Teaching Fieldcraft

Teaching the skills essential in maneuver warfare
by Capt Zachary Schwartz

The cool forest morning was becoming a warm afternoon as the four-man listening post/observation post detached from a patrol and set about establishing their hide site. The position overlooked an enemy infiltration route and two Marines, nearly invisible under “ghillie blankets” and local vegetation, set up security. Meanwhile, their buddies deployed pre-lashed tripods made from fallen timber and 550 cord at the corners of their prospective shelter. The completed hide blended into the surrounding foliage, and a $3.00 survival blanket woven into the roof ensured it was invisible to thermal optics. The listening post/observation post remained hidden from unmanned aerial systems as well as an enemy platoon that passed within several meters of its position. The Marines employed radios to report on the enemy and call for fire on them. Later that evening, a patrol departed friendly lines to recon possible enemy night infiltration routes. The patrol uncovered a strip of “glint” tape fixed to the back of a tree within sight of the defense’s flank. The patrol leader immediately began “cutting for sign” searching the surrounding area for any indications of a hostile presence. The search turned up a track of boot prints leading down to a muddy streambed that easily preserved the prints for analysis. After conducting a “box off” technique to estimate the number of individuals associated with the spoor, the patrol determined that four enemy individuals, moving under load, had passed through the area. Radioing in, the patrol leader surmised that this track belonged to a leader’s recon that had marked a probable line of deployment earlier in the day. Between the tracks and the patrol’s estimate of the situation (mission, enemy, terrain, troops, time, civil) analysis that included earlier contact with enemy probing elements, the Marines adjusted their route and eventually located the enemy offensive platoon moving in the dark. A series of hasty ambushes and radio reports allowed the friendly defense to adjust and spoil the enemy attack.

This is not a fictitious account of Marines in some future conflict; this was a platoon of student officers training to become provisional rifle platoon commanders at their Field Exercise II (FEX II) (platoon vs. platoon force-on-force)

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at TBS. This level of performance was made possible through the introduction of a fieldcraft curriculum at TBS that placed renewed focus on what Col Michael Wyly referred to as “the field skills essential to maneuver warfare.”

This course material fits into the pre-existing timeline for the program of instruction (POI). It allows for a far higher level of tactical performance and teaches a valuable “light infantry” mindset of self-reliance, signature management, and innovation. Few skills at TBS require so little effort to teach and promise such massive returns in tactical competence, mentality, and survivability. Education in fieldcraft must be implemented and standardized across the entry-level schools (e.g., Schools of Infantry, Officer Candidates School, and TBS) with proper continuity ensured through follow-on schools and the Fleet Marine Force (FMF). The following three-step program of fieldcraft instruction applied at TBS can serve as a model for the implementation of these skills across our schools and the FMF.

Introduction to the Skill

Fieldcraft, or “the techniques involved in living, traveling, or making military or scientific observations in the field, especially while remaining undetected,” has contributed to the survival of our species since the dawn of history. Imagine the struggle of early man to survive in a world where they had to compete with not only rival humans but also Ice Age blizzards, rampant diseases, and the perils of hunting often deadly game. The widespread military application of fieldcraft was not far behind. During the Napoleonic Wars, light infantry units like the British 95th Rifle Regiment were renowned for their mobility, use of earth-toned/natural uniform coloration, and an inherent spirit of self-reliance born from “working dispersed, in small units, often in isolated actions.” During World War Two, fieldcraft was a vital factor in the success of Allied and Axis forces, including the British soldiers fighting the Japanese along the Indian-Burmese border. For example, every soldier in the 77th Indian Infantry Brigade was expected to become a “self-reliant, toughened and cunning jungle fighter conversant with fieldcraft … in order to defeat the Japanese” during the bush fighting in Burma. Even modern combat, shadowed beneath the specter of nuclear weapons and increasingly advanced technology, proved the efficacy of fieldcraft. Marines learned this the hard way in the hellish terrain of Vietnam, where the field proficient North Vietnamese Army and Viet Cong were known to “welcome all obvious lapses in camouflage discipline” by their foes. A continent away, four-man “sticks” of Rhodesian light infantry troopers utilized combat tracking to follow and fix large forces of Zimbabwe National African Union and Zimbabwe People’s Revolutionary Army infiltrators across the wilderness of what is now Zimbabwe during the Rhodesian Bush War.

