-name basis. Relations were sometimes too casual (one officer remembered that his CO, eager to get numbers up, apparently offered civilian jobs with his company to new recruits) and the all-training culture contributed to a lack of drive and dynamism in the program.

In addition to training, which was in the hands of the small group of experienced personnel known as “cadre” in most units, much reservist time was spent on recruiting and screening new members. The NSGR received a regular influx of personnel coming off active duty, yet it is evident that by the late 1950s the program had drifted from its operational aspirations and was becoming mired in routine, with too much training and administrative work and not enough real-world activities. Few reservists were assigned any specific wartime mission. The large-scale growth in the active duty Naval Security Group during this period was not



*NSGR training suite*

mirrored in the reserve structure, which was drifting apart from the active force. Inevitably, recruiting and retention suffered, despite growth in the Naval Reserve, and by 1960 three of the four CT branches were in steady decline; the drop in A branchers — 22 percent — over the previous two years was precipitous. Talented officers likewise were abandoning the program, and before long the NSGR was facing a serious billet cut averted only by the strong advocacy of the Director, NSG.

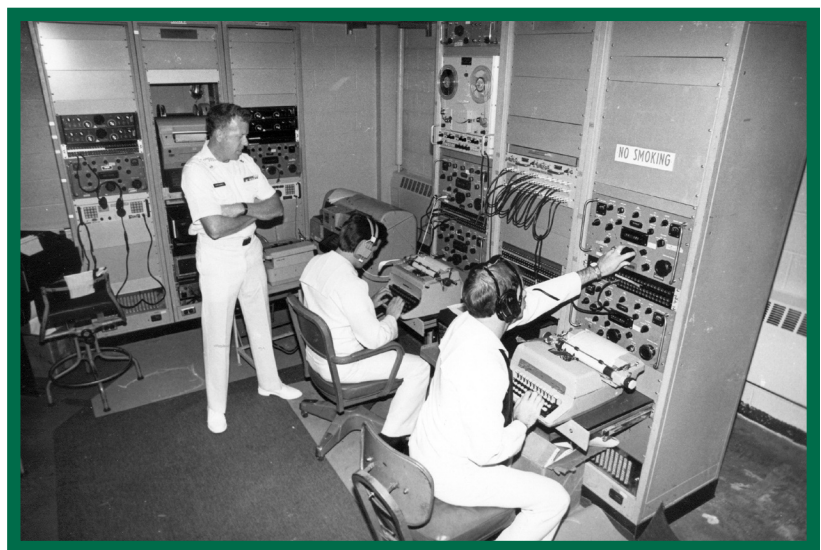
Paper strength remained impressive — even though NSGR could meet only 60 percent of its mobilization requirements — and by 1965 the program boasted 101 units across the country, with an authorized strength of 700 officers and 4,000 enlisted personnel in pay billets. However, its relevance to the Navy was in doubt. During the Berlin Crisis of summer 1961, President Kennedy recalled almost 8,000 Naval Reservists, but no cryptologists. In fairness to NR cryptology, its problems mirrored those of the larger Naval Reserve, particularly the difficulty in training and retaining the best personnel in desired skills (a 1964 GAO study revealed the USNR possessed only 35 percent of the supervisory petty officers it needed), but the situation in the NSGR had grown acute by the mid-1960s. Although it would be wrong to characterize this period as a “lost decade” for Naval Reserve cryptology, this was unquestionably the program’s troubled era.

As the Navy and the nation became embroiled in the Vietnam War in the mid-1960s, the reserves were spared the major mobilization that had accompanied America’s last Asian conflict. The Naval Reserve was essentially unaffected by limited call-ups during Vietnam, and the NSGR was untouched altogether. This was fortunate, as it gave the program time to assess its condition and regain operational relevance beginning in the middle of the decade.

### *A Changing Navy — and Nation (1965-1975)*

The lack of operational focus in Naval Reserve cryptology had grown apparent, but what mission should NR codebreakers and codemakers be performing? Units lacked the modern equipment and trained personnel to play a role in top secret operations, to say nothing of the complications posed by the program’s part-time status. It took time for any consensus to emerge, but by the mid-1960s it was clear to many reserve cryptologists that communications security (COMSEC) offered the NR an attractive “live” mission that part-time cadres could perform successfully. The COMSEC mission had always been viewed as a very secondary responsibility in NSG, trailing far behind COMINT (or, to use a later term, signals intelligence or SIGINT) in importance and prestige, but for NSGR it seemed a good fit. After a more than fifteen-year hiatus, NR cryptology would return to the operational fold and find renewed purpose.

