THE PROFESSIONAL BULLETIN OF THE U.S. ARMY SIGNAL REGIMENT

ARMY COMMUNICATOR



Maintaining the Heritage of the Regiment

The Harding Project

MOS Strategic Management

Approved for public release; distribution is unlimited. | Headquarters, Department of the Army. | PB 11-24-2

Spring 2024

In This Issue:

3. Chief of Signal Message
   Brig. Gen. Paul D. Howard
4. Regimental CSM
   Command Sgt. Maj. Linwood E. Barrett
5. Regimental CWO
   Chief Warrant Officer 5 Chris R. Westbrook
7. History: Amphibious Operations
   Steven J. Rauch
11. A Case For Taking the Hard Jobs
   Maj. Maribel Brown
12. The Military Recruiting Crisis
   1st Sgt. Wolfgang McLachlan
14. How to Retain Warrant Officers
   Chief Warrant Officer 5 Brandon Wilson
16. MOS Convergence Explained
   Lamar Lauderdale
18. Modernizing PME in the Digital Age
   Master Sgt. Noel DeJesus
21. Building an Interoperable SFAB
   Capt. Seth Revetta
23. Enabling Maneuver in LCSO
   Sgt. Maj. Shane Short
26. Forging the Path
   Capt. Thomas H. Lee
28. Direct Commission Program
   Maj. Alisha Garcia
30. The Newest Signal Brigade
   Maj. Nicholas Christensen
32. A Storied Heritage of the 44th
   1st Lt. Junior Nkamanvang
33. Distinguished Members of Regiment
   Steven J. Rauch
35. The Legacy of the 51st
   Maj. Connlann Myers, Capt. Davyd Hamric
36. Operationalizing the CPP
   1st Lt. Benjamin D. Selph
37. 101st ESB Provides Critical Support
   Maj. Sean M. Gallagher
39. Getting to Know the 25th RCSM
   Laura Levering

U.S. Army Signal Regiment Leadership

42nd Chief of Signal and U.S. Army Signal School Commandant,
Brig. Gen. Paul D. Howard

Regimental Command Sergeant Major,
Command Sgt. Maj. Linwood E. Barrett

Regimental Chief Warrant Officer,
Chief Warrant Officer 5 Chris R. Westbrook

Army Communicator

Editor-in-Chief,
Laura Levering

The Army Communicator is published as a command information e-publication for the men and women of the United States Army Signal Corps under the provisions of AR 360-1. Opinions expressed herein do not necessarily reflect the views of Office, Chief of Signal, the U.S. Army or the Department of Defense.

Send articles, photos, graphics, and story ideas for the Army Communicator to the editor-in-chief at laura.m.levering.civ@army.mil or here.

For additional information, call 706-791-7325.

Follow the Signal Regiment on Facebook here. Follow the 42nd Chief of Signal on LinkedIn here and X (formerly Twitter) here.



Front cover: *Created by Tài Doick, U.S. Army Signal School, featuring photo illustration and prompt engineering.*



On the back: *Created by William "BJ" Wood, Cyber Capability Development Integration Directorate.*

Unlocking the Future of Signal Education and Training: A Journey to the Pacific

Team Signal,



Brig. Gen. Paul D. Howard
42nd Chief of Signal and U.S. Army Signal School Commandant

Embarking on a journey to the Pacific, one anticipates the tranquil waves of Hawaii. However, my recent trip was not a leisurely escape; it was a voyage into the heart of technological advancement and military preparedness. Having not been to Korea since 1995, the changes were stark, especially at Camp Humphreys, Korea.

Amidst the stunning new camp infrastructure, I had the privilege of witnessing Soldiers and Department of the Army civilians executing missions using signal skills they learned here at the Signal School and applying field craft taught by great NCOs. In the field, our young officers, warrants, and NCOs are upskilling our signal personnel. It was evident that these individuals were not just learning; they were evolving, embracing the technologies of the future that will undoubtedly become core competencies in the modern battlefield.

As I reflected on the experience, it became clear that our approach to Soldier and Department of the Army civilian education and training must continue to evolve alongside the technology itself. We must shift our focus from mere proficiency in end-user devices to a deeper understanding of the underlying technological principles. This is especially crucial for our senior NCOs, officers, and civilian partners, who must lead with not just technical prowess but strategic insight to solve problems for commanders and grow our next generation of experts and leaders. The investment in intellectual capital is just as vital as the investment in physical infrastructure. Furthermore, as we transition to cloud-based capabilities, our education must be vendor agnostic. The ability to adapt and utilize diverse cloud platforms is essential in a dynamic operational environment. Our personnel must be equipped with the skills to navigate this complex landscape with ease and efficiency. This requires a comprehensive understanding of cloud architecture, security protocols, and interoperability standards.

As we navigate this ever-changing landscape, let us embrace innovation, empower our Soldiers and Department of the Army civilians with the knowledge and skills they need to excel, and ensure that our interactions evolve in tandem with the advancements of the digital age. This cannot only be done physically at the Signal School.

We are building a new concept currently referred to as Signal-Mobile Advanced Readiness Training (S-MART). This aspires to be a mobile team delivering agile training capacity at the timing and tempo of the operational unit. Most importantly, it is delivered in a "train the trainer" methodology which empowers our mid-tier signal experts to train their own junior Soldiers. This will be imperative as units will not all be standardized due to the speed of technological change and unit innovation.

"Dedicated, competent, highly spirited Signal Corps Soldiers and civilians always will be more important to our success than technology."

- Maj. Gen. Leo M. Childs, 25th Chief of Signal

Pro Patria Vigilans! Watchful for the Country!

Maintaining the Heritage of the Regiment: Let Us Not Forget Who We Are!



Command Sgt. Maj. Linwood Barrett
Regimental CSM

Established in 1860 by Albert J. Myer, the Signal Regiment has been vital to every military conflict. We have always done our part to defend this great nation. For example, on July 2, 1863, during the Battle of Gettysburg, it was a Signaleer that observed the movement of Confederate forces on the Army flank and "Got the Message Through" to leaders which helped prevent defeat!

Throughout history, the Signal Corps has been involved in multiple conflicts, peacekeeping missions, and humanitarian efforts, showcasing our ability to be "Watchful for the Country."

We are currently 58,000 **strong** and in Phase III of our MOS convergence. As we talk to our Signaleers across the various formations, they seem to be adjusting well to their new responsibilities and have been performing above and beyond expectations. We have continued to welcome data literacy with open arms and have encouraged and place significant emphasis on the attendance of the Network Communication System Specialist (25H Y2) Course, Digital Master Gunners Course, and S6 Course. We are committed to ensuring the Signal formations have the training needed to accomplish their mission, and we will adjust as needed based on feedback from the C2 Fix assessments.

The future of the Signal Corps is promising! As technology continues to advance, so do we. The Signal Regiment will focus on adapting, training, and operating cutting-edge communications systems and technologies to ensue seamless and secure communications for large scale combat operations. Additionally, we will collaborate with our cyber and electronic warfare teammates to meet the ever-changing needs of the military in the digital age.

No matter the location or formation, our signal professionals continue be loud and proud! Let's not forget our signal heritage. May we continue to remind ourselves of the importance of an adaptable, agile, reliable Signal Regiment! Pro Patria Vigilans! The Signal Corps Soldiers, NCOs, and officers stand ready to provide reliable communications to warfighting commanders, because "**No Comms, No Bombs**."





Aligning Signal Occupational Specialties to the DoD Cyber Workforce Framework

In 2005, the Department of Defense (DoD) released the first directive in the fight against cyber threats: Department of Defense Directive 8570. Its objectives were to address training, certification, and management of government employees performing information assurance or cybersecurity roles.

The directive had a follow-on instruction, DoD 8570.1, which included the baseline certifications requirements for those employees. While it was a leap ahead of the previous requirement, which was simply to be hired or assigned to the position, it did not scale to the modern workforce nor have flexibility to conform to modern work roles such as software development.

To support a new instruction, DoD created the DoD Cyber Workforce Framework (DCWF), which was primarily based upon a framework developed by the National Institute of Standards and Technology (NIST). The DCWF defines not only the work roles of employees, but proficiency levels within those roles as well. The DCWF is a living document that has a working group to continuously evaluate and maintain the cyber workforce work roles. Each work role has a number of tasks, knowledge, and skills attached to it, and to achieve proficiency in a task, the employee applies on-the-job experience, certifications, and/or degrees.



Chief Warrant Officer 5 Chris R. Westbrook, Regimental CWO

In February 2024, military occupational specialty 25B10 (information technology specialist) has been added to the DoD 8140 Cyber Workforce Qualification Program Qualification Matrix and Training Repository under Technical Support Specialist. This means that a 25B leaving Advanced Individual Training with a graduation certificate is considered certified as a basic level technical support specialist and does not require an industry certification to perform that assigned work role. Soldiers can upload their graduation certificate in the Army Training and Certification Tracking System (ATCTS) in the Documents section. Soldiers may still require additional training such as computing environment training to receive elevated privileges for their work role.

Adding 25B to the 8140 program is one of many steps in aligning our occupational specialties to the DCWF, and you can expect more updates as we continue to define work role tasks based upon knowledge and skills. There are also defined work roles by skill level for FA26A, FA26B, 25D, 255A, 255N, and 255S in the qualification matrix.

DoD 8140 and other DoD resources can be found at the DoD Cyber Exchange here.

The 8140 qualification matrix can be found here.

'Change is inevitable; growth is optional.'

Greetings, Team Signal!



Laura M. Levering
Editor-in-Chief,
U.S. Army Signal School

As I prepared for this edition of the Army Communicator, one word kept coming to mind: change. Few things in life are as constant as change. It's what we do with that change that is up to us.

I hope this edition of the Army Communicator enlightens you as much as it has enlightened me.

In January, we announced that the Army Communicator would be changed from being published monthly to a quarterly. We also announced that we would be soliciting articles that support the Harding Project, one of Army Chief of Staff Gen. Randy George's newest and top priorities. Unsure of what articles would come my way, I am pleased to say the signal community did not disappoint.

Inside this issue, you will find some thoughtfully written pieces that are in line with what the Harding Project aims to do, which includes "strengthen the Army profession" and "foster discussion and debate" by renewing professional military writing. Several of you understood the assignment and followed through. A couple of you might be contacted and your article passed on to higher ranking officials as examples of what a well-written professional article looks like. Some of you might even be a asked to consider joining a peer group. More to follow on that later as details emerge.

As editor of this publication, I was asked to be part of an operational planning team that meets monthly to discuss the Harding Project and the way forward. One of those changes include modernizing the way we receive and read content through the development of a platform that will enable your articles to be published in "real time" versus having to wait until the Army Communicator is released (along with other military professional journals). This supports the intent of being able to exchange ideas and debate on a user-friendly platform.

Like most endeavors, these changes will not happen overnight. But when it does happen, you will be among the first to know if you follow our social media pages and check out the Army Communicator each quarter.

Speaking of changes … I would like to know what you think about the Spring Army Communicator. Is there something in particular you like or dislike? Any articles you'd like to respond to? Anything specific you would like to see in the future? Send me your thoughts in a few sentences, and I may be able to add a "Notes to the Editor" section next quarter. This idea actually came from someone here on staff. I would love to share what you have to say - constructive criticism and all.

Looking to next quarter's theme, "training," consider writing about training/professional military education you've experienced or would like to experience. What has been useful? What needs to change?

Keep the articles coming. Spark some dialogue. And in the future, expect to see more changes - for the better.

I am here to assist you with "getting the message through!"

Submission guidelines: Articles should be sent in Word document with photos and graphics separate (not embedded in Word). Include a description of each photo/graphic along with the rank, full name, and unit of person who took photos (or created graphic). Acronyms need to be spelled out on first reference, with the abbreviation of the term acceptable on subsequent reference.

Summer 2024 theme: Articles related to training.

Deadline to turn in submissions: June 14.

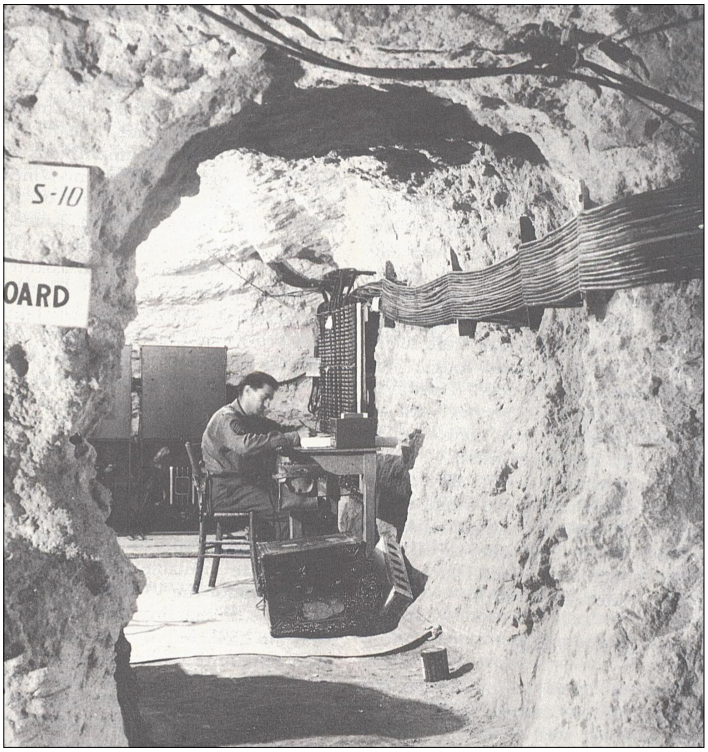
Signal Corps support of amphibious operations
January - March 1944

Steven J. Rauch
Signal Corps Branch Historian

In early 1944, within a span of a few weeks and separated by thousands of miles, three U.S. Army divisions moved by sea to forcibility seize key terrain to support operational and strategic objectives using amphibious landing techniques. Signal Soldiers who were assigned to division signal companies and supporting corps signal battalions all shared one thing in common: the challenge of providing communications in the air, sea, and land environments during large scale combat operations against peer adversaries. But wait. You thought that was the job of U.S. Marines? Not so.

During World War II, the Army conducted more amphibious landings than the Marine Corps in all theaters of operations. In the Pacific, the Army employed 22 divisions whereas the Marines had only six; a 3-to-1 ratio of combat power. It is still an Army mission today. According to *Field Manual 3-0, Operations*, when operating in a maritime environment, "Army forces are likely to conduct two complex forms of forcible entry operations: airborne or air assault and amphibious landing. Forcible entry operations seize and hold lodgments against armed opposition to set conditions for follow-on operations."

This article offers just a few highlights of the challenges signal Soldiers faced during the landing at Anzio, Italy, by the 3rd Infantry Division (ID) in late January 1944; the assault on Kwajalein Island by 7th Infantry Division in early February 1944; and the extremely violent combat experienced by 1st Cavalry Division (CD) on Los Negros Island in late February 1944.



A wine cellar tunnel system used to protect communication lines during Anzio, 1944. Radio was the sole means of communicating during initial stages of the operation.

3rd Infantry Division at Anzio, January 1944

Opposed landings in a maritime environment are one of the most difficult and dangerous military operations, so achieving the element of surprise should be pursued by all available means. FM 3-0 (p. 7-14)

D-Day was sunny and warm for the Soldiers of 3rd ID who landed at Anzio Beach on Jan. 22. Even better was the lack of enemy resistance due to achieving complete surprise with an amphibious assault behind Axis lines. The U.S. VI Corps was given the mission to land two divisions at Anzio Beach, then move inland to cut off enemy resistance to the south, link up with Fifth Army and open the way to Rome to the north.

The communications plan for Anzio drew upon lessons learned from the Salerno landing in 1943. During the seaborne phase of Anzio, VI Corps used a specially designed headquarters ship *Biscayne*. The 3rd ID used a converted Landing Ship Tank (LST) for its headquarters with vehicular radio sets SCR-399 and 193, loaded on the top deck of the ship for radio communication to Fifth Army. At Anzio, VI Corps operated independently because it was establishing a beachhead behind enemy lines, so there was no wire communication with Fifth Army. That meant radio was the sole means of communication during initial stages of the operation. Within 3rd ID, the SCR-300 "walkie-talkie" – the first portable manpack FM radio designed for use by infantry units – was relied upon for all communication networks above company level.

According to Lt. Col. Jesse F. Thomas, the division G6, "It was the most successful instrument yet devised for amphibious communications. Its range and reliability met or exceeded every expectation and established it as the most valuable item of radio equipment in the division."

Even though the batteries for the radio were rated to last 24 hours, in some cases they lasted up to 40 hours. Two DUKW amphibious vehicle mounted SCR-499 radio sets from the 57th Signal Battalion went ashore about noon on D-Day to provide radio communication for the corps combat patrols (CP) and reconnaissance elements. The only personnel from 57th to land on D-Day were those who could climb aboard the DUKWs.

This group consisted of reconnaissance personnel, radio operators, and messengers. The corps CP was established in a group of buildings near the beach and a radio set was put in operation to establish communications with both the headquarters ship and Fifth Army.