Recent history, with the emerging threat of major power conflict and required emphasis on signature management, has led to a renewed interest among Marine leaders into the grass roots infantry skills that comprise fieldcraft. After TBS sent an instructor to the Royal Marines Commando Course in 2018, it became evident that we had fallen behind in teaching the individual skills Col Wyly posited were necessary to conduct maneuver warfare. To remedy this shortfall, instructors at TBS developed a program to teach fieldcraft built on three classes. The fieldcraft curriculum is derived from the Infantry Training & Requirements Manual, the new Interim Squad publication, the Scouting and Patrolling publication, Combat Hunter, as well as historical experiences from Marines and soldiers (American and foreign) throughout history. Each class, consisting of lecture and practical application, is designed to build on the knowledge from previous classes. This curriculum continues to evolve and improve and has been taught in some format to every TBS basic officer course company since the winter of 2019.

The first fieldcraft class details the baseline personal gear, personal care routine, and equipment knowledge necessary to thrive in the field. The class is taught before students depart for their first field exercise, FEX I, in a one-hour classroom lecture and a one- to two-hour field practical application. The emphasis is on “extending the culminating point”: that is, getting the students to think past just gutting out a four to five day FEX safe in the knowledge that the barracks is just a few “wake-ups” away. Students are exposed to the fact that this type of reliable return to comfort is historically unlikely in the event of conflict. Their wars will likely be marked by austerity and an extended lack of reliable sources of supply, including fresh water and shelter. Procedures like waterproofing all gear, either through handmade dry bags or store purchased versions, are driven home constantly.

With this understanding in mind, the students are then introduced to a three-line item system in order to better organize and utilize their field equipment as they traverse the battlespace. First line equipment consists of what they carry in their combat uniform and is used to execute the Lost Marine Plan, or 12-24 hours of survival and sustainability while moving in the battlespace. These pocket items include waterproofed lighter, water purification tablets, compass, map, protractor, mapping pens, pocket chow, camo paint compact, 550 cord, magnesium rod fire starter, and a penlight. Students are coached to dummy cord and waterproof all of this kit and taught that their items must be kept in the same spots on the uniform during every operation. For example, the compass is always cored into the weak side shoulder pocket. In addition, students are instructed on selecting a field knife for incorporation into their first line gear. This knife should have a full tang blade, be transferable to second line gear, and be durable enough for wood processing and striking sparks on the fire starter. To round out their first line gear, students are additionally instructed in the creation of a survival tin. This is typically an Altoid or dip tin emptied out and filled with “open in case of emergency” essentials. The basics include cotton balls (for tinder), waterproof matches, an emergency folding knife or razor, fishing line and hooks, button compass, commando saw, and condom (to
be filled with water, placed in a sock, and tied off as an emergency hydration source). The survival tin is sealed with duct tape and stowed in a pocket until needed. This basic equipment emphasizes that even with the simplest load out, a Marine should always be capable of traversing and surviving in the field.

Second line gear for the Marine is his patrol and combat loadout. This loadout consists of the plate carrier, Kevlar, belt kit, and can include the assault pack. It enables 24 to 72 hours of sustainment. Between the plate carrier and belt, the Marine needs to have all mission essential pouches (magazine, optics, etc.). The IFAK (individual first aid kit) needs to be located on this kit, typically on the strong side of the belt or plate carrier. The belt or plate carrier should also include an admin pouch for reporting formats, pens, pencils, headlamp, pocket chow, and so forth. One of the most important pieces of gear in the second line is the personal first-aid kit (PFAK). This small kit, compact enough to be stored in a pouch, is designed to treat injuries experienced by personnel in the field. Students are taught to use a small Tupperware container (or similar vessel) to build their PFAK. Its contents include sports tape, Band-Aids, Neosporin, tweezers, blister care gear, insect bite/rash cream, Ibuprofen, and gauze.

Use of the PFAK builds a sense of self-reliance and allows the unit corpsmen to stay focused on more pressing medical issues. If a Marine includes an assault pack in their second line gear (mission dependent), the pack contains an emergency MRE that is broken out only in dire circumstances. It also has a small water filter and waterproofed Gor-Tex top and bottom. The rest of the assault pack is available for mission essential gear, canteens, extra socks, warming layers, radios, batteries, ammo, and the like.