Vietnam had highlighted glaring COMSEC problems in all the armed services, so the program’s effort to increase COMSEC effectiveness for the active Navy was well timed. Some 1966 experiments conducted by several NSGR units to assess the possibilities offered by the COMSEC monitoring mission led to formal plans of action. In March



*Naval Reserve chief petty officer supervises training of R-390 operators.*



1967 the Commander, Pacific Fleet (CINCPACFLT), described this initiative as “a refreshing idea to bring the reserve and active components into closer cooperation.” Soon CINCPACFLT was requesting formal NSGR assistance to monitor, assess, and report on the COMSEC status of his command.

This was no small task, but it was achievable with modest training, and, just as important, standard-issue R-390 receivers were all that was required. In 1967 West Coast NSGR units began monitoring Pacific Fleet frequencies, looking for COMSEC violations; the problems they found were legion, with COMSEC among naval aviators being notably poor. In Vietnam such slipshod practices cost lives; off California, it resulted in a bad write-up, at worst. CINCPACFLT appreciated the work offered by NSGR — it cannot be said that those whose poor security practices were noted were equally enthusiastic — and the new mission gave units a new sense of purpose. Sailors enjoyed having any operational mission to perform, and retention improved, as did skill sets.

Success inspired further success and, in the late 1960s, NSGR unit commanders, especially though not exclusively on the West Coast, began reaching out to active Navy commands to offer their COMSEC expertise. NSG was stretched to the limit in the late 1960s, a time of trials and tragedy. Over a grim period of less than two years, the Naval Security Group suffered unprecedented disasters: the Israeli attack on the USS *Liberty* in June 1967, the North Korean capture of the USS *Pueblo* in January 1968, and the shootdown of an EC-121 electronic reconnaissance aircraft by North Korean MiGs in April 1969. Naval Reserve cryptology offered assistance to the active force where it could, mainly in COMSEC monitoring. In 1969 the NSGR unit in Alameda, CA, offered CTs to serve afloat with the Pacific Fleet for two-week periods to perform COMSEC missions, an effort that was judged a success by all involved. Soon other NSGR units joined in, and by the early 1970s, units were routinely operating off the aircraft carriers *Oriskany*, *Ranger*, *Coral Sea*, *Hancock*, and

*Enterprise*, offering the fleet high-caliber COMSEC monitoring unavailable elsewhere. Another novel aspect of the COMSEC program was interservice cooperation that flowered in the early 1970s on the initiative of local commanders. NSGR units worked with Army and Air Force Reserve partners, assisting them with the techniques of a discipline Naval Reserve cryptologists had grown very proficient in. This joint operational relationship lasted into the mid-1990s. Many reservists were enthusiastic about the COMSEC program, and units were filled with a vigor and morale not seen heretofore in the NSGR; some sailors even brought their own, private radio gear in for drills to assist the mission as proper gear was always in short supply. However, participation in SIGINT, the top cryptologic mission, eluded the reserve, an omission that some NSGR officers aimed to change. A desire to participate in SIGINT, what was euphemistically termed Special Operations (SPECOPS) by reserve cryptologists, was widespread among forward-looking NR cryptologists, and there was no doubt that Admiral Wenger’s vision for the NSGR had encompassed it. This nevertheless was a challenge, as it involved collecting real intelligence against foreign targets. Never before had a reserve organization been granted responsibility for all facets of a SIGINT mission: tasking, collection, processing, and reporting. By the early 1970s, facing a drawdown in the active force, NSG was responsive, as were the Department of Defense and the intelligence community.

There were many obstacles, not least the need for participating units to have properly trained and cleared personnel and a secure work area (known as a Special Compartmented Information Facility or SCIF), but beginning in the early 1970s select NSGR units began collecting and analyzing SIGINT against defined foreign targets, as directed by national-level intelligence authorities. Growth came slowly, and the information collected, processed, and analyzed was of only slight intelligence value to DoD or the IC. Nevertheless, this was a proof of concept, demonstrating over four years that Naval Reserve cryptologists were able to perD-



***Rear Admiral Chester D. Phillips (at lectern) Commander, Naval Security Group Command, presented the Gifford Trophy to the 22-member Navy Reserve unit of Madison, Wisconsin, for excellence in Fiscal Year 1971.***

form real-world SIGINT missions in accordance with DoD/IC directives, tasking, and security procedures. There were limitations to what part-time cryptologists could do. Blanket coverage of a target was impossible. That said, the NSGR offered NSG and DoD a cost-effective way to provide partial coverage of second-tier targets, ones that were of interest but which the active duty force, decreasing in strength in the 1970s, could no longer afford to cover. Strong support came from Rear Admiral Chester D. Phillips, the Commander, NSG, who liked the reserve's ability to provide valuable assets at modest expense for the Navy. He was impressed that reserve SIGINT operators at several NSGR sites had grown as proficient as their active duty shipmates.