By the day after D-Day, the corps CP was up and running with switchboards, message centers, and radio stations installed and working. The signal Soldiers were very experienced in setting up communications for offensive operations, and for about a week everything worked perfectly. Many serviceable commercial and military wire facilities were discovered in the area, which were quickly rehabilitated and put into service. However, any thoughts of an easy landing and quick victory were smashed by strong enemy counterattacks Feb. 3, which threatened to throw the Allies back into the Mediterranean Sea.

During the next several days, the Allies had to shift quickly to defensive operations within a confined and extremely congested area. Intensive enemy artillery fire and air attacks tore up cable and field wire, to include main and alternate circuits. Day by day, the maintenance of circuits was a challenge and dangerous for those signalmen who had to venture onto the battlefield to install or repair lines during intense enemy bombardments.

Defensive operations, however, required more wire than had initially been planned because of a need to install double and triple circuits, multiple lateral lines, and then burying them for protection. Fortunately, the Anzio area was a wine producing region and hundreds of wine cellars and underground tunnels were available to use to route cable and wire to the corps CP. After six weeks of continuous bombing, shelling, and fighting, the battle for Anzio settled into a three-month long stalemate which lasted until spring. For its service during the challenging operation, the 3rd Signal Company was recognized with a Meritorious Service Unit Plaque, which stated, "Throughout preparations for and participation in the Anzio Beachhead campaign and the breakthrough operation culminating in the capture of Rome, Italy, the 3rd Signal Company rendered invaluable service to the Division by installing and maintaining vital communications lines and services. Although subject to constant enemy artillery and occasional small arms fire, and despite obstacles of terrain and weather, the personnel performed their tasks in a superior manner, ensuring continuous efficient communications among all elements of the Division at all times."

The operations at Anzio proved that sound basic and specialist training was essential for all signal personnel to maintenance effective communications. It also illustrated that flexibility and the ability to improvise was required to meet unexpected situations.



Soldiers of 1st Signal Troop emplacing wire using a DUKW amphibious vehicle at Los Negros Island. (Photo from Signal Historical Collection)

7th Infantry Division at Kwajalein, Marshall Islands, February 1944

In a predominately maritime joint operations area, naval and air components are typically the key components of the joint force commander's (JFC) operational approach. Army forces develop a nested operational approach that reflects and supports the JFC plan. FM 3-0 (p. 7-9)

In the Central Pacific theater, Adm. Chester Nimitz devised an operational concept known as "island hopping" to seize bases to support a potential invasion of Japan. In November 1943, Nimitz's forces had seized Tarawa and Makin in the Gilbert Islands. The Gilberts was the first time American ground forces assaulted heavily fortified enemy positions from the sea. The 27th Infantry Division had secured Makin against light resistance, but the 2nd Marine Division suffered some of the heaviest casualty rates during the fight for Tarawa. Nimitz's next objective was the Marshall Islands, which included 32 separate island groups spread over 400,000 square miles of ocean. The islands were narrow, flat, only two to three miles long, and rose only about 20 feet above sea level. Kwajalein, the world's largest coral atoll, was in the middle of the Marshalls, approximately 2,100 nautical miles southwest of Pearl Harbor. Kwajalein Island was only two and one-half miles

long and 800 yards wide for most of its length, but the Japanese were able to build a 5,000-foot runway capable of handling large numbers of aircraft. The capture of that airfield became a primary objective. Nimitz's plan was for the 4th Marine Division to seize the dual island of Roi-Namur in the northeast while the 7th ID attacked Kwajalein Island at the southeast end of the atoll. This would be the 7th ID's second amphibious operation of the war, having seized Attu from the Japanese in the Aleutian Islands in early 1943. The 7th was sent to Hawaii, where it received training in advanced amphibious techniques, marksmanship, and jungle warfare. In addition, a new unit was created to facilitate more effective communication between the services: the 75th Joint Assault Signal Company (JASCO). The 75th JASCO was augmented with navy shore fire control parties and air liaison parties, which brought its strength to almost 600 men. The JASCO's purpose was to implement common communications procedures to enable all services to effectively communicate during an amphibious assault. These included joint radio frequencies, joint message transmission procedures, joint coordination for close air support, and control of naval gunfire against shore targets.

The plan was for 7th ID to land on the western end of Kwajalein and attack with two regiments abreast. The day prior, the division would seize four smaller islands near Kwajalein as bases for the division artillery to support the landing. The division command group established command and control for the battle onboard the *USS Rocky Mount*. The *Rocky Mount* was a specially equipped headquarters ship with the latest radio and radar technology to enable commanders, both afloat and ashore, to direct multiple amphibious operations.

On Feb. 1, 1944, at 9:30 a.m., the two infantry regiments, supported by signalers from 7th Signal Company, landed on Kwajalein. Enemy mortar and automatic weapons fire greeted the troops when they stormed ashore. During this phase, radios were the primary means of communications since they provided freedom of movement and allowed commanders to adjust artillery fire from adjacent islands. By the end of the first day, the division established a CP on Carlson Island. During the battle, the JASCO and 7th Signal Company installed a switchboard on the beach and ran 4,500 yards of submarine cable to connect the command posts on both islands. Throughout the battle, the cable continuously rubbed against the coral reef and would periodically break, so a dedicated repair team from the JASCO was tasked to keep the cable operational.

The next morning, the regiments continued the attack using tank-infantry teams. In previous battles, infantry Soldiers had difficulty communicating with tank commanders. To remedy this, telephones were installed on the outside of the tanks. When a Soldier wanted to communicate with the tank commander, he would walk up to the rear of the tank where the telephone was located and lift the handset, which turned on a light inside the tank, which told the crew the infantry wanted to talk to them. When the tank commander answered, the Soldier could direct him to the needed area.

All resistance ended by the third day as the Soldiers finished their sweep of the island. Among many things the landing validated was the JASCO concept, which helped to mitigate problems in joint communications. As a result, the Army created several more JASCOs to support all theaters of operations.

1st Cavalry Division, Los Negros, Admiralty Islands, February 1944

Retaining critical island terrain through an effective defense, one that includes counter reconnaissance and security operations, is vital for the success of the JFC's objectives to deny enemy forces a relative advantage. FM 3-0 (p. 7-10)

In contrast to the Central Pacific, Gen. Douglas McArthur commanded the Southwest Pacific Area (SWPA), which included Australia, the Dutch East Indies, the Philippines, the Bismarck Archipelago, and New Guinea. MacArthur controlled army, navy, marine, and air force components from Allied nations, but he drew most of his forces from Lt. Gen. Walter Krueger's Sixth Army. MacArthur intended for his next operation to be aimed at the Admiralty Islands. Unlike the Marshall Islands, the Admiralties were volcanic islands with steep mountains, dense jungles, and malaria-breeding swamps.

The specific objective was two large islands, Manus and Los Negros, which were separated by a narrow strait that resembled a horseshoe curve. The interior of this curve, Seeadler Harbor, formed the finest natural anchorage for ships in the southern Pacific. Gaining that harbor for the Navy was critical for future operations. Krueger assigned the capture of the islands to the 1st Cavalry Division, commanded by Maj. Gen. Innis Swift. The division was organized with two brigades, each having two regiments and two squadrons in each regiment. Although the Admiralties would be its first combat action, 1st Cav. Soldiers had received extensive training to prepare them for their mission to seize Seeadler Harbor.

On Feb. 23, reconnaissance aircraft reported no signs of enemy activity on the islands. On Feb. 27, a small reconnaissance patrol landed on Los Negros and reported the island was occupied by well-camouflaged Japanese troops who had not been detected by the air reconnaissance. Based on this report, MacArthur ordered a strong ground reconnaissance to probe Los Negros. The 2/5 Cavalry Squadron was selected to spearhead the amphibious landing. Brig. Gen. William Chase, 1st Brigade commander, led the task force. Because of the confusing intelligence, MacArthur decided to personally observe the initial assault so he

could determine whether the operation should continue or be aborted.

On the morning of Feb. 29, the 2/5 Cav landed on the east side of Los Negros. The Japanese did not anticipate a landing there, and most of their forces were concentrated to defend the beaches of Seeadler Harbor. The landing proceeded on schedule, and by noon the entire 2/5 Cav was ashore and had established a small defensive perimeter around an airfield. MacArthur arrived in the area sometime after 3 p.m., where he inspected the perimeter, presented awards, and expressed satisfaction with the operation's progress. Before leaving, he told Chase, "Hold what you have taken, no matter against what odds."

During the first 24 hours, the Army had no communications back to headquarters other than through Navy ships. The Sixth Army signal officer, Col. Harry Reichelderfer, had planned for several large, truck mounted, long-range SCR-399s, along with personnel, to land with task force. But during later planning sessions attended by Reichelderfer's deputy, Krueger, decided the SCR-399s took up too much shipping space and ordered them left behind. As soon as he learned the SCR-399s were not on the beach with the 2/5 Cav, Reichelderfer made arrangements for them to be loaded onto two LSTs and sent to Los Negros, however they did not reach the area until the next morning.

After MacArthur's departure, the cavalrymen prepared for a Japanese counterattack. Chase ordered his men to dig in, but they soon discovered digging into coral required picks and shovels to make any progress. Meanwhile, the Japanese commander had issued an order stating, "Tonight, the battalion under Captain Baba will annihilate the enemy who have landed. Be resolute to sacrifice your life for the Emperor, and commit suicide in case capture is imminent." The attack on the 2/5 Cav defensive perimeter began after dark, and the Japanese attempted to infiltrate small groups of Soldiers through the American lines. Even though the troopers poured withering fire into the enemy line that killed scores of Japanese, the enemy pressed his attacks throughout the night. Although the integrity of the defensive position was maintained, some Japanese were able to crawl between the American positions and penetrate the perimeter.



Soldiers of 7th ID using an SCR-300 walkie-talkie at Kwajalein Island in 1944. (Illustration from the Signal Historical Collection)

The Japanese attack ended at dawn on March 1, but it was renewed that afternoon. A 15-man unit commanded by Capt. Masao Baba, which had infiltrated the perimeter the previous night, executed a suicide attack on the 2/5 Cav. command post. Alert staff officers defended the CP, and any enemy survivors committed suicide. The same day, Capt. Joseph Tuck, communications officer of the 1st Brigade Headquarters, was laying wire for the CP when he was caught by fire from an enemy bunker. He saw a wounded signal combat photographer in front of the bunker, and as he dragged him to safety, Tuck received a severe wound. When the enemy threw a grenade to finish him off, Tuck caught the grenade and tossed it back into the bunker, which destroyed the enemy position.

On March 2, the entire 5th Cavalry Regiment was ashore along with supporting elements. While on reconnaissance, Pvt. Leo W. Zoeller and Master Sgt. David P. Garvin of Charlie Company, 583rd Signal Battalion, encountered grenade and machine gun fire from an enemy bunker. Garvin kept the enemy pinned down with fire while Zoeller obtained some grenades and threw them into the bunker entrance, killing four of the enemy. Garvin then killed the remaining men in the position and captured valuable documents and equipment.

By March 4, the worst of the fighting was over, and having defeated a numerically superior enemy, the men of 5th Cavalry had secured a solid foothold on Los Negros. This was an example where the initial lack of communications equipment, though important, was the result of a commander concerned with transportation limitations. It is ultimately the commander's call, but the signal officers must ensure he or she understands the risk of not having a capability at the initial stages of conflict.

These examples of Army amphibious operations provide just a glimpse into the variety of challenges encountered during early 1944. Experience gained from these instances of forced entry operations would be passed on as lessons learned for the many subsequent Army amphibious operations in the coming year.

During the remainder of 1944, the Army would demonstrate its expertise in this form of joint warfare, ranging from Normandy and the coast of southern France to the islands of Guam and Saipan, and the return to the Philippines at Leyte.

The Case for Taking the Hard Jobs

MI officer finds role a challenge, rewarding

Maj. Maribel Brown
U.S. Army Signal School

As I prepared to interview for my current position as the executive officer (XO) to the chief of signal, a friend of mine – a retired Army Ranger lieutenant colonel asked me about my career aspirations.

"If you aren't planning to make general officer, then it's stupid to take this job," the Ranger advised me.

Thinking back on our conversation from almost a year ago, I could not disagree with him more. While I do not harbor expectations of pinning a star, serving in this capacity has expanded my knowledge base, forced me out of my comfort zone, and helped me learn things about the Army I was clueless about despite having served for over 20 years.

As officers, we are encouraged, nay required, to seek out key developmental (KD) positions. As a military intelligence officer, working for the Signal Regiment is nowhere in the recommended positions. In fact, being the XO to the chief of intelligence would not be considered KD. This position is described as broadening, and that is exactly what it did for me. Doing this job has taught me that the makings of a good officer are career field agnostic. Whether infantry, cyber, or medical, there are certain attributes that translate across occupations, and that there was much to be learned from my brothers and sisters in the Signal Corps.

A year ago, despite having jumped the radio on multiple airborne operations, I don't think I could tell you what SINCGARS actually stood for (Single Channel Ground and Airborne Radio System, for the record). Today, I am able to discuss the changing force structure of the Signal Corps with enough acronyms to fill a pot of alphabet soup. Besides the vernacular, I've learned to value the ability to communicate. I, like most Soldiers, take the ability to pick up a radio or log onto the network for granted, and I have been blown away by how much training and technical acumen goes into our signal Soldiers. I have learned about the Capability Development and Integration Directorates (CDID) and how they toil to modernize all aspects of our Army. I have learned about how decisions are made amongst Army senior leaders and how one must present information to ensure the message gets through at such high levels.

Besides the educational aspect of this position, I have also been impressed with the esprit de corps that is very much alive in the Signal Corps. As I glance around my workstation typing this article, I see more orange swag than I ever thought possible! Signal personnel are passionate about being part of this team, and that kind of spirit is a testament to the continued heritage of the regiment. Despite my own regimental affiliation, I was welcomed into the team with open arms.



Maj. Maribel Brown, bottom right, poses for a photo with the front office team. (Courtesy photo)

While I will leave this position with many fun memories, the title of this article refers to it as a hard job. And boy, is it! I had a particularly steep learning curve having no signal background, but in discussing with my predecessors, they agree that nothing quite prepares you for this job. It can be almost impossible to manage dozens of general officer-level engagements each week, deconflicting which three-star meeting your boss needs to go to and which he can afford to miss. It can be grueling getting up before 5 a.m. each day to have enough time to work out and take care of my family before taking my first meeting via Teams on the drive into the office. It can be thankless making oneself available to 5:15 a.m. and 10:30 p.m. text messages and phone calls on the weekend when I'm playing with my son. It can be humbling making many mistakes and having to own up to them, while asking more questions of subject matter experts and doing more research on simple concepts than I have ever before in my career.

In short, this job has challenged me to broaden my horizons. The end result of all these discomforts is that even if this job doesn't enhance my career according to the established regimen of jobs one must take, I believe it has made me a better officer overall.

No matter how long I do stay in the force, I am convinced it has improved me to the point where everyone I interact with for the remainder of my career benefits from my experience as the XO to the chief of signal. I take all those difficulties in the spirit of Charles Dickens: "I have been bent and broken, but – I hope – into a better shape."

One of the themes for this quarter is about the heritage of the Signal Corps. As an outsider, I see that the pursuit of constant improvement has been a tenant of the Corps all along, and I plan to take that with me to every job I have in the future.

Solving the Military Recruiting Crisis

Finding what resonates

1st Sgt. Wolfgang McLachlan
59th Signal Battalion

The various branches of the United States military have incorporated their respective individualized mottos into the very fabric of their organizational tapestry. The Army motto of "Be All You Can Be" is a call to those civilians within our populace who are searching to exchange their current life trajectory for one that fulfills an elemental need inside their spirit. It is an opportunity for our nation's men and women to seek out both personal and professional goals which have yet to be realized in their current daily lives.

Despite these unparalleled prospects, the U.S. military is facing a grave recruiting challenge across the various branches. Thus, we are faced with the question of what novel approaches can the military employ to solve the recruiting crisis? The author believes that the answer to this Gordian knot can be found in identifying and targeting three populations within our American society who each branch's respective motto, to include the Army's recently revived "Be All You Can Be' truly resonates with.

First, within today's American society, there is a distinct lack of rites of passages available to our nation's youth and young adults. The primal desire to seek out and encounter rites of passage is a common practice across various cultures and times throughout our species' history. To test oneself against external challenges where the outcome is uncertain, to prove oneself to one's peer group or tribe, to discover what we are capable of achieving – this is the very beating heart of our nation's youth's restless pursuit of meaning and self-discovery.

The military can offer these individuals endless opportunities to test themselves in an environment where everyone does not get a trophy just for showing up, to discover their limits, and to truly earn their place at the table among similarly assessed and hand-selected peers. Such insight into the innerworkings of this population offers our nation's military the philosophical framework to construct recruitment campaigns that directly speak to and call upon these men and women's unrealized instincts.

Second, there are those within our society who are growing up in economically disadvantaged environments who know firsthand the emotional, physiological, and physical scars that living in a poor and marginalized household cultivates.
From the inner cities to rural America, growing up in a poverty-stricken environment often generates a host of second and third tiered issues that have become so prevalent within these circumstances. For these individuals, the chance of joining an organization which offers them the means by which to elevate their current economic and social status is an incredibly appealing siren song. Service in the military offers these men and women, regardless of geographic location, race, culture, or familial structure, the opportunity to carve out a better life for themselves and their families. To an individual who has been raised knowing hunger, poverty, and social rejection due to meager financial means, service in the military offers them the economic and social mobility that seemed all but impossible otherwise.



