Introduction
The 344th Military Intelligence Battalion (MI BN) is a driving force of the future in military intelligence. Located at Goodfellow Air Force Base, San Angelo, Texas, the 344th MI BN serves as the Advanced Individual Training (AIT) site for the Army’s signals intelligence (SIGINT) military occupational specialties (MOS)—35N (SIGINT Analyst), 35P (SIGINT Voice Interceptor), and 35S (Signals Collector/Analyst). Recently, a realignment of tactical training at Camp Sentinel, Goodfellow Air Force Base, is helping to bridge the training gap between Skill Level 10 institutional and operational training requirements. Conducted in an austere and rigorous environment, this training focuses on the skills and fieldcraft needed for brigade-level SIGINT operations.

During the last 19 years, real-world operations and the Global War on Terrorism focused SIGINT AIT on counterinsurgency operations. At one point, the flash-to-bang of a newly minted SIGINT Analyst or SIGINT Voice Interceptor from graduation to boots on the ground in Iraq or Afghanistan was less than 100 days. Today, in accordance with modern doctrine, the training has shifted from counterinsurgency-centric to multi-domain large-scale ground combat operations. The 344th MI BN provides intelligence Soldiers the foundational, transferable concepts of tactical SIGINT skills while inculcating basic analysis and reporting proficiencies through schoolhouse instruction and tactical operations. Our critical tasks as an organization must meet the Army’s operational and force modernization demands.
in support of multi-domain large-scale ground combat operations. Based on this premise, delivering quality instruction to Soldiers will provide quality intelligence.

Training Requirements
Within the 344th, SIGINT training requirements fall under two authorities. The driving documents for establishing the program of instruction and subsequent lesson plans come primarily from the National Security Agency’s Cryptologic Training System Training Standards and the Army’s Individual Critical Task List. The MOS 35N, 35P, and 35S courses are Department of Defense Executive Agency courses. This means that the Executive Agency sets the requirements and appoints a Responsible Training Authority to execute and oversee the implementation of those requirements. For SIGINT analysis and reporting (35N) and cryptologic language analysis (35P), the Air Force is the National Security Agency’s Responsible Training Authority. For signals collection and analysis (35S), the Navy is the Responsible Training Authority. This limits the 344th from being able to select training objectives exclusively for Army SIGINT Soldiers.

Additionally, between 65 and 70 percent of all Skill Level 10 MOS 35N and 35P billets in the Army are in U.S. Army Intelligence and Security Command (INSCOM) units. The percentage is even higher for Skill Level 10 MOS 35S billets. As such, the course programs of instruction place a heavy emphasis on strategic-level intelligence tasks and requirements found at INSCOM. All of these critical tasks are institutionally trained. However, the 25 to 30 percent of Soldiers who graduate and go to U.S. Army Forces Command or U.S. Army Special Forces Command assignments desperately need the training and skillcraft associated with both institutional and operational tasks found at brigade-level tactical SIGINT operations. While the Tactical SIGINT/Prophet Course at Fort Huachuca, Arizona, does address some of these training requirements, not every SIGINT Analyst or SIGINT Voice Interceptor attends this course, and the course focuses primarily on giving Soldiers sets and reps on operating the Prophet system. Dismounted, low-level voice intercept or Special Operations Team-Alpha training and fieldcraft associated with multi-domain large-scale ground combat operations do not receive as much emphasis.

Cadre Training
Cadre arriving at Goodfellow Air Force Base present an array of skillsets in conjunction with their newly assigned roles as AIT instructors. Talent management is key for cadre assignment. For example, in the Basic Analysis and Reporting Course, an interview process with the course manager, chief instructor, and block supervisors determines the specific block of instruction to which a new cadre member will be assigned based on previous military experience. Often their recent experience and assignment history provide an opportunity for fellow instructors to gain real-world relevant and current information, update their skillsets, and learn the latest application theories. After completing the Air Force Basic Instructor Course and the required Subject Matter Qualification and Initial Qualification Training processes, an instructor is fully qualified to deliver the course material according to the Army University and the Air Education Training Command. When opportunities allow, continual and ongoing education is encouraged and expected because cadre need to remain proficient in their respective skillsets.