Beginning in mid-1973, RADM Phillips pushed for more NSGR units to join the SPECOPS mis-



***Captain James D. Delaney, USNR (right front), leading a critical Navy Reserve planning conference at NSA in 1977.***



sion, thereby expanding the initiative. This was no small request, given the need to ensure units had the right personnel and an accredited SCIF, but NR cryptologists were eager to take on the challenge. The SIGINT mission would be combined with COMSEC and SPECOPS missions. Captain James D. Delaney played an indispensable role by developing the strategic vision and implementation plan for SPECOPS. It was fortuitous that CAPT Delaney worked with DoD in civilian life as a senior-level manager in SIGINT operations and was able to serve as a bridge between the organizations. His role in building the SPECOPS mission against a defined foreign target was crucial to its success. Delaney's drive, determination, and hard work overcame the doubters, who wondered what a part-time organization could contribute to national-level SIGINT operations.

By the mid-1970s, CAPT Delaney's vision had crystallized and was taking shape. The success of this effort depended on three factors: central operational planning, coordinated drilling by units, and effective use of the two-week annual training (AT) period given to all NR sailors. CAPT Delaney's own unit at Fort Meade, MD, was responsible for the central planning and coordination of all SIGINT activities; it also provided collection management, traffic analysis, and reporting of the intelligence information collected by NSGR units. Many reservists spent profitable ATs at Fort Meade, honing SIGINT skills and adding value to the broader mission.

Reserve units wishing to join the program were inspected by NSG, which provided quality control for basic SIGINT skills. Once the unit had reached active duty standards for operations, it "graduated" to DoD for tasking, and became part of the nationwide network. By the end of 1974, eight units had "graduated," and by mid-1976 a dozen NSGR units were full participants in the program, while fourteen more were in preparation. In July 1975 the intelligence community issued the first SIGINT report based on NSGR collection and analysis, a milestone in the history of the Naval Reserve. As

CAPT Delaney explained, "This is the first time a reserve organization of any kind has been given the authority to release information directly to the intelligence community." For NR cryptology, a new era had dawned.

Changes in the program were by no means limited to operations. The end of direct American participation in the Vietnam War in 1973, and the end of conscription that year, brought significant changes to the Naval Reserve. Few NR sailors had been mobilized to serve in Southeast Asia, and the conflict had the unintended consequence of bolstering NR ranks; for many, the option of six years' service in the reserves was preferable to two years' active duty, possibly in Vietnam. In addition, numerous Navy cryptologists coming off active duty elected to join the NR, which ensured a steady supply of trained personnel for reserve units.

All that came to an end beginning in 1973. Concomitant cuts in the defense budget hit the reserves hard. Although the reserves were arguably less hurt by the lower funding than the full-timers were during the "hollow force" period of the mid-1970s, it was nevertheless a time of trials for all reservists. Despite Pentagon assurances that the reserve component had an even greater role to play in an era of declining active duty manpower, under the rubric of what was termed the Total Force policy, the authorized strength of the NR's Selected Reserve (SELRES) fell from 129,000 in 1973 to 93,000 in 1976, and many units had difficulty reaching the reduced ceiling.

Cryptologic units had fewer manpower problems than many elements of the NR. They were now able to offer real-world missions, and they had the allure of secret operations. Jokes about what the "spooks" were doing "behind the green door" abounded at Naval Reserve centers, and there was no denying that cryptologists, with their clearances, special activities, and tight-lipped ways, constituted a breed apart. This mystique somewhat compensated for cutbacks in funding which resulted in fewer drills and AT days for NR sailors

during the 1970s. Another important factor in the effectiveness of the program was the increasing role played by women in NSGR. As noted, women had played an illustrious part in the history of American cryptology, especially in the Naval Reserve, and their participation in the early Cold War NSGR was important. Regrettably, however, the role of female officers and enlisted declined during the 1950s; the Cold War Navy did not need women any longer — the draft and big budgets ensured enough men were available — and this bias spread into the reserves. During the 1950s, the active duty Navy phased women out of the CT rating, over the protests of NR cryptologists, and the future of women in NSGR grew precarious.

Naval Reserve cryptology had long appreciated the role played by female sailors. Admiral Wenger had highly praised the contribution of female naval cryptologists to the CNO, noting their fine performance in wartime, and stating the “inestimable value” they offered to the Navy. He “strongly recommended” that female officers and enlisted continue to serve in the Naval Reserve as codebreakers, as they did for several years after 1945. By the early 1960s, however, women had disappeared from the NSGR; unable to join the CT rating, there was no place for them to go.