1st Sgt. Wolfgang McLachlan, 59th Signal Battalion.

Third, there is also a population within our society to whom the dreams and goals of their youth have not been realized. These men and women are usually aged between their late 20s to early 40s, and despite the effort, time, and resources they have invested into their endeavors throughout these years, their personal and professional goals have still eluded them. As the years pass them by, they feel the weight of mounting disappointment and ponder what their future holds. What options remain for them to achieve personal and professional fulfillment?

In short, these men and women are longing for a way to hit the 'reset' button on their lives and start over in an environment that offers them more than a dead-end job, low pay, and an unfulfilling menial existence for the rest of their days. These often include college dropouts whose dream of higher education has slipped from their grasp, men and women who have grown up in traditionally disenfranchised and marginalized populations, and those hailing from broken homes. These men and women want to elevate themselves above their present circumstances

and earnestly desire to be given another chance to prove their qualities to themselves and to their families. Service in the military offers just such a "reset."

The key to future military recruitment success is to clearly message to members of these three key populations that what they are searching for can be found through service in the U.S. military. To facilitate this connection, we need only to look out across our formations, identify our service members who once belonged to these civilian populations, and tell their stories. In doing so, we will speak directly to our nation's population of potential recruits and send the message that personal and professional success is indeed achievable through military service regardless of the economic background they were born into, the color of their skin, whom they love, or by what name they call God.

In selectively focusing on providing a vehicle by which an individual can fulfill his or her personal and professional goals, as explored previously in this work, such stories will resonate with those civilians who would truly make excellent service members. In doing so, their actions will reverberate across each service member's respective sphere of influence and impact the next generation of our nation's youth in ways both powerful and liberating.

About the author

First Sgt. Wolfgang O. McLachlan is currently serving in the 59th Signal Battalion, supporting Department of Defense communication initiatives in the Arctic. Throughout his career, he has served as an Airborne infantryman with combat tours in Iraq and Afghanistan, an infantry One-Station Unit Training senior drill sergeant, and a Signaleer in the U.S. Army Space and Missile Defense Command. McLachlan is a Sergeant Audie Murphy Club member. He holds a bachelor's degree in human resource management, a master's in education (adult education and training), and a doctorate in educational leadership (higher education).

Maintaining the Heritage



In its original form, this drawing was created as a commemorative print using Pigma Micron fine liners and watercolor. (*Submitted and created by Maj. Matthew W. Small, Task Force Pegasus S6 OIC, 82nd Combat Aviation Brigade)*

How does the Army Retain Warrant Officers?

One CW5's vantage point

Chief Warrant Officer 5 Brandon Wilson
U.S. Army Signal School

In the past few years, warrant officer retention has become a key issue for the Army as it struggles to retain warrant officers in grades W3 and W4 across all branches. In fact, signal warrant officers (255A and 255S) are among the top 5 critical shortage military occupational specialties (out of 48 warrant officer MOSs) for U.S. Army Forces Command (FORSCOM). It is widely understood that these shortages significantly degrade Army readiness as warrant officer expertise is critical in enabling units to accomplish their mission.

So, how did the Army get here? The answer is both simple and nuanced. In short, warrant officers retired en masse – faster than the Army could develop their successors. Furthermore, our acquisition methods created a scenario that enabled Soldiers to retire before achieving senior warrant officer grades (W3-W5). Unsurprisingly, more than 90% of warrant officer losses are driven by retirement. In addition, approximately 58% of warrant officers in grade W3 retire at 21 years of active federal service (AFS). I suppose the remaining 40% either retire later than 21 years or remain in service and progress to grades W4 and W5. Nevertheless, neither of these facts is alarming as one should expect Soldiers to retire around 20 years AFS.

So, why is warrant officer retirement an issue for the Army? Does the Army expect warrant officers to serve beyond 20 years AFS? If so, what are some of the incentives to remain in service beyond 20 years, and how do those incentives compare to those gained post-retirement? This article does not address retention beyond 20 years AFS, except in the case of the officer retention bonus.

From my vantage point, the issue isn't that warrant officers retire at 20 years AFS. The problem is that warrant officers retire at 20 years AFS *before* obtaining the grade of W4, and in many cases, W3. For example, when warrant officers retire at W2, the Army can't develop them into W3s, W4s, or W5s, and subsequently employ their expertise. Moreover, if too many warrant officers retire in grades W3 and W4 before the Army has a chance to promote their successors, then manpower shortages emerge since the Army cannot develop a W3 overnight. It takes 7 years to develop technical warrant officers into grade W3 (eight years for aviators) and 12 years to develop W4s (14 years for aviators). Consequently, retirements in the scenario above can significantly impact manpower and degrade Army readiness.

In a perfect model, retirements shouldn't significantly degrade manpower since the Army has a natural attrition model based upon its authorized strength. As warrant officer grades increase, authorizations in those grades decrease; authorizations known as "personnel structure" are documented personnel capabilities units require and are authorized at echelon. For example, the

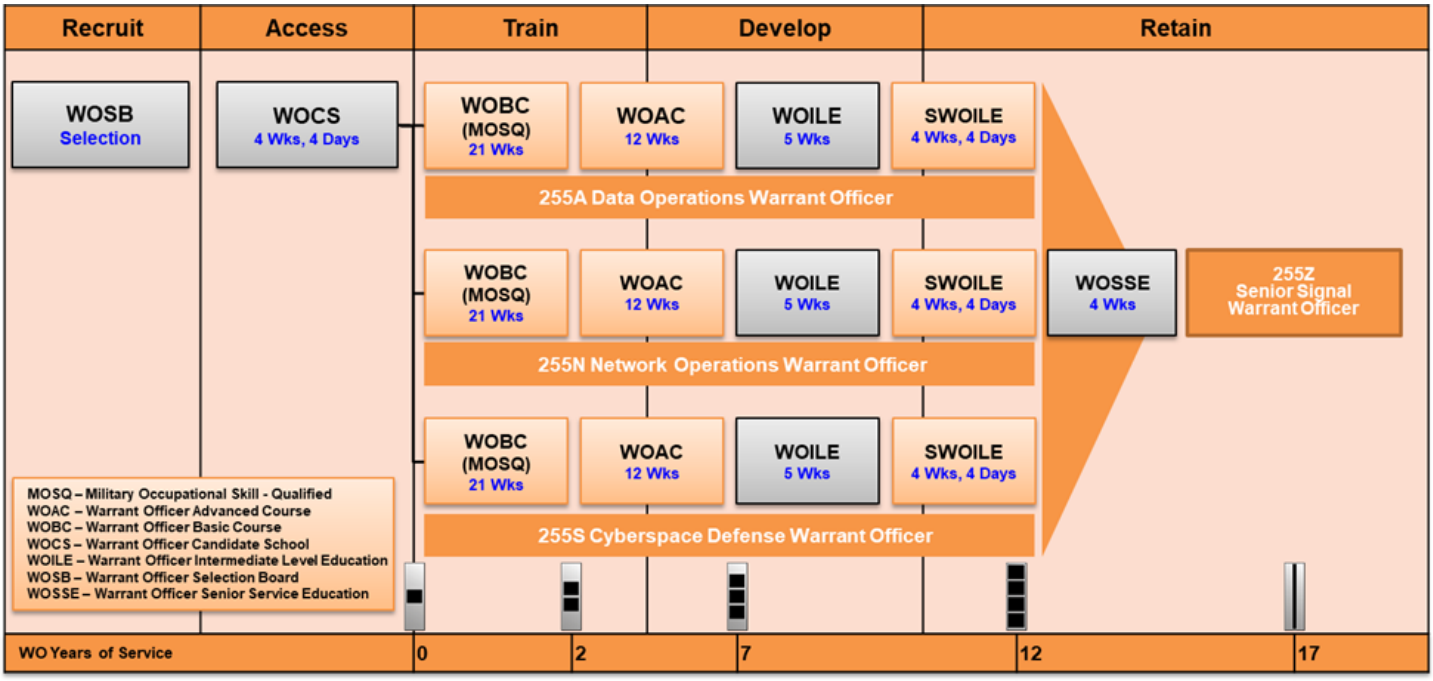


Figure 1 - Signal Warrant Officer Development Model

Army requires fewer W5s than W4s, and fewer W4s than W3s, and so on. As a result, when warrant officers in senior grades retire, the Army simply promotes their successors based on the number of authorizations in that grade. However, when the number of retirements is disproportionate to the Army's capacity to develop (i.e. promote) successors, issues arise.

The Army understands these manpower requirements, which is why it codifies a goal to acquire warrant officers with 8 years AFS or less. If the Army can acquire warrant officers in this manner, then it can sustainably develop these warrant officers from W1 to W4 prior to retirement, thereby providing units the capabilities they require. Otherwise, the Army assumes risk in permitting Soldiers with more than 8 years AFS to become warrant officers.

Today, a Soldier can apply to become a warrant officer without a waiver if they have less than 12 years AFS. At 12 years AFS and beyond, Soldiers must request an AFS waiver, which is formally adjudicated by Headquarters, Department of the Army, Deputy Chief of Staff (HQDA DCS) G1. In the past, HQDA DCS G1 approved these AFS waiver requests in large percentages, which increased the risk of warrant officers retiring before obtaining senior warrant officer grades. In recent years, the Army realized those risks as warrant officers retired en masse across several branches. In other words, the retention problems we face today were created nearly a decade ago (between 7-12 years).

Recognizing its own warrant officer retention woes, Signal Proponent launched a strategic campaign in Fiscal Year 2022 to significantly reduce AFS waiver approvals and simultaneously increase the acquisition of warrant officers with 8 years or less AFS in accordance with Army goals. Signal has steadily increased this trend by double-digits each year – a success story. However, the Army will not reap the benefits of this strategy until calendar year 2029, when warrant officers selected in calendar year 2022 reach the grade of W3, and in year 2034, when this same cohort competes for promotion to W4. In the interim, the Army has offered an officer retention bonus to retain warrant officers currently serving in senior grades.

Officer Retention Bonus

The officer retention bonus (ORB) is essentially designed to incentivize warrant officers in critically short MOSs in the grade of W3 with 20 years AFS to remain in service beyond 20 years AFS. I suppose this is to give the Army time to develop successors to meet our authorizations.

The Fiscal Year 2024 ORB offers $100,000 for 4 additional years AFS, $60,000 for 3 additional years AFS, and $30,000 for 2 additional years AFS. At the publishing of this article, 7% of signal warrant officers have asked and received the ORB.

In conclusion, the Army can sustainably develop and retain warrant officers in grades W1 – W4 if they acquire warrant officers with 8 years AFS or less.

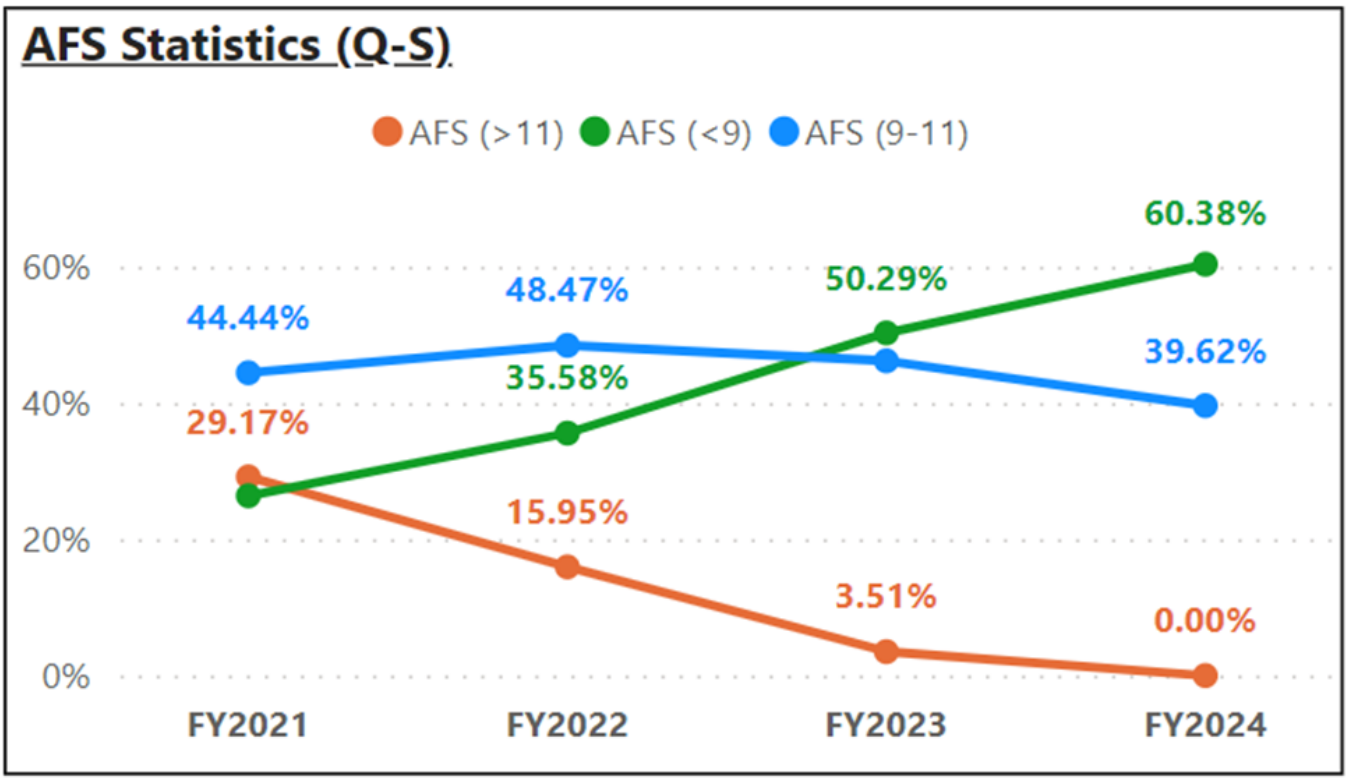


Figure 2 - Active Federal Service Statistics for Signal Warrant Officers

Signal Enlisted MOS Convergence Explained

Personnel structure

Article, graphics by Lamar Lauderdale
Office Chief of Signal, U.S. Army Signal School

Starting on Oct. 1, 2021, the Signal Regiment began implementing the most significant change in its enlisted personnel structure since the mid-1990s.

The Army Strategy's focus on readiness, modernization, and reforming the Army into a multi-domain operational force – as well as the shift to the Unified Network and other emerging technologies – created the need to foundationally change the way we train, employ, and professionally develop Signaleers. The U.S. Army Signal School developed a Signal Enlisted Military Occupational Specialty (MOS) Convergence strategy to develop adaptive, multi-disciplined signal Soldiers who can be utilized more efficiently to excel in our current and future operational environment. The last of the three-phase implementation will take effect on Oct. 1, 2025.

The Purpose

The previous Enlisted Career Management Field (CMF) 25 was not fully postured to enable mission command in the expeditionary, multi-domain, full spectrum, and large scale combat operational environment of Army 2030 and beyond. The previous model consisted of 17 MOSs which primarily focused on tasks associated with equipment sets. The Office Chief of Signal (OCoS) sought to restructure its enlisted MOS structure based on communication functions. OCoS leveraged input from several subject matter expert panels which determined the most relevant and most forward-thinking MOS structure.

Signal Enlisted MOS Convergence sought senior signal leader guidance throughout development. The overarching goal was to streamline the talent management process. The new signal enlisted structure needed to significantly reduce task redundancy between MOSs. For example, the old Warfighter Information Network – Tactical (WIN-T) personnel structure required multiple MOSs to perform on the same system. This caused readiness challenges and limited command flexibility to fill critical personnel gaps. It also foretold future challenges with equipment scalability. We could not transfer those inefficiencies to signal operations on the Unified Network.

The new CMF 25 structure also needed to eliminate the multiple "capper" MOSs that merged two or more MOSs into new MOSs at the senior NCO level, which created professional development gaps at the strategic leadership level. This level of MOS restructuring required analysis of other areas important to the health of an MOS such as grade structure, physical demands, and impact on recruiting. Ultimately, the MOSs had to realign more efficiently to support future network needs.

The Process and Challenges

The process to develop the optimal MOS structure involved a set of interconnected decisions involving doctrine, organization, training, personnel policy, and cost. The Signal School understood that all the actions required to complete Signal Enlisted MOS Convergence could not be executed all at once; incremental change would lessen the turbulence. Therefore, OCoS developed a multi-phase approach for execution across multiple years.

It was important to minimize the need for Soldiers to physically attend transition training at Fort Eisenhower, Georgia. Merged MOSs which had complimentary tasks and functions on the same signal communication systems, or with largely similar MOS duties, responsibilities, and assignments did not require transition training. The Signal School created virtual transition courses for 25S (satellite communication systems operator-maintainer) and 25V (visual information specialist) to keep Soldiers at home station. Additionally, the Advanced Leader Course and the Senior Leader Course doubled as transition training courses.

Restructuring signal MOSs involved developing new individual critical task lists that encompass the scope of the changes either by eliminating tasks, adding tasks, merging tasks with another MOS, or creating a new MOS individual critical task list. Subject matter expert panels were conducted in 2015 and 2017 to review combined critical tasks and notionally determine: which tasks remain relevant, which tasks are redundant or no longer relevant, or what tasks should be added or updated based on doctrinal changes.