Tactical SIGINT Training Concept
To achieve its goal of bringing a more prepared tactical Soldier to the operational force while meeting its institutional requirements, the 344th uses a tactical SIGINT exercise (TSE). This 5-day training event is exclusively developed and resourced by the 344th and its parent organizations.

344th Military Intelligence Battalion Advanced Individual Training Soldiers establish a tactical operations center to provide real-time situational awareness during a tactical signals intelligence exercise at Camp Sentinel, Goodfellow Air Force Base, TX.
The TSE is conducted at Camp Sentinel in Goodfellow Air Force Base’s joint training area. The TSE premise attempts to reinforce items from the Individual Critical Task List and Cryptologic Training System Training Standards trained in the classroom, coupled with an introduction to select operational tasks and warrior task and battle drills reinforcement in a scenario-driven, live signals scenario. The training progressively increases rigor and complexity with observer trainers (instructors) using the “crawl-walk-run” training methodology.

In March 2018, the Army Cryptologic Office approved the concept of operations. This perpetuated a series of improvements and evolutions to the unit’s field training process that has been virtually continual for the last 2 years. To ensure mission success, the 344th uses a holistic approach for the concept, process, and execution of the training event. As most of us know, a successful training event requires a quality venue, curriculum, personnel, and equipment.

**Resources**

In its infancy, the 344th TSE had the good fortune of inheriting a well-developed training environment that previously served as the field training exercise. Camp Sentinel and the joint training area provided adequate housing (tent space), a mock-up village that could be used in a variety of scenarios, and multiple semi-improved roads for main supply routes and alternate supply routes. The curriculum is doctrinally based and written in accordance with standards from the U.S. Army Training and Doctrine Command (TRADOC) and Army University. It is tailored specifically to tie items from the Individual Critical Task List or the Cryptologic Training System Training Standards into a field environment for a Skill Level 10 Soldier serving on a SIGINT collection team (SCT) or a cryptologic support team (CST). This “tie-in” is achieved by the most valuable resource—the instructor.

The TSE has benefited from the battalion’s and company leadership’s focus on talent management. The developer and instructors are uniquely selected based on experience, drive, and assignment history. This ensures relevance and realism and makes learning transfer achievable and enduring. All instructors participate in the Faculty Development and Recognition Program and are evaluated by a U.S. Army Intelligence Center of Excellence (USAICoE)-trained instructional coach. The emphasis on curriculum and instructor standards results in the professional delivery of adult-learner techniques that allows students to synthesize classroom instruction with hands-on application.

The final piece of the training standard is, of course, equipment. The TSE has remained well-equipped and resourced. Serviceable and relevant training apparatuses ensure that students receive much needed time and repetition on communications and collection systems currently fielded by units in the force. In turn, this produces a more confident and competent Soldier who can contribute expeditiously upon arrival at their first assignment.

**Process**

On a biweekly basis, MOS 35N students rotate from the schoolhouse to Camp Sentinel. They spend the next 5 days of their training in the field. They deploy to Gorgas where they find themselves as members of a ground collection platoon. There they conduct low-level voice intercept missions near the forward line of troops supporting a brigade combat team that is attempting to clear remnant forces from a Donovian mechanized infantry battalion and enabling U.S. forces to consolidate gains. Barracks are tents. Meals are meals, ready to eat. Beds are cots. Rucksacks are household goods. Training days are from 0600 for physical training until 2000 when the final element of training for the day is complete.

The first 2 days of training are a blend of cognitive and psychomotor skills on requisite pre-mission training. More than 20 common tasks are introduced or reinforced during this time. Training includes but is not limited to intelligence oversight, map reading, frequency modulation communications, tactical combat casualty care, grenade assault course, and react to contact. Early on day three, students are assigned to small teams. They establish a tactical operations center with CST personnel. Depending on class size, the remaining Soldiers are assigned to three to six SCTs. For the next 3 days they conduct five missions and rotate as teams through a variety of “hide sites” that include a subsurface site, a hasty site, an urban structure, and a roving team. The groups receive an operation order/fragmentary order each morning that describes the mission for that day. Student team leaders employ troop-leading procedures to ensure that all pre-combat checks and inspections are complete and that the team is prepared for the mission and situation.