Yet by the mid-1960s, it was apparent that this had been a mistake. Excluding half the American population from potential service, particularly after women had rendered sterling service as codebreakers in wartime, was foolish. NSG leadership in 1966, taking up the issue on behalf of reservists, requested that women again be allowed to join NR cryptologic units and that they should be paid at the same rate as their male counterparts. Soon women were again allowed to join the CT rating, and by the early 1970s, female sailors were regularly seen drilling with NSGR units nationwide as Admiral Wenger had intended.

It bears noting that African-Americans became eligible to join the CT rating only in the 1950s after the Navy’s integration, and CTs of African-

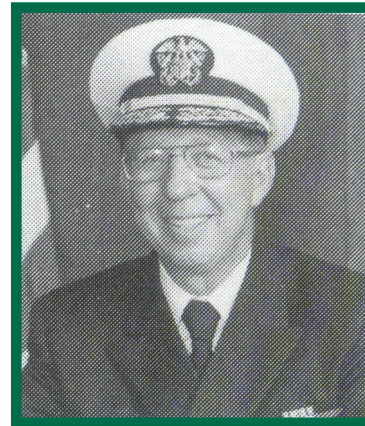
American background were commonplace in the NSGR by the mid-1960s. The Cold War cryptologic community had grown more ethnically and racially diverse than the Navy as a whole, in part due to the need for linguists, sometimes for exotic languages, for which first-generation Americans of unique backgrounds were an ideal fit. Such diversity remains a hallmark of NSGR to the present day. Many female CTs became officers beginning in the 1970s. The widespread direct commissioning of promising enlisted reservists, male and female, was a point of pride in the NSGR. Petty officers, and in some cases even chiefs, who possessed an excellent service record and had acquired relevant civilian skills and education, were frequently commissioned ensigns (or sometimes lieutenants, junior grade) without attending Officer Candidate School. This was a cost-effective way of ensuring a steady supply of technically competent junior officers and was a morale-booster, too, offering as it did a commission to hard-charging enlisted sailors. Beginning in the 1970s, DIRCOM officers constituted the bulk of the program’s junior officers, making NSGR an anomaly in the Naval Reserve, where most officers were products of OCS, Naval ROTC, or the Naval Academy. Cryptology was a highly specialized field, and although a direct commission was theoretically open to non-prior-service civilians, it was difficult to find anyone outside the cryptologic community who possessed the requisite skill set to become a 1615 (the designator for NR cryptologic officers). Hence, most DIRCOM selectees were enlisted personnel, veteran CTs. In many NSGR units, it was all but impossible to find junior officers who were not former enlisted.

### *From Malaise to Modernization (1975-1985)*

The late 1970s were not a happy time for the Naval Reserve. Years of budget cuts took a toll on strength, readiness, and retention, and by the decade’s end, SELRES personnel had fallen to 87,000, an unprecedented low in the post-World War Two era. NR units of all kinds were disbanded due to lack of funds, and the proposed 1979-80 budget would have resulted in the decommission-

ing of the entire NSGR, along with a host of other NR units. Fortunately this was averted, particularly when the Cold War heated up again with the Soviet invasion of Afghanistan in December 1979, but the Naval Reserve was in serious need of increased funding across the board. NSGR units were making do with what they had. Having “live” missions, both COMSEC and SPECOPS, to perform boosted morale, which was otherwise low during a period in which the entire Naval Reserve felt unappreciated. To compensate for inadequate resources, NSGR units collaborated closely with reservists from other services. The Navy had an edge in cryptologic matters over the Army and the Air Force, which during the 1970s merged their cryptologic and intelligence agencies, generally to the detriment of effectiveness in SIGINT and COMSEC operations. NSGR units not only had real missions, they also were customarily better equipped and trained than their Army and Air Force Reserve counterparts. Large parts of the country had no cryptologic reserve presence other than NSGR. Close collaboration among the services was the result, as scarce resources had to be shared. Thus Naval Reserve cryptologists often worked seamlessly with the other services in a manner that surprised active duty sailors, for whom “turf” issues were more pressing. The Denver NSGR unit was typical. At the beginning of the 1980s, the unit — it was small like nearly all NR cryptologic units — had ten USNR officers and twenty-six enlisted sailors, supported by three Air Force Reserve (USAFR) officers, one Marine Reserve officer, and one USAFR enlisted man. The airmen and Marine had nowhere else to drill, as the NSGR unit was the only cryptologic presence in the Denver area. Such arrangements became routine in the 1970s, and it was not unknown for an NSGR unit’s Sailor of the Year to be not a sailor, but a reservist from the Army, Air Force, or Marines. Field exercises involving reserve cryptologists from multiple services, and even foreign partners, began in the mid-1970s. A representative event was Operation Spring Thaw in spring 1977, a large exercise held off western Canada. It was considered a groundbreaking success. Based at Whidbey Island, WA, for the exercise, two NSGR units performed

COMSEC missions in collaboration with an Army Reserve cryptologic unit.