The first phase of Signal Enlisted MOS Convergence, effective Oct. 1, 2021, reduced the CMF 25 enlisted structure from 17 MOSs down to 13. MOS 25M merged with MOS 25V to form the revised MOS 25V, which established a visual information service provider. MOS 25C and MOS 25U merged to form a singular tactical communications service provider with the revised MOS 25U *(*signal operations support specialist*)*. Phase 1 also combined MOS 25P, MOS 25S, and MOS 25T to provide a streamline satellite communications service provider with the revised MOS 25S (satellite communication systems operator-maintainer).

Effective Oct. 1, 2022, Phase 2 of Signal Enlisted MOS Convergence further reduced the enlisted CMF 25 structure from 13 MOSs to seven by combining

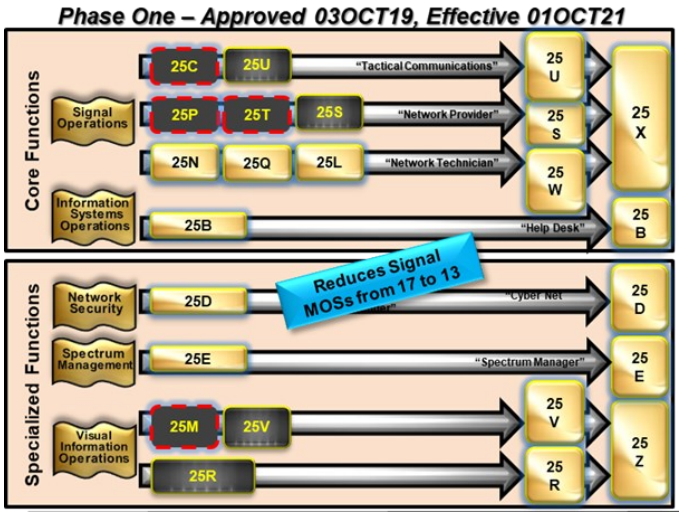
MOS 25N, MOS 25Q, MOS 25W and the wide area network (WAN) cabling functions of MOS 25L to create the new MOS 25H (network communication systems specialist), which established a singular WAN service provider. This action also combined MOS 25B and the local area network cabling functions of the deleted MOS 25L to create an enhanced information technology service provider.

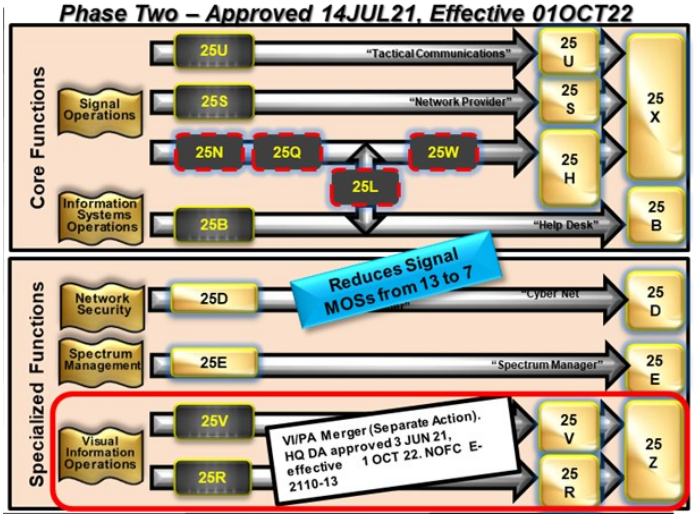
Skills and knowledges required to perform applicable communications cable and antenna systems maintainer (ASI J2) and installer (SQI I) duties were incorporated into Signal Foundation training (the Basic Communicator Module), MOS 25B, and MOS 25H training. In a separate Department of the Army directed action, visual information MOSs 25R, 25V, and 25Z transferred to the Army Public Affairs Center.

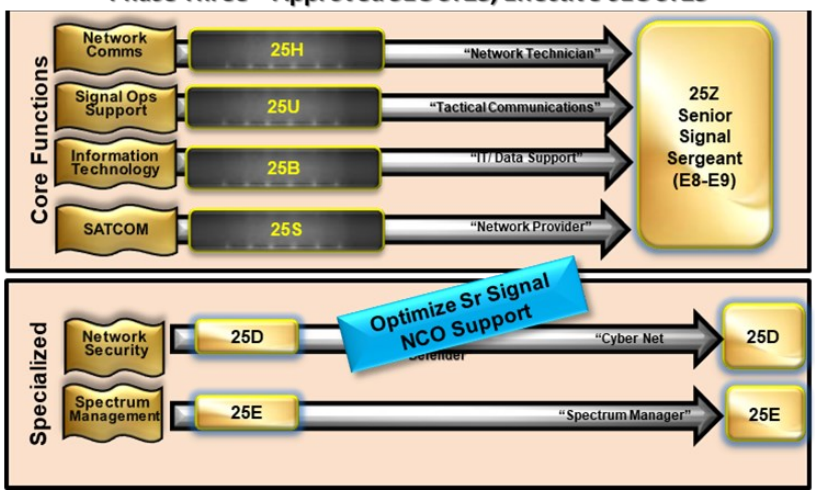
Phase 3 specifically focused on senior NCO development. Effective Oct. 1, 2025, MOSs 25B, 25H, 25S, and 25U will merge into the new MOS 25Z (senior signal sergeant) at master sergeant. This action enhances the senior NCO's ability to lead signal multi-MOS teams at the organizational and strategic levels and to manage staff elements within a multi-domain operational environment. The merger of signal's four accessions MOSs at master sergeant will increase operational readiness, expand multifunctional capabilities, and add diversity in assignments and leader development opportunities.

Phase 3 will also change the CMF 25 name from communication and information systems operations to signal. MOS 25S will change from satellite communication systems operator-maintainer to satellite communication systems specialist to align its naming convention with signal's three other accessions MOSs.

MOS development is an ongoing process. The transition period for Signal Enlisted MOS Convergence will take several years. Feedback through critical task site selection boards, operational Soldier employment, and leader engagements will allow the Signal School to fine-tune how these new MOSs are accessed and trained. As the Signal Regiment continues to transform, its personnel structure will continue to change as well to ensure continued success.



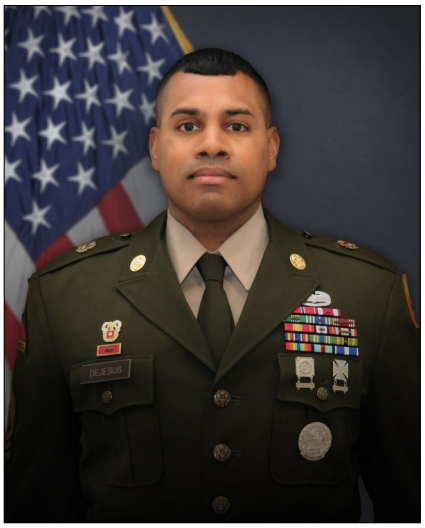




Modernizing Professional Military Education in the Digital Age

Enhanced learning

Master Sgt. Noel DeJesus
Sergeants Major Academy



Master Sgt. Noel DeJesus, Sergeants Major Academy

The Army is engaged in a complex and multifaceted struggle with technology. Fortunately, it is not in the way that many have predicted. Skynet is not here, and terminators are not roaming the streets hunting down the human race. Paradoxically, the United States Army's war with technology is far more perplexing, and it is adversely affecting the progress of professional military education (PME).

The Department of Defense (DoD) signed a 10-year, $7.6 billion contract with Microsoft in 2019 (GSA, 2019). However, the Army's learning environment has failed to keep pace with innovative and collaborative technologies. The purpose of this paper is to analyze how the Army can implement the ethical use of artificial intelligence (AI) to enhance the learning experience for Soldiers throughout their professional military education (PME), and subsequently attract, train, and retain Generation Z Soldiers.

A Call for Change

The digital revolution has arrived, and advancements in AI have ushered in a new era of technology that requires a transformational change in leadership development (DeJesus, 2023). As technology continues to evolve at an unprecedented pace, organizations that value innovation and adaptability will survive and thrive, and organizations that do not will cease to exist (Siebel, 2019). The current state of PME lacks the technological implementation necessary to attract, train, and retain Generation Z. While the DoD has provided Microsoft's cutting-edge software portfolio, many of the Army's physical and virtual classrooms are resistant to using anything except Microsoft Word and Microsoft PowerPoint – software that debuted in the 1980s.

Enhancing the Learning Environment

Microsoft recently released Copilot, an AI platform that leverages a large language model to serve the user as an everyday AI companion (Stallbaumer, 2024). Microsoft Copilot is now available on government computers, and Soldiers have direct access to AI on their Microsoft Edge home pages. By allowing the use of the full suite of Microsoft products within PME, the Army can provide a relevant and realistic learning experience to its Soldiers. Generative AI software like Microsoft Copilot can enhance the learning environment by encouraging critical and creative thinking while preparing students for the rapidly evolving technological dynamics of the real world (Abramson, 2023). The rapid adaption of emerging technologies is having a profound impact on the global environment.

The DoD has officially recognized that AI provides service members with a competitive advantage of speed, precision, adaptability, and efficiency, and they have implemented programs to leverage this technology (Clark, 2023). As AI continues to impact and shape the operating environment at an inconceivable pace, the Army cannot afford for its Soldiers to fall behind the technological curve.

Research Capabilities

The Army's PME system emphasizes reading and writing comprehension. While generative AI platforms like ChatGPT have become popular for their writing capabilities, AI is more than a tool for strictly writing papers (Abramson, 2023). AI software like Microsoft Copilot expands research capabilities, improves the brainstorming processes, delivers multiple sources of information, and exponentially surpasses the limitations of previous research methods (Maslach, 2023).

One of AI's key advantages is its ability to quickly analyze extensive data sets, identifying intricate patterns and correlations that may be challenging for human researchers to detect (Smith & Zhang, 2022). This ability is instrumental in fostering new insights and hypotheses, enriching the research process. Furthermore, AI contributes significantly to ensuring the accuracy of research by cross-referencing information across various sources

and identifying inconsistencies or errors (Maslach, 2023). This advancement represents a paradigm shift in the scope and efficiency of academic research and can significantly enhance the learning environment of the Army.

Redefining Academic Dishonesty

"Lead from the front" is a term that is often associated with the Army; however, the current academic policy displays a willingness and comfort in waiting for others to implement the change first. The University of Vanderbilt has recognized the value of AI, and they have implemented an academic policy that allows use of AI in the classroom (Villet, 2024). Furthermore, the University of Maryland Global Campus, which currently has 53,000 service members, veterans, and military spouses enrolled, has a policy on the ethical use of AI for its students (UMGC Library, n.d.).

The Paradox of Policies

For example, the Sergeants Major Academy (SMA) has partnered with Penn State University and Syracuse University to offer merit-based scholarships in adult learning and instructional design to sergeants major who are selected to serve as future instructors at the academy (NCO Worldwide, n.d.). The SMA does not allow use of AI in the learning environment (Department of the Army, 2023). Paradoxically, Penn State and Syracuse have academic policies that allow students to leverage AI during their coursework (Penn State University, n.d.; Syracuse University, n.d.). The Army can implement an academic integrity policy and syllabus language similar to those of Penn State and Syracuse to create instructional and institutional synergy.

A Measured Approach

The Army has a history steeped in tradition and bureaucracy. This is not a call to overhaul the entire PME system, however, change is necessary whenever a variable emerges with the global impact and speed of AI. By taking a measured approach, the Army can fully embrace the DoD's investment in Microsoft while positioning their students to remain relevant and informed with the latest technological advancements in AI.

The Ethical Application

The ethical application of AI is possible in the academic environment, and the Army must rewrite its policies on academic dishonesty to provide Soldiers with a world-class learning experience. In following the syllabus language and policies of Penn State and Syracuse , a rewriting of the academic integrity policy letters would allow students to use AI with several requirements that include proper acknowledgment and citation of any generated work, prior instructor approval of generative software and platforms, and attendance of an ethical use orientation (Penn State University, n.d.; Syracuse University, n.d.). The creation of a baseline standard for the ethical use of AI in the PME system is necessary if the Army wants to develop adapt and innovative leaders who are ready for the challenges of the operating environment of tomorrow.

Conclusion

This paper aimed to analyze how the Army can leverage AI to enhance the learning experience for thousands of Soldiers. AI is here to stay, and just as the personal computer revolutionized the writing process and digital catalogs enhanced libraries, software like to Microsoft Copilot should be viewed as a tool for progress. Rather than a lagging, restrictive, and rigid approach to adopting emerging technologies, the Army should lead from the front and allow the structured and responsible implementation of AI.

Learn More

A longer version of this article has been accepted to be featured in the Army University Learning Symposium, to be held June 11-14, at Fort Leavenworth, Kansas. Interested readers can attend the event virtually and participate in a live 30-minute Q&A session with the author. You can register for the event here.

References

Abramson, A. (2023, March 27). *How to Use ChatGPT as a Learning Tool*. Apa.org. https://www.apa.org/monitor/2023/06/chatgpt-learning-tool

Clark, J. (2023, November 12). *DOD releases AI Adoption Strategy*. U.S. Department of Defense. https://www.defense.gov/News/News-Stories/Article/Article/3578219/dod-releases-ai-adoption-strategy/

DeJesus, Noel (2023). *Artificial allies: The intersection of AI and human leadership.* Pocket Sized Leadership.

Department of the Army. (2023). SGM-A policy memorandum No. 17, academic integrity.

GSA and DOD Award Defense Enterprise Office Solutions Cloud Contract. GSA. *(2019, August 29)*. https://www.gsa.gov/about-us/newsroom/news-releases/gsa-and-dod-award-defense-enterprise-office-solutions-cloud-contract-08292019

Maslach, D. (2023, December 13). *Generative AI Can Supercharge Your Academic Research.* Harvard Business Publishing Education. https://hbsp.harvard.edu/inspiring-minds/generative-ai-can-supercharge-your-academic-research

NCO Worldwide. (n.d.). *SGM-A Fellowship program*. https://www.ncoworldwide.army.mil/Academics/SGM-A-Fellowship-Program/

Northrop, L., & Korpela, M. (2021). Artificial intelligence in academic research: Applications

Siebel, T. M. (2019). *Digital transformation: Survive and thrive in an era of mass extinction*. Rosetta Books.

Smith, J., & Zhang, L. (2022). Artificial intelligence in data-driven research: A new frontier in academic investigation. *Journal of Technology and Science Education*, 12(1), 15-29.

Stallbaumer, C. (2024, January 3). *Introducing Microsoft Copilot Studio and new features in Copilot for Microsoft 365*. Microsoft 365 Blog. https://www.microsoft.com/en-us/microsoft-365/blog/2023/11/15/introducing-microsoft-copilot-studio-and-new-features-in-copilot-for-microsoft-365

Syracuse University. (n.d.). *Syllabus recommendations, center for learning and student success.* https://class.syr.edu/academic-integrity/syllabus-recommendations/#ai

UMGC Library: Artificial intelligence: Home. Home - Artificial Intelligence - UMGC Library at University of Maryland Global Campus. (n.d.). https://libguides.umgc.edu/artificial-intelligence

Penn State University. *(n.d.). Syllabus statements. AI, pedagogy, and academic integrity.* https://aiai.psu.edu/sample-syllabus-statements

Villet, R. (2024, January 8). Vanderbilt extends leadership in generative AI. *Vanderbilt University*. https://news.vanderbilt.edu/2024/01/08/vanderbilt-extends-leadership-in-generative-ai

About the author

A native of the Bronx, New York, Master Sgt. Noel DeJesus is currently assigned as a student at the United States Army Sergeants Major Academy, Class 74. He is a proud member of the Signal Corps with previous assignments as a first sergeant at Fort Detrick, Maryland, and Joint Base Lewis McCord, Washington. DeJesus holds a Master of Arts in Administrative Leadership from the University of Oklahoma. He is married to Sophia DeJesus, and they have two children.

Building a Legal, Interoperable SFAB

Lessons learned, shared

Article, chart by Capt. Seth Revetta
U.S. Army National Training Center

The National Training Center (NTC) recently completed a first-in-a-generation event with 1st Armored Division (AD) executing a combat training center (CTC) rotation with a division as the primary tactical formation. This rotation had multiple enablers to stress command and control, fires capabilities including air defense artillery (ADA), multiple launch rocket systems (MLRS), and a force package from 4th Security Force Assistance Brigade (SFAB).

Each enabler brought their own unique challenges for 1st AD to work through while attempting to integrate them into a single fighting organization. The division fought through these challenges and identified problems that cannot be identified during a warfighter exercise due to the simulated nature; a division CTC in the dirt presents the ability to work through the human dimension not found in the sterility of a War Fighter. Many of these points of friction were directly tied to the interoperability of the Maneuver Battalion Advisor Team (MBAT) 430, of the 3rd Squadron, 4th SFAB.

The Situation

The current SFAB construct was designed during the Global War on Terrorism (GWOT) and has been attempting to develop their revised equipment list and mission set to support the shift to large scale combat operations (LSCO). MBAT 430 identified multiple points in which the SFAB could operate more effectively with both their coalition partner force and any U.S. division they may be operating adjacent to.

