The Signal team: keystone to training

by Maj. Dwight E. Lee

According to FM 100-5, "the Army's need to prepare for battle overrides every other aspect of unit missions. This urgency derives from the danger present in the world scene, the lethality and complexity of modern war, and the ever present possibility that a unit in training today may be in action tomorrow. The commander's first concern must be to order all the activities of his unit to meet his primary obligations to the Army, his unit and his soldiers: produce a unit ready to fight and win now."

All too often, we in the non-combat arms units are guilty of viewing the contents of FM 100-5 and similar publications as something written for "them", with little or no bearing on "us". Nothing could be further from the truth. I cannot think of a better way to describe the training goals of any Army unit than that expressed above. We differ only in the techniques we use to attain these goals.

Contained in the FM excerpt are two implied missions. The first and most obvious mission is that we must train up to a level that will make us ready to go into battle tomorrow. The second mission is that we must then maintain that level of training by conducting sustainment training so we are ready to go into battle *any* day.

The second mission is without a doubt the one that is most difficult to accomplish. Personnel turnover, requirements to furnish special duty personnel, shortage of training facilities, taskings to support non-mission related events, and human forgetfulness all interact to become major stumbling blocks in the path of sustainment training.

Unfortunately too many of us view these obstacles as insurmountable and fall back on the technique of "training up" to accomplish the first mission on a periodic basis, a technique that could get many of us killed. How should we train if we are to accomplish both missions? I would suggest that we must train in the same manner in which we are going to fight: train our basic fighting unit. This may mean widely diverse techniques for many units. However, for the vast majority of Signal Corps

units, and in particular Division Signal Battalions, it means concentrating training at the team level. The Signal team is to us what the rifle squad is to the Infantry and the tank crew to the Armor. It is the basic building block that we must rely upon to accomplish our mission.

The team chief is the man who spends the bulk of every day in direct contact with his soldiers. No other member of the chain-of-command can make that statement. It makes sense then to say that if there is any one individual who best knows the training requirements of the individual soldiers, it is the team chief. Once you, the training manager, have accepted this fact, your job becomes much simpler. What you have to do is give the team chief the time and resources he needs to train his team. Do not dictate how he must use every minute of his time. For example, you may believe the entire unit needs training on the cleaning of protective masks. However, six teams in your unit are totally proficient in this area. Should they waste precious training time re-learning this task, or should they be able to utilize the time on tasks in which they know themselves to be weak? The answer is obvious.

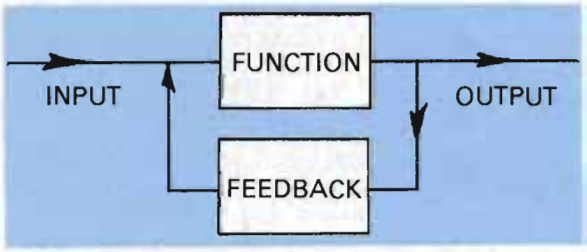
Dedication to this concept can reduce much of the boredom often associated with unit training and, more importantly, enhance the role of the team chief while focusing on known deficiencies rather than on perceived needs. Frequently, the span of control in a Division Signal Battalion goes directly from the SYSCON to the individual team. Therefore, we must train to support this concept. Nowhere is this more important than in the Federal Republic of Germany where almost every team in a Division Signal Battalion has a well defined mission and a known piece of terrain on which to perform. Frequently an E4 or E5 team chief is given an operations order that requires him to independently move his team in excess of 250 kilometers, set up a site and establish communications without any direct supervision from his chain-of-command. Again, we must train to support this concept. Make the team the focal point of your training effort. If you do otherwise you will simply miss the mark and jeorpardize your ability to accomplish sustainment training.

A typical training schedule might look like this:

Note the blocks of time titled "Team Training." During these times the team chief is free to train his team on any subject that he knows they need. The responsibility of the chain-of-command is to monitor this training to insure that it is being accomplished and that it is meaningful.

Do not draw the conclusion that the team chief is allowed to plunge headlong into the morass of training requirements to sink or swim based solely on his perception of where his problems are. You, as the supervisor of the training program, must provide him with a basic framework supported with routine, frequent, informal evaluations and less frequent formal evaluations coupled with meaningful feedback. The team chief can then utilize this feedback to better define the training requirements for his team. How you choose to accomplish this procedure is limited only by your imagination. The technique used in my unit is basically that presented by Maj. J. G. Swedlund in the Spring 1979 issue of *TAC* titled "Training Tips for Signal S-3's."