Third line gear consists of the Marine Corps main pack and sustainment pouches and is used for up to and beyond 96 hours of sustainment. The top pouch of the pack is stuffed with the issued tarp. The four corner grommets on the tarp are each threaded with bungee cord to a separate tent stake. Two more bungee cords and stakes are attached at the center grommets. This arrangement aids in building field expedient shelter. The sustainment/hydration pouches (three) are attached to the outside of the pack. The far-right pouch (as you are wearing the pack) is used exclusively for field stripped MREs and a dark brown or black trash bag for stowing the refuse. The next pouch is used for a hygiene kit, including a face towel, body towel, shave kit, toothbrush, toothpaste, floss, Listerine, foot powder, and a small bottle of body wash. The use of body wash and towels for scrubbing off field grime decreases the need for disposable wipes. The last pouch is used for a spare set of utilities/underwear. The internal storage area of the pack is kept free for the sleep system, any bags of warming layers or socks, and mission essential kit. The sleep system is stowed in a dry bag large enough to store the system itself but also a pair of lightweight, dark colored sneakers to sleep in. The use of this item as well as the other parts of the third line system is explained as the students learn about creating a tactical bivouac site.

After students learn about the three-line items, the class moves to teaching about bivouac and camp routine. Students are taught how to make a triangle tent patrol base (PB) as detailed in the Interim Squad publication. Students are taught to either build the PB as a squad site or a platoon site. Emphasis is placed on 360-degree security. When the unit leader is satisfied with the positioning of the site, they signal for “50% security.” At this cue, one Marine from each buddy pair remains on security while the other Marine drops back and begins construction of an A-frame shelter. If foul weather is not in the forecast, no shelter construction is needed. The primary purpose of the shelter is to help Marines get dry and provide a space for weapons to be cleaned and lubricated. The tarp is simply pulled from the top pouch of the main pack and erected using the pre-staged bungees and stakes. The center line can be propped up by tying off the ends between two trees, using manufactured telescoping bivy poles or carved sticks no more than waist height. Stakes can be store bought or carved from short sticks. Once the A-frame is built, the Marine lays their personal gear beneath it. Their Isomat is rolled out on one side of the tarp with the head facing outboard toward any threat. Their fighting gear is placed at the head of the shelter, rifle inboard, muzzle facing out, and their pack placed at the feet, with the pouches facing the feet. It is important to note that all kit not needed right away is kept stowed in the pack to enable rapid displacement from the site. Once a Marine’s gear is
arranged, the Marine relieves his buddy on duty. The buddy sets their kit up under the shelter and then returns to security. It is emphasized that Marines will sleep two to a shelter. This allows for one buddy’s shelter kit to always remain packed in case the patrol base needs to be abandoned and new shelter is needed. When the leader sees all shelters have been put up and all Marines are back on security, they pass the signal for whatever security posture is deemed necessary and for the beginning of PB routine. Marines not on watch can then camouflage the shelters with vegetation to limit their signature. Breaking down the site is done in the exact opposite way of setting it up, starting with 100 percent security and alternating one Marine packing the shelter while the other stays on guard.

The personal PB routine commences when the Marine is not on security or other duties and is preparing to sleep. They return to the shelter and commences weapons and gear maintenance. All of these functions can be completed under the tarp, without light, and out of the elements. Once it becomes time for personal maintenance, the Marine turns to their third-line gear. With their pack at their feet pouches facing them, the Marine simply goes from left to right across the pouches, working their way from eating chow to changing clothes. Their first step is to eat chow, so that if the PB must be abandoned, the Marine has at least eaten. Next, the Marine uses the hygiene pouch. Teeth are brushed, faces are shaved, and bodies scrubbed (mindful to use the face towel for the face only and body towel for the body). The PFAK is pulled out to treat any blisters or minor cuts before their feet are powdered to aid drying. The Marine then moves to break out their dry kit and is ready to fight fully clothed and shod. If the Marine has watch later that night, they change back into their wet kit, boots, and fighting load before assuming post.

The above “bivouac drill” and personal routine combined with the pre-organized line items builds a baseline for sustainability and security in students as they prepare for their first FEX. The goal is to sustain combat power through good hygiene, restful sleep, and a mindset tuned to security and thriving in adversity. No longer are students collapsing in a pile, sleeping in their underwear, without adequate hygiene, content in the fact that they can just gut out the remaining field time and see “doc” for whatever scrap they have. Now there is an expectation for personal and collective responsibility. Marines are ready to fight at all times. No matter how wet or filthy a Marine becomes after a day of operations, that Marine now has the confidence that comes from knowing they have the means to dry, clean, and feed themselves. The psychological edge from this “light infantry” mindset is arguably the most important part of fieldcraft and is sharpened through two more classes.