The SFAB is equipped with communication equipment originally intended to support advising packages in Afghanistan and Iraq are now being asked to partner with coalition partners that are, in some cases, already functioning at a peer level. Each SFAB will need to be fielded equipment that best supports their efforts in advising modern foreign partners throughout the competition and conflict spectrum. The organization is currently operating with equipment that is sufficient for competition operations where maneuver advisor teams (MATs) and maneuver company advisor teams (MCATs) are operating geographically separated from one another and other U.S. forces. As the SFABs prepare for the next fight, they will need to take a serious look at the communication training and validation that each advisor will perform, modernizing their communication equipment to be lighter and quicker; and how the communication equipment can integrate with the division-level network architecture. The SFABs state that the communication equipment is their primary weapon system, which is why it is critical for these lessons from the NTC be shared.

Training and Validation

The SFABs have communication equipment throughout every band of the spectrum from high frequency (HF) with the AN/PRC-160 manpack radio to satellite communications (SATCOM) with the Sky-WAN Carry-On User Terminal (SCOUT). Redundancy in communication will be critical for the SFABs as advisors are called to operate in LSCO with a partner force, especially since all peer competitors have jamming capabilities throughout multiple bands of the spectrum. All the communication platforms are critical but have the potential to be overwhelming to the single 25-series noncommissioned officer to simultaneously manage, working at the MATs and MCATs.

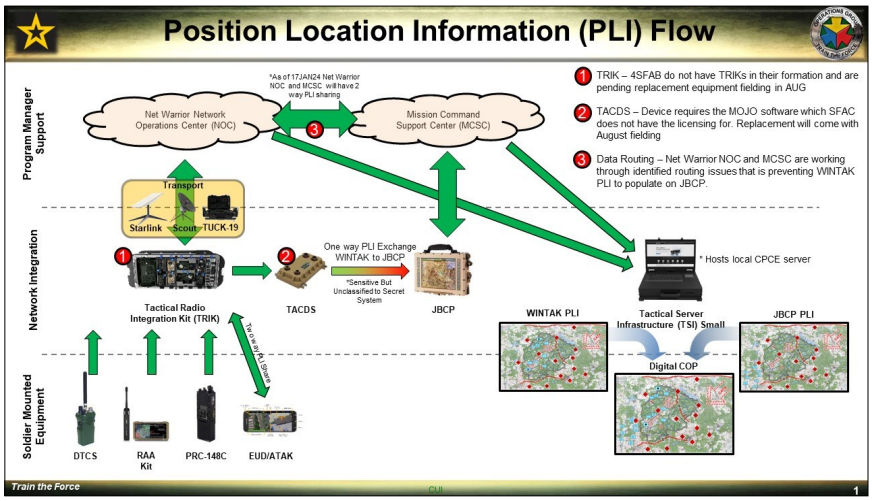
One observation from the recent 24-03 NTC rotation is the reliance on the communication representative, whether they were a 25-series or not, establishing all communication systems by themselves. This delays the MAT's, MCAT's, and MBAT's ability to fully establish and have all capabilities functional in the command post due to the immense number of systems that are required to be set up by one individual.

The best way to ensure rapid displacement and emplacement of the command post is to identify a primary, alternate, and contingency operator for each piece of equipment. Operators must train and qualify on each of their assigned communication equipment with a Go/No-Go checklist to determine proficiency. These checklists should be developed by communication system and modeled off the Training and Evaluation Outline (T&EO) model, as described in Field Manual (FM) 7-0: Training, to provide a clear validation of the operator. This will be a significant event since there are currently no T&EOs broken down for communication equipment. The return on this investment will make it worth the effort. Once each operator is validated in each piece of communication equipment, the MATs and MCATs can then begin the collective training of establishing and operating the command post.

Modernization

MBAT 430 identified equipment that either needed to be modernized or replaced to better facilitate their mission during LSCO. Two critical assets that were unable to be used due to a software licensing issue is the Tactical Radio Integration Kit (TRIK) and the associated equipment, the Tactical Cross Domain Solution (TACDS). These devices have the capability to publish a locally federated Position Location Information (PLI)

data from the SFAB Windows Tactical Assault Kit (WinTAK)/Android Team Awareness Kit (ATAK) to Joint Battle Command – Platform (JBC-P) to increase situational awareness across the battlefield. This integral tool to producing a singular digital common operating picture (COP) was not able to be used due to an expired software license in the TRIK. This capability will need to be updated or repaired to allow MATs, MCATs, or MBATs the ability to publish their end-user device (EUD) PLI to JBC-P without an upper tactical internet (TI) connection.



PLI flow chart describing some of the challenges outlined in the article.

Starshield was leveraged with great success by MBAT 430, however, it was only with the unit for testing and not officially fielded to the unit. The unit was able to establish their command post and support their coalition partners and 1st AD within 20 minutes when using Starshield. In contrast, the same crew of proficient operators would take over an hour to be able to pull services when using the SCOUT. The ability to quickly establish a link with a satellite with an untrained operator makes the Starshield a necessity for the SFAB due to the rapid tempo of LSCO and high bandwidth required to support multiple enclaves at once. This higher bandwidth requirement will be needed to support the WinTAK/ATAK network which runs on Sensitive but Unclassified-Encrypted (SBU-E), any services they are running in support of their partners on Mission Partner Environment (MPE), and any reporting or collection done over Secured Internet Protocol Router (SIPR) with higher and adjacent units.

The last point for modernization is to reduce the number of management laptops that are used to create plans for the different communication equipment. The SFAB must be lighter and faster. One easy solution is to have one single device that can run virtual machines for different planning tools. The most efficient way to do this would be to field the SFABs a Tactical Server Infrastructure (TSI) Small which has the capability of hosting multiple servers and running the virtual machines for the planning tools. This would also give the SFABs the ability to host their own Command Post Computing Environment (CPCE) server where they could produce and publish the green COP for units they are providing advise, support, laisse, assess (ASLA) support to.

Integration With Divisions and Above

One of the biggest lessons learned during the 1st AD rotation was the need to have all systems that produce a digital COP capable of communicating with one another. The SFABs are authorized WinTAK/ATAK across the formation, so it makes logical sense that would be where advisors could put their operational graphics. However, that system does not share those graphics with JBC-P or CPCE. WinTAK/ATAK is also not able to receive graphics from either JBC-P or CPCE. The solution for this rotation was for the SFAB liaison officer (LNO) team to populate updated graphics from one system to the other. The SFABs are not the only units that will deal with this integration problem since any Integrated Tactical Network (ITN) based organization will have similar issues with a primarily armored formation. There should be a consolidated effort to have PLI, graphics, and chat rooms that can be shared across WinTAK/ATAK, JBC-P, and CPCE.

The final lesson to take away from this historic rotation is just how far in advance the networks should begin to be configured and tested to work together. The MBATs network infrastructure was prepared for the exercise before arriving to the NTC, however, there were still configurations that needed to be worked through once all systems were online. The 1st AD had a similar result with their own internal equipment and network, which only delayed being able to integrate their enablers. The SFAB S6 can mitigate this friction point in the future by leaning forward and beginning network integration prep once an advisor package has been identified for support.

Conclusion

The SFAB has a unique challenge in balancing ASLA with partner forces during competition and supporting those same partners during conflict while informing adjacent units of their actions and capabilities. The lessons learned by MBAT 430 during NTC Rotation 24-03 are going to shape the future of the SFABs as they continue to develop their standard operating procedures around LSCO.

This amazing rotation set the foundation for the SFAB and how divisions will train as the unit of action for years to come. NTC will continue to execute training in the most realistic environment the Army has to offer and share the hard lessons learned in the dirt with the force to ensure the Army is ready to win the first battle of the next war.

Enabling Maneuver in Large Scale Combat Operations

Comms weaponry

Sgt. Maj. Shane Short
United States Army Sergeants Major Academy

Napolean Bonaparte's quote, "The secret to war lies in communications," is no less true today than it was when he said it. Napoleon also believed that to have good soldiers, a nation must always be at war. For most of us in uniform today, we seem to fit that belied too. So, by now, as signal Soldiers of an Army geographically dispersed to more countries than we have states, we should be absolute experts in our craft and how to employ communications to those we support. But I don't think we are there yet.

There are some fundamental lessons we need to relearn in providing communications – lessons such as the Indo-Pacific Command theater and European Command theater are two very different environments with different communication needs. The Army of World War II understood this and capitalized on amplitude modulation (AM) and high frequency (HF) radios to enable island-to-island communication in the Pacific theater. Knowledge like this comes from understanding your equipment, understanding who and what you're supporting, and training to do it. To unlock the secret of war through communications, during large scale combat operations, signal Soldiers must train, be experts at understanding all parts of an operations order, and know how to support the scheme of maneuver through intelligence preparation of the battlefield (IPB).

Current View

Our current doctrine on Signal Operations, Field Manual 6-02, is maneuver-anemic and speaks to enabling different types of operations, enabling different types of formations, and to some extent the core competencies. In the signal professional military education (PME) courses, we teach high technical fidelity to the enlisted, and capabilities and interoperability to the officers. At no point do we teach how to overlay capabilities, technical expertise, and interoperability with the scheme of maneuver or the enemy situational templat (SITTEMP), as determined through deliberate analysis or IPB. Being able to do those two things will be imperative to enabling command and control communications in a contested or congested areas of operation.

We do not teach emission control and concepts to improve survivability, but we do an excellent job at teaching how to apply data and transmission systems per "x number" of users. A signal captain knows that a Command Post Node (CPN) provides data and voice for a certain number of people but does not know how to employ it against adversary sensors.

Army Techniques Publication 6.02.70, Techniques for Spectrum Management Operations, acknowledges facing a contested environment. However, the publication does not have any prescriptive or descriptive techniques for overcoming it. No signal doctrine or training publications mention how to combat or prepare for a contested environment. Until the Army publishes the next Total Army Analysis and Army Structure Memorandum, and signal companies remain at the brigade combat team level, signal Soldiers will remain a low density specialty. This makes the conversation for training space a difficult conversation.

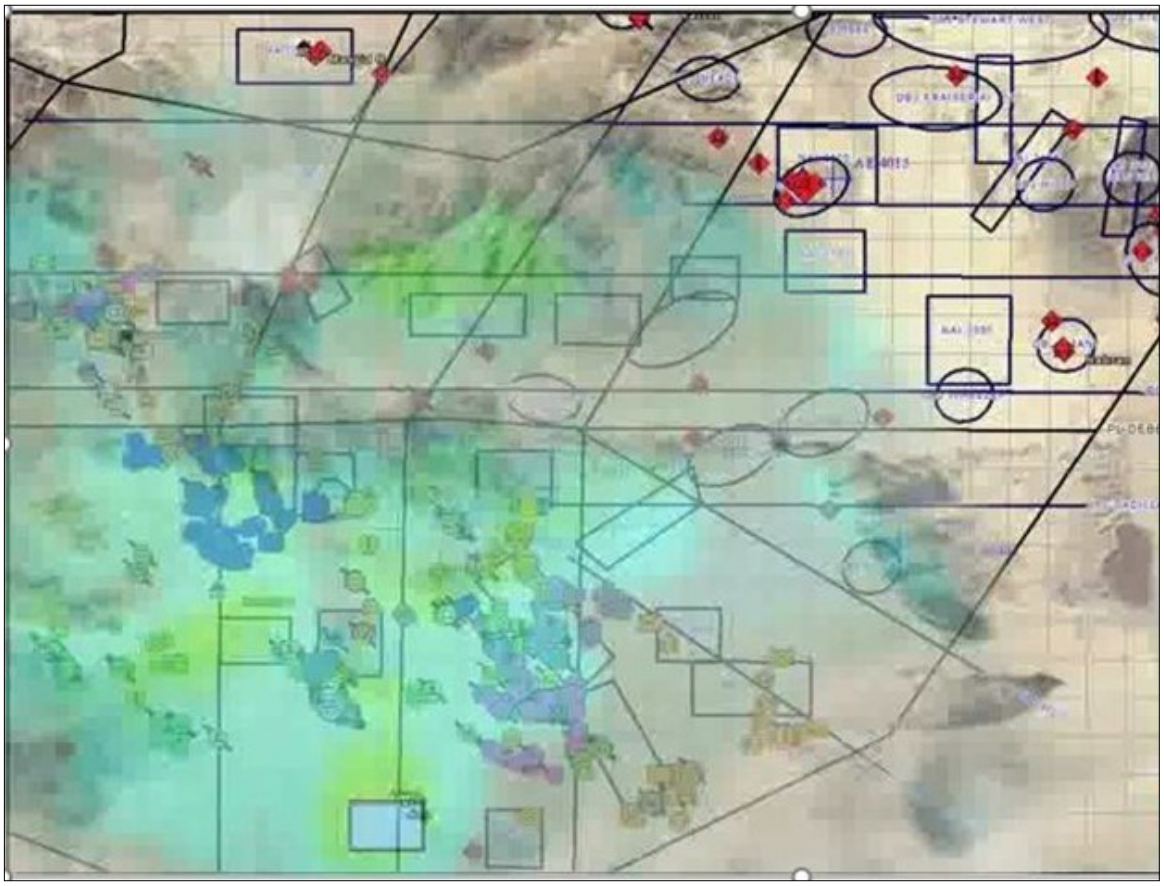
Signal leaders must be able to articulate to their supported maneuver command teams the need for training space. This needs to be a conversation of risk and survivability. The maneuver world is associated with risk and risk mitigation. The signal world is associated with capability.

Signal leaders must develop the skills and understanding of how properly employed capabilities will mitigate maneuver risk, and then articulate that risk to the commander with a followed discussion of training required to accomplish that level of enabling.

Evidence to the Case

Combat training centers (CTC) are often viewed as the Super Bowl for a unit and provide the guiding metric for the commander and staff evaluations. More and more, during the after action review, the opposition forces at CTC are showing units how signal emissions led to catastrophic lethal effects. This happens at the National Training Center and Joint Readiness Training Center.

Blackhorse and Geronimo will use sensor data to find, fix, and finish rotational unit elements. However, units do not receive a grade on how often the signal officer got Soldiers killed through lack of emission control. Or, in rare instances, units also do not receive a grade on how they leveraged the Spectrum Manager and Cyber Electromagnetic Activities (CEMA) Cell for survivability. Units are graded on other categories, and this goes largely unnoticed. Outside of training, we see lack of emission control exacting a heavy toll on forces.



Sensor data from a 2020 rotational unit at the National Training Center. Signal emissions are clearly observable by opposing force sensors.

In 2020, the world watched the renewed Nagorno-Karabakh conflict between the two caucus countries of Armenia and Azerbaijan. Lessons learned in the aftermath of that conflict demonstrated the Azeri use of electronic warfare (EW) sensors on drones to enable over the horizon artillery reconnaissance. The EW sensors detected radio emissions from Armenian soldiers, allowing Azeri artillery to fire on their position in minutes. In many instances, the Armenian units did not have time to displace before artillery arrived. A quick google search for "Ukraine War and Electronic Warfare" will deliver hundreds of articles on how Ukrainian and Russian armies are using EW sensors to find, fix, and finish command and control nodes. This is forcing both sides to become smarter on how they conduct signal operations within the proximity of rolling sensors and ariel sensors. As the use of the sensors evolves, so does the method of communication.

Closing the Gap

Closing this gap is easier said than done. That is the case with many things in the Army. Some of this will require a shift in culture. Closing any gap will start with a Functional Needs Analysis. Are maneuver commanders getting what they need from signal enablers? Without going down the entire road of Functional Solutions Analysis and DOTMLPF-P, which will need to occur at some point, we can simply focus on the L: Leader development.

Leader development is where the Signal Corps can begin to address this gap. Signal leaders need to exist beyond their comfort zones of the S6 and move into areas where other staff sections are discussing maneuver. This will require Signal leaders to move beyond the basic understanding of maneuver doctrine to analyze how signal capability will create better maneuver through reliant communications in contested areas. Afterall, don't we want leaders with high access to Blooms taxonomy, addressing interesting problems in complex environments? Since we do not teach this in doctrine or PME, signal leaders will have to seek this self-development. This can come in the form of self-study and digging into doctrine to understand maneuver, RF propagation, and adversary capability. Leadership development can also come in the form of signal leaders having the candid conversation with the operations officer and commander on what true maneuver enabling looks like in a contested environment and how to overcome it.

Understanding that using the electromagnetic spectrum (EMS) to enable command and control is still a form of maneuver. Signal leaders will need to understand how terrain can be your friend to makes your EMS signature, or terrain can be an obstacle to your enabling. Signal leaders need to know how they look in the EMS when they use certain assemblages, just as a tank commander knows what his silhouette

looks like in an urban environment. Signal is not a maneuver career management field, but we must understand that signal operations are maneuver signatures in the EMS. Signal leaders will require training time to finely hone techniques for EMS maneuvering.