To have any degree of effectiveness, our training programs must be supported by a meaningful evaluation program. In order for an evaluation to be meaningful, it must support the type training we accomplish. If this sounds like I am talking in a circle, it should. I am! A basic model of your training program looks like this:



Where input is training time, function is what you do with the time, the output is the result of how well you used this time, and feedback is the information based on sampling that can be used to make the function more effective and thus improve the output. Sound confusing? It really is not. What it illustrates is that our feedback must have a direct bearing on the training program. Our evaluation mechanism must be geared to the type training we

DATE & DATE	HOURS	PERSONNEL	SUBJECT	INSTR
MONDAY 21 APRIL	0615 - 0700	BN	PHYSICAL TRAINING	1SG
	0815 - 1030	BN	NCO PROFESSIONALISM	PLT SGT
	1030 - 1630	BN	TEAM TRAINING	TM CHIEF
TUESDAY 22 APRIL	0615 - 0700	BN	PHYSICAL TRAINING	1SG
	0815 - 1130	A	VEHICLE MAINT	PLT SGT
	0815 - 1130	B	TEAM TRAINING	TM CHIEF
	0815 - 1130	C	GENERATOR MAINT	PLT SGT

are performing, and our training must be geared to our missions.

Therefore, if we emphasize training at the team level, we should also emphasize evaluation at that level.

There are currently two major training evaluation vehicles utilized throughout the Army. They are the Army Training Evaluation Program (ARTEP) and Skill Qualification Test (SQT). Let us examine each of these to see how well they support our efforts to conduct sustainment training.

ARTEP

The purpose of the ARTEP as stated in ARTEP 11-35 is: (1) to train/evaluate the ability of a Signal unit to reach/maintain its mission minimum combat standards, (2) to provide a guide for training objectives by specifying minimum standards of performance for combat critical missions and tasks, (3) to evaluate the efficiency and effectiveness of past training needs. A cursory reading of those purposes would probably convince most people that this is an ideal evaluation tool. I, however, am not convinced that this is the case across the board. Let me explain my misgivings.

As is the case with most Army programs, the ARTEP was conceived primarily with the combat arms in mind. During peacetime, it is impossible for them to actually perform their primary missions. Therefore, in order to be able to evaluate the effectiveness of their training programs, they must manufacture some artificial vehicle/environment for an evaluation. The ARTEP seems to be satisfying this requirement (for them).

First, in the Signal Corps we are not faced with the same dilemma as our combat arms brethren. We *can* perform our mission and thus receive sound evaluation in the absence of warfare. Any well-conceived FTX or CPX will do. I would suggest that we do not necessarily need the full ARTEP concept as developed for the combat arms.

Second, in spite of all the material that you read about the ARTEP concept representing a revolutionary change in the Army training system and the fact that it is not a replacement for the Army Training Test (ATT), it is not universally perceived as such. In too many cases it is still looked upon as a *test* in which outside evaluators descend on a battalion to pick it apart, and the commander's reputation (and maybe career) is placed on the line. Because of this perception, the validity of many ARTEP evaluations may need to be questioned. How many of you have been either privy to or a participant in a conversation that went something like this: "Hello John, this is Bill. How is everything going in your battalion these days? Really! That is pretty much the case here also. Say, I'm getting some pressure from division about not having had an externally administrated ARTEP in over a year. Do you think you could bring down a team of your officers and senior NCOs during the June-July timeframe to ARTEP us? You can? Great! In fact, why don't I return the favor next time you are due?"

There may be nothing wrong with this, but the great potential for back-scratching that exists is dangerous to the validity of the evaluation. "When was the last time your unit received an external ARTEP?" is a question frequently asked in a division. If you can answer with a resounding "never", you may be closer to fulfilling the intent of the ARTEP than you realize. Maybe Infantry and Armor units need outside evaluators. I contend that Signal units do not. Signal units receive all the external evaluation they need every time they go to the field with their subscribers. You may argue that the only thing the subscribers address is how well you communicate, but that is not really the case. They evaluate how well you perform C-E maintenance, how well you provide logistics support, how well you provide motor maintenance, how well you provide COMSEC logistics, and the list goes on and on. How do subscribers evaluate all this? Very simply. If you do not provide all this and more they do not talk.