***Rear Admiral Nelson O. Heyer,  
first flag officer of the  
Naval Reserve Security Group Program.***

This period also saw the selection of the first cryptologic admiral in the Naval Reserve, Rear Admiral Nelson O. Heyer, who was appointed the Commander, NSG’s Assistant for Reserve Plans and Readiness, a sign of the increased significance of reserve cryptology in the Navy. RADM Heyer successfully served as an advocate for reserve issues with NSG, and thanks to his performance the Navy would continue to promote NR cryptologists to flag rank. His successor, Commodore (later Rear Admiral) William J. Miles, was selected in 1983.

The malaise of the late 1970s that harmed the entire reserve component came to an abrupt end with the beginning of Ronald Reagan’s presidency in January 1981. Defense budgets rose at once, resulting in immediate funding increases for reserve units across the country, and this proved a boon for the Naval Reserve in particular. The visionary and forward-leaning new Navy Secretary, John Lehman, was not only a strong proponent of maritime strength, but was an NR aviator himself. Secretary Lehman improved the pay and conditions of service for Naval Reservists, ensuring more paid drills and ATs for SELRES sailors. The USNR was authorized additional personnel and units and, thanks to increased pay and benefits,



there was no longer difficulty finding recruits. The Naval Reserve, which began the 1980s with only 86,000 sailors, had over 129,000 on strength at the decade's end. The NSGR benefited from these changes and as a result was able to add more units to the SIGINT mission — over seventy eventually. By the early 1980s, its participation in “real world” SIGINT was an established fact in the U.S. intelligence community. No one questioned any longer whether part-timers could play a meaningful role in top secret work. SPECOPS reporting provided by NSGR routinely was provided to high-level decision-makers, military and civilian, including the Chairman of the Joint Chiefs of Staff, the Secretary of State, and the White House on at least one occasion.

During one hectic international crisis of the first Reagan administration, NSGR sailors performed excellently, working from several drill sites across the country and providing a quick SIGINT response to meet the intelligence needs of the Navy and DoD.

Leadership at NSG and DoD continued to be impressed by what reservists could do at limited cost. The Commander, NSG, in the early 1980s, Rear Admiral Peter W. Dillingham, was a strong advocate for the reserve, and expressed a faith in NSGR shared by few active duty admirals. His efforts resulted in NSGR playing an even greater role in intelligence production, and enabled the continuing success of the SIGINT program. It should be noted that the Director, NSA, in this period, Vice Admiral Bobby R. Inman, likewise supported NSGR efforts in national-level intelligence.

An important step forward in aligning NSGR more closely with national-level intelligence came at the end of 1982 with the creation

of DoD's Reserve Forces Advisor (RFA) office for cryptologic issues, and the appointment of Captain Raymond P. Schmidt, USNR, as the first holder of the position. CAPT Schmidt, a cryptologic officer since 1959 (unlike most 1615s, he was an OCS graduate and had been a cryptologist since commissioning), during a tour of duty that lasted five and a half years, developed the RFA program and thereby assisted DoD and the IC in finding missions for reservists to perform, and in many cases the specific reservists to complete the task. By 1985 RFA had identified and validated some 1,000 mobilization billets for reservists, and thanks to CAPT Schmidt's efforts, growing numbers of NSGR sailors performed ATs at Fort Meade, learning the latest cryptologic techniques and procedures, invaluable knowledge they brought back to their units across the country. Although there were still distances to go before NSGR could take full advantage of the operational, training, and funding opportunities offered by national-level intelligence, establishing the RFA constituted a crucial step forward for the program.

By 1985 Naval Reserve cryptology had fully recovered from the doldrums of the previous decade.



***Admiral Miles presented the new annual Delaney Award for mobilization excellence on board USS Constitution in Boston, Massachusetts.***

Adequate funding had brought new equipment to its units and renewed vigor to its operations. Thanks to inspired leadership and the willingness of sailors of all ranks to work hard and innovatively, NSGR had matured into a valued partner of both active duty NSG and DoD/IC. It had 440 officers and 2,000 enlisted sailors on strength, drilling at eighty-five units located at seventy-eight Naval Reserve centers in nearly forty states. Its units were supervised by five regional commands, and every unit supported SIGINT in some capacity. This was remarkable progress in only a decade and stood in marked contrast to the NSGR of the mid-Cold War when cryptologic units lacked operational missions. Now NSGR sailors performed COMSEC and SPECOPS missions of real value to the Navy and the nation, at modest cost. The program had blazed a new path, demonstrating what part-time cryptologists could do if given the funds, equipment, and support. In the mid-1980s, the future of Naval Reserve cryptology had never appeared brighter.