The second class focuses on camouflage and concealment along with tactical tracking. This class is typically delivered after FEX I and before the Patrol FEX. In Patrol FEX, students execute two days of force-on-force squad patrols. Knowing that they will be facing down their fellow squads, the competition fueled desire to gain an advantage is strong. Personal camouflage is taught in a one-hour classroom lecture and then another one- to two-hour practical application that can be taught in budgeted “field prep” time. The class introduces the science of how objects are seen and a history of personal camouflage. The students are exposed to the use of concealment to lengthen the time it takes an adversary to detect and attack them.

Students learn to focus on the most identifiable areas of the human silhouette: the head, shoulders, waist, and ankles/boots. They learn that simple platforms can be constructed with local vegetation to obscure these critical areas. Students are instructed on harvesting plant life that matches their environment and that proper camo will require updating when vegetation wilts and discolors. In arid climates where vegetation is sparse, shredded burlap or tar netting can suffice. For snow, strips of shredded white sheet can work. The boonie cover MOLLE (Modular Lightweight Load-carrying Equipment) straps can be tied with shredded burlap and “gutless” 550 cord for vegetation tie in. Boot bands stretched across the Kevlar and secured to the Kevlar cover slits and under a “cat-eye” band create an anchor for fist- to-fist and half-sized plant clumps. A boot band wrapped around each of the shoulder straps of a plate carrier provides a similar camouflage platform. Warbelt pouches or plate carrier pockets can be wrapped with a line of shock cord or more boot blouses to create another tie-in platform to break up the waist outline. With some added plant matter, an extra set of boot blouses worn over the boots obscures the outline of the shins and boot tops.

Students also receive instruction on building a personal “ghillie blanket.” This lightweight cape is constructed from a piece of netting or sniper veil. It is designed to obscure the back and shoulders but can just as easily be thrown over a pack or fighting position. The fabric is tied in with 550 anchor points to accept plant matter as well as shredded burlap to provide an obscuring base-layer. It can be dyed or spray-painted to better match the environment and must have shoulder and waist ties so that it can be worn. The blanket can be rolled and tied to a Marine’s second- or first-line gear and is light enough to stay out of the way. It offers an enhanced level of camouflage for operations like leader’s recon, patrolling, setting in a defense, or scouting. After learning about these topics in the classroom, the practical application portion allows the Marines to go out and see this gear demonstrated. The tracking portion of the second fieldcraft class comes from the Marine Corps Warfighting Lab Combat Hunter
through a one- to two-hour practical tracking class. The final fieldcraft class is delivered to inform the students as they constantly cycle through METTT-C; tracking will very rarely be the final technique. All of this training is kept within the context that tracking is a tool to practice fire team formations used in tactical tracking. Students get a chance to learn tracking, and the execution of a lost track or employ counter-techniques such as the best times for putting up overhead concealment on defensive positions and LPOP. For fighting positions, four lashed tripods placed around the fighting hole, which can be protected with sandbags, form the basis for crossbeams. Students can then place a layer of vegetation on top for concealment.

For LPOPs, while one Marine sets security, the other sets out a similar array of tripods to construct a hide site. Students learn how concealment “roofs” can incorporate tarps for water resistance and foil survival blankets to obscure them from thermal optics. They are also shown that observation windows in LPOP hides can be thermally sealed through the use of a piece of Plexiglas, cut to fit inside of an assault pack, and fitted over the observation point in the LPOP “wall.” Students learn to construct hide sites with at least one Marine on security before occupying the hide from a concealed route. Students get a chance to see an instructor-built hide, which properly models the use of tripod lashing and concealment. Students are coached to have pre-prepared tripods ready to go out with Marines on LPOP duty, so that the latter will not to need to spend precious time wood processing and lashing when outside of friendly lines.

In teaching fire craft, the students are given historical cases highlighting the need to have tactical warming fires or fires for water purification. They are shown how to dig a Dakota fire hole. This below-ground structure hides the visible signature of flame from ground-level observers and incorporates an air hole to keep the fire oxygenated. Students learn about making a tinder bed to catch flame with a hand carved “fuzzy stick.” The tinder and flame can then be fed into the fire hole and sustained with kindling. Burning kindling (sticks thinner than a thumb) rather than fuel (larger sticks) keeps the fire at high efficiency and cuts down on smoke while still producing adequate heat for warming, cooking, or boiling water in a canteen cup. Sticks suspended in the side of the hole can be used to form a makeshift-heating platform.

With the completion of this third class, the fieldcraft curriculum is complete. The observed benefits have been numerous and encouraging. The greatest benefit is creating a mindset of confident self-reliance, minimalism, and creativity in the Marines. Starting from the first fieldcraft class through to the last, the emphasis of instruction is on thriving in adversity and thinking past simply “gutting out tomorrow until we return to the barracks.”