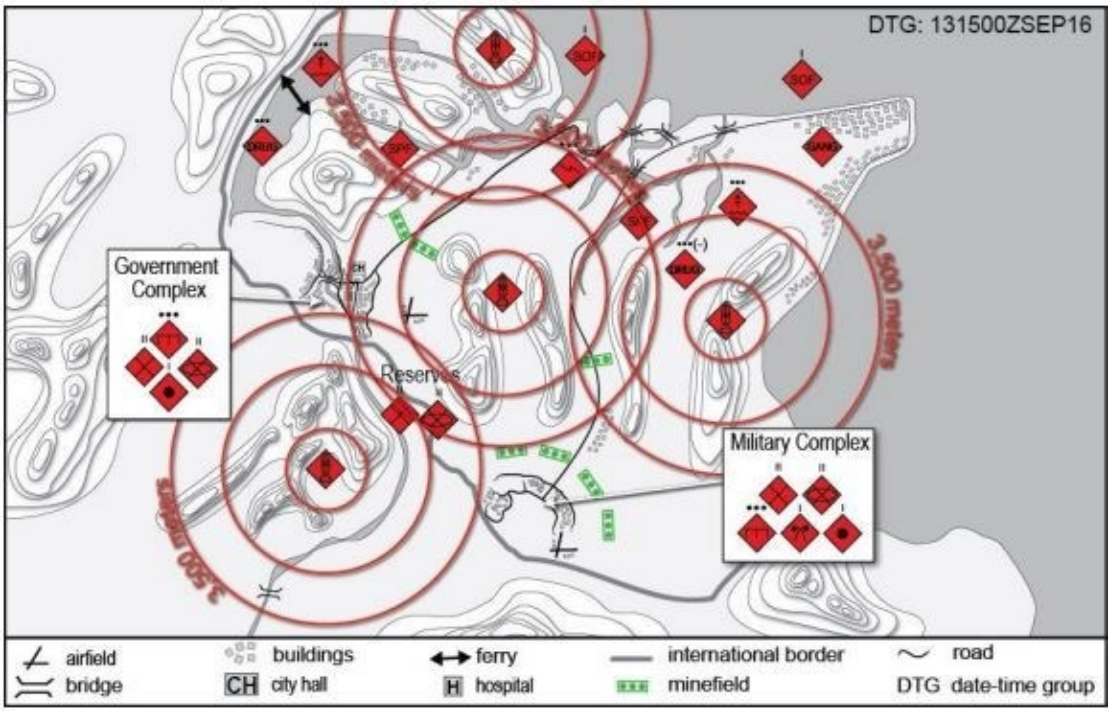
Signal leaders will need to articulate to commanders the need for training space so signal Soldiers can practice or develop techniques for signal operations in a contested environment. Developing a signal force capable of enabling maneuver through low probability of detection (LPD) almost makes the signal force a force multiplier. Electronic contact is one of the 11 forms of contact in doctrine. LPD is just as it sounds and prevents electronic contact by sensors. In the Ukrainian War, Ukrainian and Russian elements are using LPD methods to prevent electronic detection until the last possible moment – the "don't shoot until you see the whites of their eyes" metaphor, but in the electromagnetic spectrum. This allows a certain freedom of movement; it also restricts the amount of data passed. Fighters developed some of these methods through hard-won trial and error; they developed other techniques through training and leader development.

Directional antennas, only transmitting during certain time windows, and rotating your communications plan daily are all very easy ways to remain LPD. The Cold War Army had many emission control and LPD techniques. Signal field craft from the Cold War era is a good place to start with training, coming back around to proper camouflaging of systems, developing signal operating instructions, and using VHF radio etiquette. Understanding how to use HF Radios with directional antennas will allow low probability of detection for Fires. Knowing how to use the military crest and correct antenna height on re-transmission stations will aid in masking from adversary sensors. Using high bandwidth assemblages with directional antennas for upper tier communications, such as the high capacity line of sight, will reduce detection. These methods are almost completely foreign to leaders born into the digital generations or leaders developed during the Global War on Terrorism. These practices are not restrictive either. Out-of-the-box analysis and evolving techniques will help enhance survivability against evolving sensors.

Communication is the Secret

Communication will always be the secret to war. Subordinate units can only fight the plan and seize the initiative for so long before they need further command and control guidance. It is simply the history of warfare. But, as wars in the 21st century progress, the army with the best communicators, that understand adversary sensors and doctrine, will be the army with an asymmetric advantage.

Everyone must be an expert in their portion of the profession of arms. Leaders and Soldiers must know how they fit into the puzzle and also know how their piece directly affects all of the other pieces. That will give the Army a decisive and asymmetric advantage. For the Army to have that advantage, our signal leaders must train, change their culture, understand enemy SITTEMP, and enable maneuver with a low probability of detection. This begins with addressing the knowledge gap in leader development.



Enemy Situation Template example from ATP 2-01.3 Intelligence Preparation of the Battlefield, March 2019.

Forging the Path for Future Army Leaders

Talent based branching

Capt. Thomas H. Lee
Office Chief of Signal, U.S. Army Signal School

Beginning with Fiscal Year 2021, the U.S. Army implemented a new system to branch cadets from the countless Reserve Officers' Training Corps (ROTC) programs across the nation.

This new system, called Talent Based Branching (TBB), aims to align newly commissioned officers with one of the 17 different branches that best suit their skills and aspirations,
representing a significant evolution in how the Army identifies and cultivates its leadership talents.

This article will explore how TBB serves not only a strategic move for the Army but a transformative one, while highlighting the advantages for the cadets and the Army, specifically its impact on the Signal Corps.

Understanding the TBB Mechanics

The TBB system unfolds over a four-year trajectory, commencing with the Talent Assessment Battery (TAB). This comprehensive tool evaluates a cadet's cognitive and non-cognitive capabilities relative to their peers. This holistic assessment not only identifies individuals' strengths and areas of development, but also helps in discerning compatibility with various branches. It ultimately serves as a compass, guiding cadets towards branches with talent priorities that align with the cadet's unique talents.

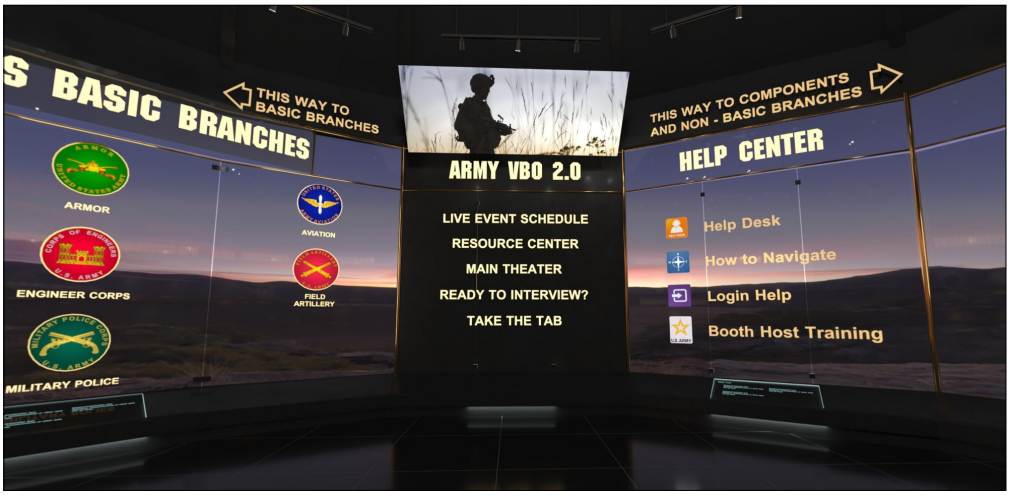
Following the TAB assessment, cadets gain access to the Virtual Branching website (VBO 2.0). This interactive platform serves as a gateway to the different branches, segmenting them into individual virtual presentation booths. Here, cadets can explore the different informative materials and watch recorded videos that highlight the capabilities of the corresponding branch. Cadets immerse themselves in understanding the requirements, expectations, and opportunities within the diverse branches.

The culminating stage of the TBB process for the cadets is the interview process, facilitated by the HireVue platform. Through structured evaluations and tasks, HireVue allows cadets to engage directly with their desired branches and to demonstrate their suitability and potential. From multiple-choice assessments to thoughtful essays and compelling video recordings, cadets showcase their readiness to become commissioned officers in their chosen path within the Army.

Benefits to Cadets and the Army

The TBB system signifies a paradigm shift in officer placement as it showcases multifaceted advantages:

1. **Enhanced officer satisfaction and retention.**
   The system empowers cadets to select branches based on their talents and passions, which fosters higher satisfaction levels and reduces attrition rates. Similarly, branches benefit from having officers who are genuinely invested in their roles, which leads to improved morale and cohesion within units.
2. **Elevated performance and readiness.**
   By aligning officers with roles that complement their strengths, the TBB system amplifies overall performance and readiness. Officers are better equipped to excel within their designated branches, while branches leverage the diverse talents of their officers to accomplish missions effectively and efficiently.
3. **Fostering diversity and innovation.**
   It encourages cadets to explore diverse branches, cultivating a more inclusive and innovative Army culture. The combination of fresh perspectives and talents stimulates creativity and problem-solving, enhancing the Army's adaptability and resilience in dynamic operational environments.



VBO 2.0 Introduction page - the first thing cadets see when they log into their VBO account. This interactive page allows cadets to explore the capabilities of each branch posted on the site. (Screenshot)



Capt. Thomas H. Lee, left, U.S. Army Signal School, engages with Texas A&M University cadets during their Branch Day to give insight on career opportunities, training, and development within the Signal Corp Branch. (Courtesy photo)

Navigating Talent

In the realm of TBB, the Signal Corps career program manager's role within the Office Chief of Signal is paramount, overseeing the seamless integration of cadets into the Signal Corps. Collaborating closely with the Signal Corps Proponent, they tailor the TBB process to align with the branch's strategic goals and operational requirements.

Responsible for setting talent priorities and criteria, the career program manager facilitates cadets through virtual and in-person branch orientation engagements, mentorship opportunities, and interview preparations. Their expertise in evaluating cadets' suitability and potential ensures the recruitment of quality leaders for the Signal Corps' mission success. In essence, the career program manager assist the future leaders in navigating the talent landscape, steering the most preferred cadets towards a future of excellence within the Signal Corps.

Impact on the Signal Corps

Within this framework, the Signal Corps benefits significantly from the TBB system:

1. **Specialized skill alignment.**

The Signal Corps relies heavily on technical expertise and proficiency in communication systems. Through the TBB system, cadets with aptitudes in areas such as information technology, networking, and cybersecurity can be identified and channeled into roles within the Signal Corps that capitalize on these specialized skills. This ensures a more precise match between officer talents and branch needs, enhancing operational effectiveness.

2. **Nurturing technological innovation.**

As technology continues to evolve, the Signal Corps plays a pivotal role in adapting and implementing cutting-edge communication technologies. By attracting cadets with a passion for innovation and technology through the TBB system, the Signal Corps can cultivate an organization of officers who are not only proficient in current systems but also adept at driving technological advancements within the branch.

3. **Strengthening community engagement.**

The TBB system facilitates a more interactive and transparent process, fostering stronger connections between cadets and the Signal Corps community. Through mentorship opportunities, informational sessions, and branch-specific engagements, cadets gain deeper insights into the unique challenges and opportunities within the Signal Corps, fostering a sense of belonging and commitment among future officers.

Review

The Army's Talent Based Branching system represents a pivotal advancement in officer placement. It caters to the diverse talents and aspirations of cadets while meeting the evolving needs of various branches, including the Signal Corps. By aligning individual strengths with organizational requirements, the TBB not only enhances officer satisfaction, performance, and diversity but also fortifies branches like the Signal Corps with the specialized skills and an innovative mindset necessary for success in an ever-changing landscape. As the Army continues to adapt and modernize, the TBB system stands as a testament to its commitment to excellence in talent management and operational readiness.

Sources

U.S. Army Cadet Command. *https://armyrotc.army.mil/wp-content/uploads/2023/02/Talent-Based-Branching-Handbook.pdf*

Army's new Talent Based Branching places the right leader in the right career. *https://www.army.mil/article/250949/armys_new_talent_based_branching_places_the_right_leader_in_the_right_career*

New innovations improve branching process for cadets, branches. *https://www.army.mil/article/239587/new_innovations_improve_branching_process_for_cadets_branches*

Signal Corps Direct Commission Program

Talent management

Maj. Alisha Garcia
Office Chief of Signal, U.S. Army Signal School

Historically, direct commissioning has been available to qualified professionals in the medical, dental, legal, and religious fields, but new authorities outlined in the 2019 National Defense Authorization Act allow direct commissioning for all services up to the grade of O-6. Since then, the Army Talent Management Task Force has been working with the Combined Arms Center and others to identify technical and occupational skill gaps across all career fields, and the Army published a directive guiding the direct commission process for branch proponents.

Army Directive 2019-27 makes direct commissioning available to the Signal Corps, specifically for Functional Area (FA) 26 areas of concentration 26A/ network systems engineers and FA26B/data systems engineers. The Signal Direct Commission Program accepts civilians, enlisted, and warrant officers with relevant experience and education to be directly appointed as commissioned officers in the Regular Army (RA), Army National Guard (ARNG), and United States Army Reserves (USAR) to perform critical roles for the Army.

The main intent of the Signal Direct Commission Program is to offer an alternate commissioning source for exceptionally qualified individuals. The program does not replace or adversely affect Officer Candidate School or other commissioning programs.

Ideal candidates have professional experience and skills in innovating, developing, or reverse engineering data and network systems-related capabilities and technologies, especially with experience in 5G network engineering, artificial intelligence, cloud computing, cloud security, data engineering, data storage, machine learning, network engineering, software defined networking, zero trust architecture, software development, or other highly specialized IT-related career fields.

Minimum Qualifications

1. Must be a U.S. citizen.
2. A four-year degree; STEM degree is preferred.
3. Ability to obtain and maintain a Top Secret security clearance.
4. Four years of work experience in networking or information technology post Baccalaureate degree or two years of experience after an advanced degree.
5. Prior service candidates must have an honorable discharge.
6. Pass the Army medical screening and meet basic fitness standards.
7. Regular Army applicants must be able to complete 10 years of active commissioned service by the date they have completed 20 years of active federal service (AFS). Waivers are available for candidates with experience in specific technologies.
8. All waivers must be adjudicated before a board interview will be scheduled.

Selected candidates help build and establish the future of the Army's network capabilities and technologies as an officer. Rank varies from captain to colonel and is dependent on relevant education and work experience. There is no age limit for RA applicants. ARNG and USAR have age requirements based on assessed rank, but waivers are available for highly qualified applicants.

The Process

The Signal direct commission process includes several steps. First, the Office Chief of Signal - Officer Division (OCoS-OD) screens packets for accuracy and minimum qualifications. Using the experience outlined in a candidate's resume and transcripts, OCoS-OD determines assessed rank and begins processing any required waivers. Once initial screening is passed, a selection board consisting of at least five field grade officers conducts virtual interviews with qualified candidates. There are currently two boards conducted each year in May and November.

Once the selection board's results are approved by the Directorate of Military Personnel Management, candidates begin the onboarding and scrolling process. This includes a medical examination at the nearest Military Entrance Processing Station and a complete background investigation and security clearance initiation if the candidate does not already have one.

After a candidate's scroll is approved, OCoS-OD works with Human Resources Command (HRC) to complete appointment and assignment orders. OCoS-OD also ensures candidates are enrolled in appropriate military training prior to reporting to their first unit.

The process is lengthy, taking anywhere from 12-24 months from application submission to taking the Officer Oath of Office. Some aspects that can take more time are medical screenings, waiver processing, security clearance adjudication, and availability of

required training courses. There is no limit to the number of times a candidate can apply to the program. Selected applicants should plan to attend the Army's six-week Direct Commission Course at Fort Moore, Georgia, and the Signal Captain's Career Course and Functional Area 26 Course at Fort Eisenhower, Georgia.

From applicant screening, board interviews, onboarding and assignment, OCoS-OD tracks candidates from initial inquiry through commissioning and initial professional military education requirements. To date, the Signal Corps has directly commissioned three officers into the RA and USAR, with over 40 additional applicants being considered in various stages of the process. By leveraging the diverse background and expertise of signal direct commission applicants, the Army will continue to maintain readiness and adaptability within an increasingly complex and data-driven landscape.

For more information, please contact OCoS-OD at usarmyfteisenhowersignalschllistOCOS-OD@army.mil.



Capt. Derrick Kozlowski, left, U.S. Army Signal School, made history on Nov. 16, 2023, by becoming the first Signal Corps candidate to receive a direct commission through the Army's Direct Commission Program. In March 2021, the Signal Corps became the third branch to execute the program, following the Cyber Corps and Military Intelligence Corps. (Photo by Laura Levering, U.S. Army Signal School)

Activating the Army's Newest Signal Brigade

From Europe to the Pacific

Maj. Nicholas Christensen
22nd Corps Signal Brigade

On Nov. 22, 2021, while our nation was steeped in a fight with COVID-19 and our military was dealing with the effects of the nation's withdrawal from a decades-long war in Afghanistan, a significant change came to Joint Base Lewis-McChord (JBLM), Washington, and the Pacific theater.

In a small gym, with Soldiers donning face masks and few in attendance due to COVID-19 restrictions, the Army's newest signal brigade, the 22nd Corps Signal Brigade (CSB), was activated. While this small ceremony made few headlines, it was significant to I Corps and the Army's pivot to the Pacific. On that day, I Corps not only gained a signal brigade, but received the 51st Expeditionary Signal Battalion (ESB), which was realigned from 35th Theater Tactical Signal Brigade under the XVIII Airborne Corps.