### ***Cold War Victory and Its Aftermath (1985-1995)***

Confident in its capabilities, the NSGR of the mid-1980s looked to the future and saw nothing but opportunities. In 1986 the program embarked on an ambitious Fleet Support initiative to supplement active duty NSG support to U.S. naval activities worldwide. This effort aimed to bring the skills of the NSGR to the fleet, using seagoing direct support assets as training – and ultimately operational – platforms for the reserve.

In October of that year, NSGR leadership gathered in Washington, DC, to discuss the program's future. The two-day meeting, held at NSG headquarters, involved some eighty senior officers discussing where the program had been and where it was going. RADM Miles led a panel on the NSGR's future, including discussion of the operational possibilities ahead. The conference's highlight was



***Naval Reserve Security Group leaders from around the nation attended the innovative 1986 Planning Conference in the historic building where Navy cryptologists helped win World War II.***



the “birthday party” for NSGR, since the gathering coincided with the 40th anniversary of the establishment of the first NR cryptologic unit by direction of Admiral Wenger in 1946. None doubted that the Navy’s first cryptologic admiral would be pleased with what had been accomplished, particularly since the early 1970s.

What no one could know, however, was that the Cold War had entered its final phase in the mid-1980s and that the Soviet Union was on its last legs. The slow collapse of the Soviet empire, including the fall of the Berlin Wall in autumn 1989 and culminating in the disintegration of the Soviet Union itself two years later, brought profound changes to the U.S. military and intelligence community, and NSGR was no exception. The adversary that the United States had come to know well in over four decades of Cold War confrontation disappeared in a fashion few predicted — with a whimper rather than a bang.

What this meant for NSGR no one knew at first. Although NR cryptology possessed many talented sailors with skills that could be redirected against new problems, doing so would take time and effort. NSG and DoD were unable to offer much guidance, as those far larger organizations were themselves engaged in assessing their future in the early 1990s.

That the program needed to move beyond its Cold War posture was evident even before the USSR collapsed. The Iraqi invasion of Kuwait in August 1990 led to the largest reserve mobilization since the Korean War. The Naval Reserve mobilized over 21,000 sailors in the summer and fall of 1990 to meet the needs of Operations Desert Shield and Desert Storm; hardly any cryptologists were called up, and no units were. While the U.S. military performed exceptionally well in the liberation of Kuwait, NSGR played no part in the operation. It was clear that the program needed to redefine itself for the post-Cold War world.

The identical challenge stood before the entire Naval Reserve. The early 1990s, with their vaunted “peace dividend,” saw cutbacks in reserve funding, units, and missions reminiscent of the post-Vietnam era. Again long-serving NR sailors were informed they no longer had pay billets, sometimes without explanation; again SELRES personnel faced an uncertain future. Naval Reserve strength was reduced by approximately one-third in the first half of the 1990s, as the force struggled to discover its relevance and core competencies after the disappearance of the Soviet empire.

NSGR was hit particularly hard by the cutbacks. The drawdown began in 1990, with the decommissioning of several units, but beginning in 1993, the program was dramatically scaled back, so that in less than two years it fell from some 2,500 SELRES sailors in 59 units to fewer than a 1,000 in 20 units, resulting in a force smaller than at any point since the Korean War. In 1979 NSGR avoided total dissolution thanks to the support of the active force. Now NSG seemed to place less value on the reserve’s contribution, which was perhaps no surprise given the trying transition from Cold War to uncertain peace. It was unclear what the reserve had to offer during such a period of reassessment and flux for the military and the intelligence community.

Under the leadership of Rear Admirals Robert H. Weidman, Jr. and Thomas E. Courneya, NSGR made the difficult transition from the confident program of the late 1980s to the transitional force of the mid-1990s. This was the lowest period in the history of Naval Reserve cryptology. As in the 1950s, operations gave way to training, and mission focus became blurry — inevitably so, as it was unclear what SIGINT missions NR cryptology ought to be undertaking. Morale proved difficult to sustain in the face of severe cutbacks in sailors, equipment, units, and missions. NSGR leadership had made the difficult, but ultimately wise, decision to endure short-term pain to accrue long-term benefits. Only by drastically shedding personnel and units could the program hope to survive and refashion itself

as an operationally relevant force for the post-Cold War Navy. More sailors left the program than stayed behind, and not all separations were voluntary. Numerous units that had served for more than forty years, after being reconstituted after the Korean War, were decommissioned. NSGR's footprint, which had once encompassed over a hundred units in nearly forty states, was reduced to a shadow of that.

Yet it must be admitted that only through such harsh measures was NSGR able to survive at all. Funds made available through slashing of personnel and units were expended on more drills, ATs, and active duty training days for those still serving; this was particularly important for NSGR linguists, who needed substantially more active duty time than other CTs to keep their skills fresh. It was better to have twenty units, properly outfitted with modern equipment and staffed by fully trained and cleared sailors than to have many more units equipped with legacy systems manned by sailors with outdated skills. Only through modernization could the program hope to contribute to the post-Cold War Navy and intelligence community.