Observer trainers become increasingly hands-off as students demonstrate proficiency with the equipment, troop-leading procedures, and pre-combat checks. While on mission, students must be able to extract essential elements of information and provide indications and warnings. They are required to apply radio wave theory concepts to improve collection and communication. Ultimately, they will conduct analysis and use direction finding to locate an enemy combatant. They will also use their warrior tasks and battle drills training in a series of opposing force (OPFOR)-related events that include a casualty evacuation, a call for fire, a squad assault, and the clearing of a building.
Collection and analysis drive each of the OPFOR events and, ultimately, determine the outcome.

During the entire mission process, the tactical operations center provides real-time battle tracking via the integrated mesh radios, a large screen display, and an analog map with an overlay. CST members assist the CSTs with intelligence fusion and mission control. They are ready to provide a sanitized “situation update” at any time. This blended concept of SIGINT collection and warrior tasks and battle drills allows cadre to assess the Soldiers’ knowledge, skill, and performance of a wide variety tactical SIGINT tasks.

Sustainable and Enduring

While the concept and process have been important for the TSE, the functionality of the course is a necessity to keep it relevant. This is key for training value and the motivation of trainers and trainees. A training event with equipment or facilities that are outdated or unserviceable does not often achieve the intended takeaway. Obviously, new and/or updated equipment in the inventory improves the learning outcome and the transfer of skill to the gaining unit.

In early 2019, the 344th upgraded its collection system training apparatus from a Wolfhound V9 to the Versatile Radio Observation and Direction (VROD) V2. Select units continue to field the highly reliable and capable system across the force as of this writing. Allowing students to train on equipment that their future leaders have not yet trained on increases the students’ ability to contribute upon entry at their respective units. While the VROD cannot make a claim as a program of record, it does allow for valuable skills training on dependable equipment.

Beyond the “big dollar” equipment, the continual logistics and high throughput of the exercise require a variety of tools—such as all-terrain vehicles, power equipment, communications equipment, simulators, and storage facilities. Prudent requests from cadre, coupled with a willingness to contribute from the battalion, brigade, and Center of Excellence, have directly affected the quality and durability of training.

Internal resources are also a valuable commodity. Cadre for the exercise readily point to the fact that self-resourcefulness has enabled the growth. Observer trainers are responsible for grounds maintenance, facilities maintenance, and any small-level construction projects. The TSE cadre completed many of the recent innovations to the training area. These projects include the 300-meter, seven-obstacle grenade assault course; a two-room military operations in urban terrain (MOUT) house in the pre-mission training area; and a small five-house village that allows for an alternative ending to the prescribed scenario. The combination of this resourcefulness, an actively engaged S-4 section, and contributions by unit and headquarters leadership have made the exercise functional, but more importantly, sustainable.

Way Ahead

As the Army shifts from counterinsurgency to multidomain large-scale ground combat operations, the role of the SIGINT operator will continue to serve as a force-multiplier for commanders. MOS 35N, 35P, and 35S Soldiers will provide tactical, regional, and strategic-level commanders with time-sensitive reporting, indications and warnings, and active SIGINT support. As our potential adversaries change, so will our training to best give decision makers the intelligence needed to win on the battlefield.

MOS 35S Tactical SIGINT Exercise. Incorporating MOS 35S Soldiers into the TSE serves as a new initiative to support the force. As of 1 October 2020, MOS 35S Soldiers attend their AIT at Goodfellow Air Force Base rather than Corry Naval Air Station, Florida. Previously, when MOS 35S training occurred.
at Corry Station, only 3 to 5 students started in any one given class, and the program of instruction occurred entirely in a joint service environment with Sailors. There was no program of instruction time for tactical training or even time to practice warrior tasks and battle drills. As a result, TRADOC created a separate 40-hour Warrior Sustainment Course to give MOS 35S Soldiers time to practice and execute warrior tasks and battle drills requirements common to all Soldiers graduating AIT. However, the small class size and limited resources prohibited an austere, robust field training event.

The Warrior Sustainment Course also shifted to Goodfellow Air Force Base with the MOS 35S training. Additionally, because of the need to work with the Air Force and USAICoE registrars, class sizes will be 9 to 10 Soldiers. Having a squad-sized element go through training together not only enables students to participate in a week’s worth of warrior tasks and battle drills training but also helps them to integrate seamlessly into the TSE. This provides them hands-on experience with the VRODs and allows them to perform Individual Critical Task List-based institutional and operational signals collection and analysis duties in support of an SCT or a CST alongside MOS 35N Soldiers.