The brigade was originally constituted on Nov. 14, 1945, as Headquarters and Headquarters Company, 22nd Signal Service Group, and activated one month later in Germany, where it would go through multiple deactivations and subsequent reactivations over an 80-year period. It was most recently deactivated in Germany in 2007, as the country saw the closure of multiple Army units. The brigade's activation in November 2021 was not the first time it served under I Corps and not its first service in the Pacific theater.

The brigade's first service outside of Europe came during the Korean War from November of 1951 to May of 1955, where it received multiple campaign credits during the period while assigned to I Corps. With this most recent activation, the brigade would be the first unit to be re-designated as a corps signal brigade, where it was tasked with executing command and control of expeditionary signal assets supporting United States Army Forces Command (FORSCOM), United States Army Pacific (USARPAC), and I Corps that are capable of engineering, installing, operating, and maintaining their portion of the unified network with a focus once again on the Pacific theater.

While the brigade was officially activated on Nov. 16, 2021, the activation process on JBLM began in the previous spring with the unit receiving its first members in early summer. With only 37 Soldiers on activation day and a temporary facility inside I Corps' footprint to call home, the brigade began the process to not only physically establish itself on the installation but to build relationships across I Corps, FORSCOM, the Pacific region, and the signal community.

In the first 30 months, the brigade built a unit from scratch, establishing its headquarters infrastructure along with the standard operating procedures required to conduct the normal operations of any Army unit. In addition, the brigade participated in multiple Operation Pathways rehearsals, conducted engagements with leaders around the Pacific theater and the Army, converted the 51st ESB-E, and then planned and executed its deployment to Southwest Asia as the first ever full ESB-E to deploy. Throughout this process, the brigade faced challenges that required them to lean on the skills and talents of not just its few members, but of their adjacent units, their headquarters, and the signal community at large.

As with any task, the first thing that must be done is to decide what the desired end-state is, then build a plan to achieve it. While the end-state of the 22nd CSB was a fully operational headquarters able to execute its mission, the plan to build it from scratch wasn't something laid out in any doctrine or military publication. With much to do and no checklist to follow, the best option was to build one; but with many of the personnel who possessed specialty knowledge of their warfighting functions not arriving prior to activation, the brigade had to frequently look elsewhere for assistance. The staff utilized expertise from Corps' staff, Garrison, other units on JBLM, or other CSBs to establish the foundation for how they would operate. This led to the development of an activation checklist that broke down each staff function and the actions required to be undertaken through each phase of activation. With the establishment of this foundational document, it allowed the commander to track the unit through the activation process and reprioritize different actions as the unit grew and onboarded personnel with subject matter expertise.

With the lack of doctrine available to define the activation process, had the brigade not established it as a living document from the beginning, there would be no measurable way to establish the foundation and core functions required to operate any Army unit. Following the completion of activation, this document, along with the after-action report, will be provided to the Center for Army Lessons Learned so that future activating units will have a reference point from which to start their process.

After activating in November 2023, the brigade was eager to get engaged quickly and begin contributing to I Corps, JBLM, the Pacific, and the signal community. It quickly saw the need for a CSB and an ESB to support everything I Corps and its units were doing. With

multiple Operations Pathways rehearsals, local unit training exercises, and support for training center rotations and warfighters, the need was everywhere. The problem is that with only 37 personnel at activation (one quarter of those assigned to S1), the lack of manpower and skillset didn't allow it to organically execute all its activation tasks, severely limiting its ability to plan and execute communications support for these missions. During the early months, the brigade would have to work within its limitations and us the resources available to execute both.

With a fully operational subordinate battalion with a larger staff, the brigade was dependent on their assistance along with the I Corps G6 planners to assist in mission support planning, because it lacked the expertise of the region and available personnel. With assistance from the battalion and I Corps G6, the brigade successfully integrated itself and developed an understanding of how I Corps and USARPAC conduct mission planning while still being able to conduct the activation tasks. Initially, this placed additional pressure on the battalion to bear a more significant load by operating outside their normal planning procedure. But by the summer of 2022, the influx of personnel provided the brigade with the manpower and skillsets required to no longer need external assistance and to define their internal processes that nested with I Corps.

Early on, there is always a desire to contribute as part of the team, but working within the given limitations, in this case available manpower and talent, and seeking assistance from those best positioned to help understand the environment and the process allowed the brigade to learn and build their processes with an understanding of the system they operated in.

Before you can contribute to positive change in your environment, you must understand it. Albert Einstein is known for saying, "If I had an hour to solve a problem, I'd spend 55 minutes thinking about the problem and five minutes thinking about solutions."

With minimal understanding of the theater and the problem it faced, the brigade understood from its inception that it must quickly engage with every stakeholder and participate in as many engagements as possible to learn about the challenges it would be asked to help solve. Leadership from all levels of the brigade attended not just engagements within I Corps but expanded to events and activities across the Pacific theater and the Signal Regiment. Leaders from the brigade developed an understanding of the priorities of different commanders and key stakeholders that would affect the unit's operations as it continued to grow in its capabilities. Leadership attended the NETCOM Pacific Theater Synchronization Reviews to better understand the ongoing initiatives and needs affecting the strategic network in the Pacific. They participated in the FORSCOM G6/S6 Quarterly Forum and the biannual G6Summit to understand the communications challenges commanders faced at the operational level. They attend the AFCEA Indo-Pacific TechNet, where leaders and thinkers from across the joint force provide insight on the challenges and opportunities in the region. These and many more events provided an in-depth understanding of the challenges not only to communications but also to the customers the brigade would be tasked with supporting.

To better understand the local JBLM community and build relationships, individuals from the brigade integrated themselves into local associations that stewarded the profession, building connections with fellow Soldiers and civilians who shared unique experiences and ideas. Leadership from the brigade helped reinvigorate the AFCEA Pacific Northwest chapter, reactivated the Mt. Rainier Signal Corps Regimental Association chapter, and served in leadership roles in the Sergeants Major Association and the Sergeant Audie Murphy Club. Additionally, the brigade created a connection with the City of Puyallup and the Salt Lake City Recruiting Battalion, giving Soldiers the opportunity to engage with the communities those areas serve and share their Army experience. Engaging early and often at all these activities, events, and engagements over the first 30 months helped prepare the brigade for the final 5 minutes, where it would now be tasked with contributing to the solution.

With the pending deployment of 51st ESB-E to Southwest Asia, leaving the brigade without any subordinate battalion, their attention now shifts to preparing for the next transition in the history of the unit. In the summer of 2024, the brigade will see the departure of almost all original members, all in key staff positions, and the departure of the commander who oversaw the reactivation. In a profession hardwired for change, the brigade will fully shift its focus away from activation tasks and continue to refine the concept for how a CSB provides support to a corps headquarters in the Pacific. The brigade's concept of support for I Corps, which will be exercised as part of Warfighter 25-02, will provide feedback directly to the Signal Corps and the Army on the best employment of the CSB and its subordinate assets in the future.

As the Army continues its pivot towards the Pacific while transforming in contact, and deploying forces to support operations around the globe, the 22nd CSB is now ready to provide trained and ready Soldiers to support whenever and wherever they are called to. With the activation behind them, the Eagle Brigade looks forward to the next chapter in its storied history, this time, with its eyes on the Pacific.

A Storied Heritage of the 'Fighting 44th' ESB-E

'Getting the Message Through'

1st Lt. Junior Nkamanvang
44th Expeditionary Signal Battalion-Enhanced

The storied history of 44th Expeditionary Signal Battalion-Enhanced spans from World War II to present day, marked by key campaigns and the evolution of tactical signal support operations. Constituted on Feb. 3, 1944, as a heavy construction battalion, it saw service in the European theater of operations.

The battalion earned campaign credit for the Rhineland, Central, and Asiatic-Pacific theater campaigns before transitioning to the Pacific to support the final stages of the Pacific campaign and subsequently inactivated in 1946. The battalion was re-activated on Aug. 1, 1966, and designated as 44th Signal Battalion in support of operations in Southeast Asia. The 44th earned credit for 11 different Vietnam War campaigns. Following Vietnam, the battalion Inactivated again in 1972 and returned to service on March 16, 1981, in Germany, and again saw service overseas earning campaign credit for Operations Desert Shield and Desert Storm. In 1995, the battalion deployed throughout the Balkan region to support Operation Joint Endeavor.

The "Fighting 44th" deployed to U.S. Central Command five different time between 2003-2012 to support operations in Afghanistan and Iraq. Aside from the overseas operations, the battalion's rich history of enduring service in Germany traces a path through the cities of Mannheim, Schweinfurt, Grafenwhoer, and now Baumholder. The battalion's outstanding service continues today as the battalion serves as the lone theater committed tactical signal battalion supporting both U.S. European Command and U.S. Africa Command.

On Dec. 16, 2021, the 44th Expeditionary Signal Battalion officially redesignated as 44th Expeditionary Signal Battalion–Enhanced (ESB-E). This signified the transition to a more agile tactical signal battalion. The battalion completed ESB-E conversion in late February 2022 and immediately deployed forces in response to the Ukrainian Crisis.

In last nine months of 2022, the 44th executed more than 50 signal support missions throughout 11 different countries across the NATO alliance. The surge in operations created the opportunity for the 44th ESB-E to change the way the battalion fights, adapting to the reality of sustained signal support operations in addition to normal exercise and training support.

"2022 was a catalyst for questioning our definition of what it means to be 'expeditionary,'" said Staff Sgt. Anthony Alvarez, network operations NCO, Bravo Company, 44th ESB-E. "We were forced to revamp existing procedures to keep up with the dynamic and ever-evolving environment of a high operations tempo across the theater. Our leaders and Soldiers did an exceptional job increasing the short-order deployability of our unit's signal assets."

The demands of the new operational environment placed a premium on the 44th's ability to provide trained, certified, and ready signal support teams while still providing predictability to Soldiers and families. The 44th ESB-E adapted an operations and readiness training cycle which emphasized a progression of training utilizing the Signal Assessment Tables (SAT).

The battalion established a progression of training structure which places elements of each company in a focused mission cycle, training cycle, and reset cycle. Leveraging the SAT, the 44th ESB-E conducts a two-week Signal Range Density (SRD) exercise to certify units against short notice prepare to deploy mission requirements using a variety of mission scenarios.

The frequency and density of teams within each cycle is flexible based upon the projected operational demands of the battalion. Currently, the battalion conducts three SRD exercises a year, averaging 18 signal teams each iteration. This new training structure paid dividends, enabling the 44th to react to rapid-response mission requirements throughout 2022 and 2023, while maintaining readiness and predictability for the battalion.

The rich history and lineage of the 44th ESB-E spans generations of signalers, maintainers, and sustainers successfully evolving to deliver the network. The battalion has prevailed through the vast theaters of operations of World War II, thick jungles of Vietnam, and the mountainous, desolate Middle East. Amidst supporting a challenged NATO Alliance, operating in an unknown African environment, and responding to crisis in the USCENTCOM area of operation, the Fighting 44th continues to prepare for the next test.

No matter where or when called, history has proven the Soldiers of the Fighting 44th will always "Get the Message Through."



Distinguished Member of the Regiment Program

An honor since 1986

Steven J. Rauch
Signal Corps Branch Historian

The Signal Corps Regiment, activated on June 1, 1986, is a component of the U.S. Army Regimental System (USARS) designed "to provide each Soldier with continuous identification with a single regiment and to support that concept with a personnel system that would increase a Soldier's probability of serving recurring assignments with his or her regiment.

The USARS concept as set forth in Army Regulation 870-21 stipulates that all Soldiers, with certain exceptions, will be affiliated with a regiment of some type. Under the system, combat support and combat service support branches (Chemical, Military Intelligence, Military Police, Cyber, Signal, etc.) operate on a whole branch concept as a corps, but also assume the traditions of a regiment. Soldiers are automatically affiliated with their corps and regiment upon graduation from Initial Entry Training.

One hallmark of the USARS is to link the past with the present by using special awards and honors. One of those awards is the Distinguished Member of the Regiment (DMR) that recognizes individuals who have significantly contributed to the promotion of the Signal Corps Regiment in ways that stand out, usually spanning years and decades of service.

A DMR recipient must have demonstrated the highest standards of integrity and moral character, displayed an outstanding degree of professional competence, and served the U.S. Army Signal Corps with distinction. Once appointed, a DMR recipient has the duty to perpetuate the history and traditions of the Signal Corps Regiment, thereby enhancing unit morale and esprit. DMRs are expected to continue to serve by mentoring signal Soldiers, officers, and warrant officers such as serving as speakers at graduation ceremonies, promotions, leader development programs, and other Signal Corps Regimental functions.

For almost 40 years since 1986 to date, there have been only 171 individuals who have been awarded this rare and special honor. In some years, no nominees were offered for consideration.

One category of recipient has been former chief signal officers (or chiefs of Signal), of which there have been 42 in history, but only 12 have been awarded the honor of DMR. Other recipients include the five Medal of Honor awardees: Pvt. Morgan D. Lane, Maj. Gen. Charles E. Kilbourne, Jr., Sgt. Will Croft Barnes, Maj. Gen. Adolphus W. Greely, and Col. Gordon Johnston, who were selected in the late 1990s. Other historical inductees have included those associated with photography, motion pictures, science and invention, training, signal history, and aviation. Former Georgia Senator Max Cleland, a signal officer and triple amputee during the Vietnam War, was given the honor in 1997. Most of the awardees, however, have been long-serving officers, warrant officers, NCOs, and Soldiers who had dedicated decades of their lives to the Signal Corps Regiment.

The Office Chief of Signal (OCoS) is responsible for managing and executing the DMR program for the chief of signal and holds a section panel to vote nominations annually. The current standard operating procedure approved by the Chief of Signal provides the specifics about the program.

Selection Panel

The selection panel is comprised of enduring and rotating positions representative of the greater Signal Corps community but may be adjusted at the discretion of the chief of Signal. Selection panel members may not submit DMR nominations. The DMR Selection Panel is comprised of the U.S. Army Network Enterprise Command (NETCOM) commander; regimental chief warrant officer; regimental command sergeant major; Headquarters, Department of the Army deputy chief of staff and sergeant major; and U.S. Army Cyber Command (ARCYBER) command sergeant major. In addition, three general officers and one Distinguished Member of the Regiment serve on the panel.

Selection Process

Any member of the Signal Regiment may submit a DMR nomination at any time throughout the year, however, the chief of Signal may establish cutoff dates to facilitate DMR presentations at specific events, such as the annual Signal Regimental Ball. The DMR selection process does not limit or cap total selections of nominees within



A senior NCO attends the 2023 DMR Induction ceremony. (Photo by Laura Levering, U.S. Army Signal School)

each occurrence. Only one DMR panel will be held each year. If a nomination does not meet the current year's established cutoff date, the chief of Signal may consider the nomination eligible during the next DMR selection window.

OCoS maintains all documentation pertinent to each annual DMR nomination and selection process. Once the selection panel has completed the voting process, the Chief of Signal makes a final determination of each nomination. The chief of Signal has full authority to accept or reject panel votes for all nomination packets.

OCoS records the chief of Signal's selections, and the Signal Branch historian will file them in the branch history archives.

The selection panel will evaluate DMR files utilizing an "Induct" or "Not Induct" vote. Nominees must receive at least two-thirds "Induct" votes from the selection panel members to be recommended to the chief of Signal for final approval. The chief of Signal will review the nominations recommended by the selection panel and make a final decision.

DMR Eligibility Requirements

1. Retired officers, warrant officers, and Soldiers (regardless of component) who were members of the Signal Regiment.
2. Retired Functional Area (FA) 26 (formerly FA 24 and FA 53) officers who officially affiliated with the Signal Regiment.
3. Retired Department of Army (DA) civilians who served in Career Program (CP) 34.
4. Retired DA (regardless of career field) who worked for a Signal Regiment organization for over 10 years.
5. DMRs may be inducted posthumously.

Nomination Packets Must Include:

1. Signed nomination memorandum containing contact information for both nominee and nominator.
2. Detailed nomination/justification memorandum, no more than two double-spaced pages. Memorandum should speak directly to significant contributions that truly impact the Signal Regiment.
3. Summarized biography addressing the nominee's entire period of service to the Signal Regiment.
4. High resolution 8-by-10-inch digital photograph.

DMR nominations should be submitted via email to the OCoS points of contact, Tanisha Aiken, at: **tanisha.m.aiken.civ@army.mil**, and Ernest Jones at **ernest.b.jones.civ@army.mil.**

They may also be submitted via U.S. Postal Service to:
Commandant, U.S. Army Signal School,
ATTN: ATSO-OCO,
417 22nd Street, BLDG 21716,
Fort Eisenhower, Georgia 30905



Regimental Command Sgt. Maj. Linwood Barrett speaks to an audience during the 2023 DMR Induction ceremony held in Grovetown, Georgia, on June 24, 2023.
(Photo by Laura Levering, U.S. Army Signal School)

A Legacy of Conversions, Deployments, and the Forward March of Progress

Always constant

Maj. Connlann Myers and Capt. Davyd Hamrick
51st Expeditionary Signal Battalion-Enhanced

The 51st Expeditionary Signal Battalion-Enhanced (ESB-E) is no stranger to transitions and changes in signal technology. As one of the oldest signal battalions in the Army, the 51st has gone from laying telegraph cable across the fields of France and the frozen reservoirs of Korea to reaching satellites with assemblages the size of a suitcase. As the Army once more moves towards a more streamlined, expeditionary force structure, the 51st shifts in kind.