By 1995 the worst was over and NSGR had commenced its transition from an operations posture aimed at the Soviet Union into a forward-looking force attempting to find developing cryptologic missions. Fortunately for the program, the COMSEC mission had never gone away, and the Navy's need for monitoring remained robust; for NSGR this continued to be a core effort and a point of pride. Finding new SIGINT missions was more challenging, however, as this required new equipment, highly skilled personnel, and assistance and cooperation with NSG and DoD. By the mid-1990s, though, there were promising signs that Naval Reserve cryptology stood at the cusp of a renaissance.

### ***Renewal and Transformation (1995-2005)***

By 1995 the Department of Defense had developed a new, post-Cold War model of how Reserve

Component (RC) intelligence and cryptologic units ought to function operationally, and it looked a great deal like how NSGR had done business in the 1970s. What Naval Reserve cryptologists had developed in the 1970s and brought to fruition in the 1980s — namely, using dispersed assets across the country to provide highly classified, meaningful support to national-level intelligence on a regular basis — was what the Pentagon wanted, only now to be performed by all reservists serving in intelligence or cryptologic units. The new DoD plan, promulgated in January 1995, mandated that RC intelligence personnel — 20,000 in all — begin supporting national-level agencies as their primary mission. Charging RC elements to “do in peacetime what you do in wartime,” the Pentagon tasked reservist “spooks” from all the armed services to become relevant to national-level missions.

This was possible thanks to DoD support in bringing improved facilities, with updated equipment and secure connectivity, to the reserves. There were many challenges — improving interoperability and connectivity with national agencies, better training in operations, an emphasis on recruiting and retaining key skills (particularly language) — but the basic need was proper drill sites. These DoD provided beginning in the mid-1990s with the establishment of Joint Reserve Intelligence Centers (JRIC) across the country. Within five years, there were twenty-seven JRICs with full secure connectivity with national-level intelligence agencies, serving as a model for “virtual teaming,” allowing the unique skills of RC intelligence to be used daily in peacetime to support national intelligence requirements.

NRSRG benefited from this sea change immediately. After decades of neglect, the Pentagon appreciated that RC intelligence and cryptology offered special, high-demand skills — particularly in information technology and language — that were scarce in the active duty military. In the second half of the 1990s, NR cryptology charted a new course that would bring newfound relevance to the program. Having proper drill sites was the neces-

sary first step, and before long all NSGR units possessed complete top secret connectivity with each other and national-level partners.

Getting and keeping the right people was another no less important challenge. The early 1990s constituted a personnel drought: a significant loss of sailors, including many of the most experienced, with minimal fresh blood entering the program. In the second half of the decade, NSGR began to set this right. Recruiting commenced again, as did officer commissioning, and sailors were receiving enough active duty time to maintain their individual skills. By 2000 the program's human capital had improved notably over a few years before, and NSGR was having success bringing CTs with low-density languages — always the hardest skill to recruit — into its ranks.

The “new” NSGR would be tested in earnest in 2001 in the aftermath of the terrible 11 September terrorist attacks on our homeland. Under the leadership of Rear Admiral James B. Plehal, Naval Reserve cryptologists came forward immediately to defend our country. Over 300 NSGR sailors — one-third of the program — were mobilized after 9/11, nearly all of them volunteers. They were called to active duty for a year (in some cases more), placing lives and careers on hold, often with significant personal and financial hardship, to serve the Navy and the nation.

The performance of NR cryptologists after 9/11 was impressive, demonstrating how far the program had come since the difficult post-Cold War drawdown. While the embers of the World Trade Center still burned, NSGR sailors reported for duty around the world to defend the homeland and take the war on terrorism to the enemy. Following 9/11, NSGR elements undertook several interesting initiatives, including some set up at Fort Meade. The reservists attacked these initiatives with gusto and played an important role in supporting homeland security operations.

That was only part of the story. NSGR officers and enlisted deployed forward, serving with U.S. Central Command (CENTCOM) in the Middle East, from Qatar to Bahrain to Afghanistan beginning in fall 2001, and in Iraq beginning in spring 2003. They brought much-needed cryptologic expertise to Operations Enduring Freedom and Iraqi Freedom. Others participated in antiterrorism operations in the Pacific region and other quiet yet vital fronts in the Global War on Terrorism (GWOT). NSGR sailors found themselves serving not just on ships and on staffs, as expected, but in the field, at the “sharp end” of war alongside soldiers and Marines fighting terrorists at close quarters. Many NR cryptologists supporting the GWOT did so not from the Middle East, but from the United States. Mobilized reservists were dispatched to theater, but also to Fort Meade, and to major DoD facilities in Texas, Georgia, and Hawaii; they were as much engaged in the GWOT as those serving in the Persian Gulf, Afghanistan, and Iraq. Thanks to secure telecommunications, CTs were able to conduct SIGINT operations from the safety and comfort of U.S. territory (although sailors working long hours at cryptologic watch centers in support of deployed forces would question just how comfy it was). Mobilized NSGR personnel provided direct, real-time SIGINT support to CENTCOM operations from several DoD and NSG sites. Just as important, other recalled reservists worked non-GWOT targets, freeing up active duty cryptologists to support the GWOT.