It is clear that education in fieldcraft creates a better prepared, more adaptive, confident, and capable warfighter who can more effectively survive to execute his assigned mission. As an instructor who has taught these techniques and watched students implement them, it is inspiring to see the spark of empowerment in the Marines when they “get it.” The examples my fellow instructors and I have witnessed are many and varied. There was the leader’s recon team that...
scouted out an enemy defense from inside the adversary’s line of fighting holes through the use of applied camouflage. Or the night attack objective rally point that was so well camouflaged, enemy patrols were ambushed at ranges within twenty meters. Or the platoon bivouac that built shelter in a rainstorm to complete weapons maintenance and get good rest before a live fire range. Each of these episodes ended with students walking away proud of their accomplishments and with confidence in their ability to thrive in the field. The Marines are inspired to tell their peers and innovate new ways to succeed in the field. There are few things that are more fulfilling to an instructor than seeing this spirit of endurance and innovation kindled in their students. This is the spirit and confidence that makes light infantry tactics and maneuver warfare possible. Furthermore, having been employed by warriors ranging from barely literate Soviet conscripts to South Vietnamese peasants devoid of any formal education, these techniques epitomize the “basics.” They require little talent and can be accomplished quickly. The skills and mindset that come from teaching fieldcraft also forms a springboard for teaching the more advanced aspects of signature management. Already at TBS, a new signature management class focused on the electromagnetic spectrum, radio discipline, etc., is being developed. In its current form, the class harkens back to the personal signature management taught to the Marines in their fieldcraft classes.

Though the above developments are encouraging, there is work to be done to sustain and expand fieldcraft education in the Marine Corps. The Marine Corps must maintain fieldcraft proficient instructors at entry-level schools. Teaching fieldcraft across the Marine Corps starts by maintaining at TBS. There is currently a fieldcraft instructor course (FCIC) that has been running several times a year at TBS. This two- to three-day course combines the classes the students receive with some enhanced instruction, including at least one overnight in the field. The current course director is the Infantry Officer Course Marines Awaiting Train-
ing Platoon Commander. To ensure proper turnover and longevity in the director seat, a fieldcraft or signature management package primary instructor should be appointed. This Marine’s responsibility will be creating instructors qualified to teach fieldcraft as well as ensuring uniformity of instruction across the school. The responsibilities of a fieldcraft package primary instructor can even be split among a pre-existing package staff (such as squad tactics, tactical planning, etc.). The fieldcraft instructors should also be responsible for advocating for the acquisition of supplies useful in teaching fieldcraft (adequate drybags/MAC sacks, Camcon bivy poles, stakes, shock cord, etc.). All incoming TBS instructors should receive some form of FCIC, and online instructional videos can be made for student and instructor reference. Other entry-level schools can reference these videos as a form of “distance education,” ensuring proper instruction at their respective schools while avoiding pulling personnel from already strained POI to attend FCIC. The Marine Corps should also explore implementing fieldcraft training at the recruit depots, Officer Candidates School, and the Naval Academy. An early education in field skills will squash bad field habits and help build a solid foundation for the “light infantry” mindset.

As Bravo Company, 2-19, prepared to graduate TBS in the summer of 2019, then-Commandant of the Marine Corps Gen Robert B. Neller came to address the Corps’ newest crop of TBS graduates. In his last address to a TBS company as Commandant, Gen Neller spoke of the challenges the graduates would face. He told the Marines that they would have to grapple with the “battle of signatures” and the challenge of “austere logistics.” He spoke about learning to hide from the adversary and “look for sign” in a dirty and confusing battle space. In summarizing the solution to these challenges, Gen Neller stated “that’s fieldcraft.” Whether he knew it or not, Bravo Company was the first full company at TBS to receive an in-depth fieldcraft curriculum, and his remarks certainly rang true with the students. Now, his successor, Gen David H. Berger, has placed his intent behind a renewed focus on forging the Marine Corps into “an elite corps of Marines.” That goal must include a dedicated effort to teach Marines the grassroots fieldcraft skills necessary to practice maneuver warfare on an individual level. Only through a focus on the individual Marine can we hope to embody the confident, adaptive, light infantry mindset necessary to thrive in coming battles.

Notes
9. A stick with numerous thin feathers cut into it, created by multiple thin slices with a sharp field knife. The thinner the feathers, the easier the wood catches spark.