The battalion's first test was in 1918, as the 55th Telegraph Battalion while participating in the St. Mihiel and the Meuse-Argonne Offensives, laying telegraph cables, and running passenger pigeon roosts to ensure command and control for both American and French forces. After the war, the 55th was redesignated as the 51st Signal Battalion. The battalion would see the rise and use of radio systems during the interwar period and would be the testbed for those systems during peacetime exercises in San Antonio, Texas, supporting Gen. John Pershing's test of the Triangular Division concept in 1937. The next test would be in Europe once again; this time in the Italian campaign in 1943, where the battalion would establish telegraph lines across Sicily and the Italian mainland. After World War II, the 51st Signal Battalion participated in the Korean War supporting the I Corps headquarters, where radio wave technology was further expanded and refined in the frozen mountains.

After the war, the 51st would remain in South Korea until 1981, when it would relocate to Ludwigsburg in West Germany in support of VII Corps. In 1990, 51st Signal Battalion was mobilized for deployment to Saudi Arabia in support of the Gulf War as part of the 93rd Signal Brigade, utilizing the Mobile Subscriber Equipment (MSE) system and existing terrestrial satellite systems.

The following two decades were a period of rapid change and adjustment for the battalion. The 51st would relocate to Fort Bragg, North Carolina, in 1993 as 51st Signal Battalion (Airborne) under 35th Signal Brigade, and adopt the Warfighter Information Network-Tactical (WIN-T) in 2004. The battalion would then relocate to Joint Base Lewis-McChord (JBLM), Washington, in 2007, and utilize WIN-T systems during the surge in Iraq.

On Nov. 16, 2021, 51st ESB was realigned under the newly reconstituted 22nd Corps Signal Brigade (CSB) at JBLM, shifting the battalion's focus to supporting missions in the Pacific theater.

In recent years, the battalion has been tested all around the globe. The battalion participated in United States Africa Command missions in Somalia, supported corps-level warfighter exercises in the continental U.S., training throughout the Pacific Northwest, and more recently, exercises in Alaska, Australia, Hawaii, Guam, Japan, Philippines, and Thailand, in support of the United States Indo-Pacific Command theater.

In 2023, 51st ESB converted into an ESB-E, forming the basis of signal support around 48 Scalable Network Node (SNN) systems, which allows for quicker and lighter delivery of signal capabilities, along with a reduction in personnel and rolling stock requirements.

Additionally, the battalion is participating in a Department of the Army pilot program using several high-throughput/low-latency (HT/LL) transport systems, which will inform future decisions on how the Signal Corps provides data transport to the joint force.

Lt. Col. Nicolas Beck, the current 51st ESB-E commander, explains, "It is an exciting time to be a part of 51st, and we look forward to the opportunity to provide the Army feedback on the HT/LL systems as well as how to best to operationally employ an ESB-E for large scale combat operations."

The 51st ESB-E is postured to deploy to the United States Central Command area of operations (AoR) in 2024 as the first full ESB-E, taking over a mission that has previously been filled from ESBs and providing new capabilities to the area of responsibility. The mission will provide the Army the opportunity to improve the tactical network supporting U.S. forces in the AoR with the newest equipment and prove out the ability of the ESB-E concept to fully replace existing ESBs.

The 51st ESB-E continues to live up to the history and heritage of the Army Signal Corps in innovation, adaptation, and implementation of new technology.

Operationalizing the CPP in the Pacific

Yama Sakura 85

Article, photo by 1st Lt. Benjamin D. Selph
I Corps' Headquarters and Headquarters Battalion

As the complexity of military operations in the Pacific continues to increase, the prospect of communication across the region poses a real challenge for U.S. forces. As important as tactical network establishment is for effective command and control, creating a robust network of contingencies using the various radio systems the Army has to offer shows to be just as vital.

During the Trilateral Yama Sakura 85 exercise in Japan, a small team of Signaleers within I Corps Signal, Intelligence, Sustainment (SIS) Company set out to prove that radio systems are a feasible part of the Primary, Alternate, Contingency, Emergency (PACE) plan for operations moving forward for communications between subordinate units in the area of operations as well as across the Pacific Ocean back to Joint Base Lewis-McChord (JBLM), Washington.

To accomplish the mission of High Frequency (HF) communication across the Pacific Ocean, SIS Soldiers utilized a Command Post Platform (CPP) and its accompanying radio systems and antennas. The CPP encapsulates and mobilizes multiple lower Tactical Internet (TI) systems inside of a shelter mounted on a Humvee. These systems include HF Radio, Tactical Satellite (TACSAT) radio, FM radio, and a Soft Crew Access Unit (CAU) Tactical Operations Center Intercommunication System (TOCNET) that allows use of radios internal to the shelter remotely at any workstation inside the tactical operations center. Leading up to deployment, the CPP team put in countless hours performing maintenance and validating the CPP and its radio systems with internal testing and HF shots to various Military Auxiliary Radio System (MARS) stations. Once in Camp Asaka, Japan, the CPP team used a Sloping V configuration erected on a Quick Erecting Antenna Mast (QEAM) and the CPP's 8-element whip antenna to execute long-range shots. To start, the SIS Soldiers established HF communications on island using the CPP whip antenna with shots to 7th Infantry Division located in Sendai, Japan, roughly 330 kilometers north from Camp Asaka. Branching out, the CPP team moved on to shots with the MARS station located in Okinawa, Japan. These shots were roughly 1,500 kilometers, and once again using the 8-element whip antenna, clear two-way communications over HF were established. They continued expanding the range, shooting to the MARS station in Hawaii next. This was another successful transmission of over 6,200 kilometers, with clear voice heard on both ends.



The CPP team installing a Sloping V antenna.

The culminating training event of Yama Sakura 85 for the lower TI team was a shot from Camp Asaka over the Pacific Ocean back to JBLM. Given the restricted number of frequencies and significant time zone difference, there was a limited amount of time each day the team was able to attempt the cross-ocean shot. Using a Sloping-V antenna configuration and a 400-Watt Power Amplifier, the team was able to transmit voice over 7,700 kilometers to a team at JBLM.

During troubleshooting of JBLM shots, Australian Defense Force counterparts coordinated for the CPP team at Camp Asaka to attempt an HF shot to Australian 1st Division personnel in Brisbane, Australia. After success with JBLM, the CPP team and Australian 1st Division began shooting to each other. Using the same setup as the JBLM shot, a new azimuth, and frequencies, the team was again able to transmit voice the roughly 7,100 kilometers to Brisbane, putting a ribbon on the proof of concept they had been working on over the course of the exercise. Once the CPP was completely set up and operational, the CPP team had the opportunity to give a walkthrough brief to their Japanese Ground Self-Defense Force (JGSDF) counterparts. This brief introduced the general capabilities of the CPP, and the locations and configurations of each antenna. Over multiple iterations, the CPP team briefed multiple field grade and general officers in the JGSDF.

The success of the SIS CPP team during Yama Sakura 85 provides significant data for future mission planning and consideration. The CPP can be fully implemented into future PACE plans for long-range communications throughout the Pacific and back to home station.

101st ESB Provides Critical Support Overseas

Communications power

Maj. Sean M. Gallagher
101st Expeditionary Signal Battalion

The 101st Expeditionary Signal Battalion (ESB) was notified in the middle of 2021 that they would deploy again in 2023. This would be the battalion's second time in the last five years supporting Operation Spartan Shield (OSS) under the 160th Theater Signal Brigade (TSB), and the third deployment in the last 10 years.

Veterans of the previous deployments would say to anyone who would listen, "This is not Afghanistan in 2013 or OSS in 2019. Don't let what you did last time make you think it'll be the same."

The 101st key leaders began working with Army Central Command (ARCENT) G6 planners and the unit in-theater, the 151st ESB, to develop a scheme of signal support based on what to expect. The answer given from ARCENT was simple: "Make sure your teams are proficient and your equipment is working, because you'll support ARCENT exercises, but this area of responsibility is very dynamic."

Based on that guidance, the 101st would spend drill weekends, during annual training, and countless days in-between discussing team proficiencies, mission location assignments, training methods, and ways to get after physical and logical signal maintenance to ensure the teams and equipment would be postured the best possible to conduct operations overseas.

The last part of the answer from ARCENT would prove to be prophetic. Less than 14 days after officially assuming the mission following the transfer of authority (ToA) in late September 2023, Hamas launched a devastating terrorist attack on Israel. Within days, the 101st was called to action to provide upper tactical internet (UTI) support to 75% of the contingency command posts (CP) of the forces deploying from the continental United States (CONUS) into the U.S. Central Command (USCENTCOM) AoR. These mission requests were being received as the final systems were still being delivered from the ports to mission locations, and systems that had arrived were still being validated for service. Despite the intense pressure on each team chief to "put points on the board," they delivered.

The 101st deployed over 50% of its combat power to existing OSS missions and established services for incoming forces. Support included multiple air defense artillery (ADA) assets, new radar site emplacements, expanded UTI support to security forces (SECFOR), and sustainment CPs at each location.



Three unidentified 101st ESB Soldiers provide communications support while deployed to Jordan and Syria. (Courtesy photo)

With the relentless pace of requests for UTI support showing no signs of letting up, there was a silver lining coming to support 101st Soldiers; one of the units in the final group being deployed was Charlie Company, 57th (C/57th) Expeditionary Signal Battalion-Enhanced (ESB-E) from Fort Cavazos, Texas, who would arrive to provide even more combat power for the 101st ESB.

The arrival of C/57th meant the 101st was now a "multi-component" battalion. The Soldiers of C/57th did not stay in place for long however, and within 12 days of arrival they unpacked, validated their teams and equipment, and were missioned forward into three countries to expand UTI capabilities to even more units. The battalion had committed the entirety of C/57th's combat power to the warfighter in less than two weeks of their arrival.

Good work turned into more work; the support requests did not stop. Communication exercises (COMMEX) for ARCENT exercises still needed to be fulfilled, and the battalion was about to take part in the most critical one the USCENTCOM AoR had ever conducted. At the center of it was the 101st ESB and C/57th. The exercise was tasked, resourced, and executed in less than four weeks. It required detailed coordination between the 1st Theater Sustainment Command (TSC), Task Force Spartan (TFS), 54th Strategic Signal Battalion (SB), 25th SB, and the

101st ESB to provide UTI support at multiple locations in-theater.

The exercise successfully proved the ability of the rotational ESB to enable all ARCENT commands simultaneously, fully enabling mission command for all supported units. Following the successful COMMEX, calls for 101st support slowed but did not stop, and the Soldiers continued to step up.

Despite being more than halfway through their rotation and having kept the throttle pinned since leaving New York over half a year earlier, they had gotten their second wind. For the remainder of their tour, Soldiers focused on improving the larger theater-level communications picture now that they realized how integral they were to the larger kinetic fight.

They began stepping into the lower tactical internet (LTI) realm and looking at ways to improve quality of service (QoS) on their assemblages.

Despite being in the final two months of their tour, there was a call to support a truly large scale operation before leaving: cross into European Command (EUCOM) and expand Southwest Asia (SWA) services to ARCENT units working with EUCOM Signaleers to support a multinational joint operation. The 101st analyzed the mission, developed a plan, moved, and extended the SWA network to support operations in under eight days.

The 101st was told in 2021 they would deploy again in 2023, and what awaited them was very different from anything the Soldiers had expected. Despite facing consistent threats from enemy forces across the region and a relentless pace of operations, the Soldiers of the 101st and C/57th lived up to the 160th's motto: "Finest of the First, Forged in Fire."



The 101st ESB Phoenix, STT, and JNN staging to support ARCENT and NAVCENT forces. (Photo by Spc. Kenyon Horsford, New York Army National Guard)

RCSM Has 'Best Job Ever' Leading Signaleers

Motivation in the flesh

Article, photos by Laura Levering
U.S. Army Signal School

Well-known for his captivating disposition and infamous "chip challenge," Command Sgt. Maj. Linwood Barrett, Signal Corps' 25th regimental command sergeant major, has been serving his country and its people for nearly 30 years. Growing up, the Spring Lake, North Carolina, native always felt like he was meant to be a Soldier.

"My father served; he is an amazing man, and I wanted to follow in his footsteps," Barrett said. "He was a true role model … I wanted to do something fulfilling and for the greater good."

But he never thought he would go on to serve this long nor climb the ranks as he has. Barrett said he enlisted knowing he "wanted to do something that involved electronics." After his recruiter explained the importance of being a communicator, Barrett said he "leaned in that direction" and enlisted as signal support specialist (25U). Initially, he did not plan on making the Army a long-term career. That changed by the end of his first term thanks to several positive role models who helped solidify his decision.

Fast forward multiple deployments, numerous duty stations, units, positions, and awards, this top-ranking NCO said his current role of overseeing 55,000 signal Soldiers, or Signaleers, while serving as the senior enlisted advisor to chief of signal, is "the best job ever."

"I've had some good jobs, and I would never change any of them, but this is absolutely the one that takes the cake," Barrett said.

No two days are ever the same, and Barrett thrives on being in the presence of other Soldiers – particularly junior Soldiers, as evident by anyone who has seen or participated in his chip challenge, which has been coined as a way for recognizing excellence and expressing gratitude to deserving individuals on behalf of the Signal Regiment.



Command Sgt. Maj. Linwood Barrett congratulates the Army's first class of network communication system specialists (25H) on March 8, 2023.

Sgt. Maj. Christopher Stadler, Operations Division, U.S. Army Signal School, usually accompanies him on those challenges. Having known Barrett for 10 years, four of which Stadler served as Barrett's first sergeant, Stadler described Barrett as "the ultimate motivator, ruthless standard bearer, empathetic, mentally tough" person who "can lead and identify with any race, religion, and/or gender."

"I have had many great leaders in my day, but none have ever attended my son's athletic events, birthdays, holidays or known exactly what to say to either correct, motivate, or cheer me up until Regimental Command Sgt. Maj. Barrett came along," Stadler said.

As a senior leader himself with 19 years in service (and counting), Stadler said Barrett has had a tremendous impact on his career and personal development, emphasizing he would not be where he is today if not for Barrett.

"I have taken more tools from him and put them in my kitbag than I would like to admit," Stadler said. "The biggest influence is how comfortable I am in difficult situations – got it straight from him. The other is passion. There is nothing more fun than helping a Soldier solve a problem just as my mentor [Barrett] does all day, every day."

For Barrett, there is nothing he would rather be doing. At a point in his career where he could retire, Barrett has no immediate plans to hang up the uniform and make the transition to becoming a civilian. Instead, he wants to continue serving "wherever the Army needs" him.

"Soldiers motivate me," Barrett said. "The team … thinking about how awesome individuals are that I work with on a daily basis … I enjoy being able to help people and help shape the future of our young men and women in the Signal Corps, providing input, positively influence others, and make change."

As much as Barrett lives and breathes the Army, this seasoned Soldier fully understands that every day isn't going to be a "walk in the park."

His advice to others who are struggling is this:

"Always give 100 percent. Be in the right place, right time, and right uniform. Be true to yourself and find a mentor who will provide you with good sound advice. The Army is an amazing organization to be a part of, and although you may not enjoy your current experience, things can easily change for the better at your next duty station."



Command Sgt. Maj. Linwood Barrett throws down a card during a game of UNO with Soldiers hanging out at Fort Eisenhower's BOSS Headquarters on Dec. 24, 2023.

Serving in the military has afforded Barrett opportunities he might have had otherwise, to include traveling the world, being exposed to other cultures and learning about significant contributions from others who have served. For these reasons (among others), Barrett feels strongly that the Army is one of the greatest organizations in the world.

"Everyone brings different life experiences to the formation," he said. "What makes our Army so great is that we welcome everyone and empower them to be all they can be."

Bio Snapshot

Command Sgt. Maj. Linwood Barrett entered the Army in January 1996. His military education includes every level of the Noncommissioned Officer Education System. He is a graduate of the United States Army Sergeants Major Course, Communications Security Custodian Course, Combatives Level 1 and 2, Drill Sergeant School, Drill Sergeant Leaders Course, Airborne School, Jumpmaster School, Air Assault School, and Master Resiliency Training. Barrett is a member of the Sergeant Audie Murphy Club and a recipient of the Bronze Order of Mercury. He deployed in support of Operation Iraqi Freedom (09-10) and Operation Enduring Freedom (11-12). Barrett holds an associate degree in general studies from Northern Virginia Community College and bachelor's degree in liberal arts from Excelsior University.



Command Sgt. Maj. Linwood Barrett greets Soldiers following a mass Signal Corps 163rd Anniversary run that he led on June 21, 2023.


You are cordially invited
to attend the
164TH SIGNAL CORPS
ANNIVERSARY BALL
164th Signal Corps
Anniversary Ball
JUNE 15, 2024
BEGINS AT 6 P.M.
AUGUSTA MARRIOTT
AT THE CONVENTION CENTER
2 TENTH STREET
AUGUSTA, GEORGIA, USA 30901
For ticket and Ball Information:
https://www.EisenhowerSignalBall.org
U.S. ARMY
PATRIA
PRO
VIGILANS