Soon every NSGR unit would possess secure communications — phone, fax, and computer — with NSG and DoD/IC, including access to the necessary top secret databases; thus reservists not recalled to active duty were able to support the war effort, providing SIGINT analysis during drills and ATs. This was the culmination of extensive planning and investment in infrastructure and training. Thanks to strong efforts by Rear Admiral William D. Masters, Jr., who charged NSGR with conducting any mission, at any place, at any time, full secure connectivity for every unit was achieved after 9/11.

Finally, the fusion of active and reserve cryptology in the Navy was functionally complete. This development was something Admiral Wenger could only have imagined in 1945 but doubtless would have found impressive.

The 9/11 attacks heralded a new era for Naval Reserve cryptology. Although call-ups had been widespread, they had not been total as in 1950, thereby allowing units to continue to function, providing valuable operational support and training for those still on home station. The NSGR office at Fort Meade charged with planning and policy, headed by Captain Ronald E. Hecox, took the strategic view. All understood that the GWOT promised to be a long and difficult struggle — a marathon, not a sprint. Recruitment was helped by the surge of patriotism after 9/11, and NSGR was well on its way to reaching its authorized strength of 1,200 sailors. Many of the new CTs were linguists, now seen as the program's single greatest contribution to the Navy and the intelligence community.

Under the leadership of Rear Admiral William D. Masters, Jr., the transformed NSGR played an important role in the GWOT and the defense of our homeland after 9/11, vindicating the force structure and concept of operations developed in the mid-1990s. Like so many NR cryptologic officers, RADM Masters had served as a CT beginning in 1964 — including Vietnam service — and knew the program and its people well. Thanks to the efforts of many NSGR sailors, reserve cryptology had more than recovered the reputation for excellence and relevance it enjoyed in the 1970s and 1980s. After 9/11 the relationship between NSGR and NSG grew closer than it had ever been, culminating in the selection of RADM Masters as the Vice Commander, Naval Security Group, in late 2004, an unprecedented demonstration of the fusion of naval cryptology, active and reserve.

That fusion was complete in October 2005, with the realignment of cryptology — recently renamed information warfare — in the U.S. Navy. The Naval Security Group was decommissioned,

its units resubordinated under the Information Operations Directorate of the Naval Network Warfare Command, headquartered in Norfolk, VA. NSGR became an integral component of this new organization. This was a significant step forward in the transformation of cryptology/information warfare in the U.S. Navy from a support function to a fighting command capable of conducting effective information operations, offensive and defensive, on behalf of the Navy and the nation. Indeed, in recognition of this role, the Reserve Component is programmed for 40 percent growth in coming years. For Naval Reservists, this is the beginning of yet another era, filled with promise, one that will offer sailors new ways to contribute to the defense of our homeland and its vital interests. This bold step forward poses novel challenges, but its rewards include an increased role for reservists in supporting the fleet and defeating our nation's enemies. The future, like the past, will be filled with adventure and trials for those brave enough to make the journey.

The history of the Naval Security Group Reserve demonstrates the importance of institutions, but above all the indispensable part played by individuals. NSGR has never been a large command by the standards of the Naval Reserve or the intelligence community, but its contributions to the defense of our country have been significant. Its talented and driven sailors, though few in number, have made a valued difference, though most of their accomplishments remain classified. During World War II, the Korean War, and today's Global War on Terrorism, Naval Reserve cryptologists have punched far above their weight, rendering sterling service in top secret operations. It is a proud history and a treasured legacy that will inspire the Navy's citizen-codebreakers of today and tomorrow to further accomplishments. They will remain the silent warriors they have been throughout their history, serving in secrecy on behalf of the Navy and the nation.

*Source of photos:*

*Captain Joseph N. Wenger,  
(a U.S. Navy photo courtesy of Jeffrey J. Wenger (Captain, later Rear Admiral,  
Wenger's son)*

*Rear Admiral Nelson O. Heyer  
(a U.S. Navy photo courtesy of Captain Raymond P. Schmidt)*

*Waves, photo courtesy of NSA*

*All other photos courtesy of Naval Cryptologic Veterans Association (NCVA)*