**Integrated Training.** The move of MOS 35S training to Goodfellow Air Force Base has presented the 344th MI BN with a unique opportunity to mesh and integrate MOS 35N, 35P, and 35S tactical SIGINT training under a single, unified exercise with mutually supportive roles. The MOS 35P schoolhouse is divided into seven separate courses, and six of those are joint with Airmen and Marines. Aligning the limited time available for MOS 35P students to train at Camp Sentinel has proven difficult. However, the SIGINT Voice Interceptor committee has recently developed a course of action to integrate SIGINT Voice Interceptor training into the TSE. As the MOS 35P portion of TSE matures, every MOS 35P student will find themselves participating in an integrated exercise with fellow MOS 35N and 35S Soldiers, or in a stand-alone TSE with MOS 35N injects provided by cadre. In instances where schedules align, MOS 35P collectors in the field will report to MOS 35N CST members who will provide battlefield updates in support of the scenario. When the integration of all three SIGINT specialties is complete in calendar year 2021, it will be the first TSE in AIT in which MOS 35Ns, 35Ps, and 35Ss work together in supporting roles and missions.

This integration of MOS 35N, 35P, and 35S tactical training will also usher in another first—every MOS 35N, 35P, or 35S student who graduates AIT will arrive at their first unit of assignment having had hands-on training on the VRODs. Additionally, all of these Soldiers will have practice and experience performing brigade-level tactical SIGINT operations in an austere and rigorous training environment. This is a great leap from three MOSs with programs of instruction that focused only on strategic-level training and had no, or very little, emphasis on tactical training.

**Joint Training.** Recent upgrades at Camp Sentinel have also presented opportunities to bring in our joint partners at Goodfellow Air Force Base. The Marine Corps and Air Force have expressed interest in sending their students through the Grenade Assault Course. The smoke, the .50 caliber machine gun simulators, and the artillery simulators bring realism and add rigor and stress that is not often replicated in any AIT. Looking ahead, it is not too difficult to imagine incorporating Air Force lieutenants or Intelligence, Surveillance, and Reconnaissance Course students into our training facility at Camp Sentinel to replicate a joint operations center in support of joint multi-domain large-scale combat operations.

**Outreach.** As the 344th continues to modify and refine training, we will engage with regional partners such as Fort Hood or Fort Bliss, Texas, to see if they would like to
send their SCTs or CSTs to Goodfellow Air Force Base for training. Building on these successes, we may even engage with the INSCOM Foundry program to gauge their interest in partnering with the 344th to send Soldiers to some live environment training before deployment downrange or to a combat training center.

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Mr. Brian Lemaster is an MOS 35N (Signals Intelligence [SIGINT] Analyst) training instructor and is currently the block supervisor for the 344th tactical SIGINT exercise. He is a retired MOS 35Z first sergeant who served approximately 16 years of his 20-year career as a member of dismounted SIGINT collection teams in both U.S. Army Forces Command (FORSCOM) and USASFC. He has spent the majority of the last 7 years as a contract or Department of the Army Civilian instructor at Camp Sentinel, Goodfellow Air Force Base, TX.

CW4 Christopher Banks has served as the MOS 35N course manager at Goodfellow Air Force Base, TX, since September 2017. During his 21-year career in the Army, he has had strategic, FORSCOM, and TRADOC assignments, including Fort Meade, MD; Korea; Germany; and the 3rd Infantry Division at Fort Stewart, GA. He has served on multiple deployments as a small teams officer in charge and division SIGINT officer in charge. He holds a bachelor of science in psychology from the University of Maryland University College.

SFC LeeAnn Seitz serves as the chief instructor for the MOS 35N course at Goodfellow Air Force Base, TX. She has also served as a senior instructor and evaluator for the course for over 4 years. She was previously assigned to Fort Meade, MD, as the Foundry noncommissioned officer (NCO) in charge and brigade S-3 training NCO at the 704th Military Intelligence Brigade. She holds a master of public administration from Norwich University.