Another of my misgivings concerns the "subscriberless" ARTEP. I have never been able to understand how a Signal Battalion can be evaluated on how well it provides communications when there is no one out there trying to communicate. Sure, we can talk switchboard to switchboard, RATT rig to RATT rig and so-on; but what has that really told us? The difference in communicating in this mode and in *really* communicating with your full complement of subscribers is as different as daylight and dark! The pressure applied by a CG who wanted to talk to a brigade commander for the past three hours and has not been able to do so and who is totally unsympathetic to your problems cannot be simulated. You need the real thing to make the entire event meaningful.

Do not get the impression from these misgivings that I believe the ARTEP to be without value. What should be understood is that it is not to be used blindly as a miracle training evaluation tool. If poorly handled, it can be worthless.

Finally, I said earlier that in order for an evaluation to be meaningful it must support the type training we accomplish. ARTEP 11-35 is structured to provide evaluations at four levels; battalion, company, platoon, and team/ section. If you concentrate your training at the team level, place the bulk of the resources that you dedicate for evaluation at that level. It is there that you will get the highest return for these resources in the form of meaningful feedback. The Subunit Evaluation (SUE) concept contained within the ARTEP is an excellent vehicle to accomplish this type evaluation. The only potential pitfall associated with the SUE is that one strong team member can often carry a team, thus hiding possible training deficiencies among the other members. Another evaluation must be made to cover this area.

SQT

The other major evaluation tool available to the Army today is the Skill Qualification Test

(SQT). The SQT was designed to evaluate the ability of individual soldiers to perform individual tasks. It was envisioned to be a hand-in-glove fit with ARTEP, based on the theory that if the individual soldiers cannot do their jobs, the unit will not be able to meet the standards required. So we use the SQT to check on how well we have trained our individuals and the ARTEP to see how we have trained our units. This all sounds great, and in theory it is. Then someone came along and built a massive stumbling block in the path of using the SQT as an effective training evaluation/management tool. "They" decided to tie it to personnel management, and this completely changed the rules of the ball game.

Now what could have been an efficient means of providing an objective snapshot view of the individual training status of a unit has had a stigma attached to it by linking it to promotions and reenlistment status. I cannot think of a better means to jeopardize a training evaluation device.

Many commanders now perceive the SQT as an event to "train-up" for in order to look out for the best interest of their soldiers. These interests translate to keeping their soldiers eligible for promotion and reenlistment. If they happen to be well trained as an adjunct to this, that is an added benefit. The unit's training status is not the forcing function.

What the SQT has effectively done is get the commander caught in a tight predicament. He can look at the SQT as a training tool, train his soldiers on all aspects of their jobs and take the chance that they will do well on their test; or he can "train-up" for the limited subset of tasks in the SQT notice to insure that his soldiers fare well on the personnel side of the house and take the chance that they may become fully trained in the process. Neither is a particularly desirable choice.

The SQT is presently showing the tendency of slipping into the mold of the old MOS test, that is being primarily oriented toward personnel management. Maybe this is not really bad, but if this is to be the case, let us acknowledge it as such, staff our units to administer it, and let it proceed. Attempting to rely on it as a training evaluation tool may cause many people to be grossly misled concerning their individual training status.

Team evaluation

If I am not going to use SQT results as a true means to evaluate training, and if you accept my earlier premise that much of the ARTEP is focused at the wrong levels you may be asking, "Just how does this guy propose to evaluate training?" Let me explain the technique used in the 8th Signal Battalion.

We call it Team Evaluation and it was mentioned under the name Team Testing in Swedlund's article mentioned above. It requires two weeks twice a year to administer. The change from *testing* to *evaluation* was made as a subtle transition from the pass/fail implication associated with testing to the most qualified/least qualified suggestion of evaluation. The emphasis is placed on having all teams fully qualified to perform their MOS and Common Task Skills. Throughout this evaluation, the team chief is still the key individual. It is on his shoulders that the responsibility for his team's performance rests. It is his reputation as a leader and trainer that can be made or broken. After being involved with six of these events, I can say unequivocably that the majority of the team chiefs respond superbly to this challenge. They welcome

TEAM EVALUATION WEEK ONE

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY
HHC	VEHICLE MAINTENANCE INSPECTION	ALL COMMON SKILLS		PT TEST
A	ALL COMMON SKILLS	SIGNAL MAINTENANCE INSPECTION ALL 145'S & 142'S	PT TEST	VEHICLE MAINTENANCE INSPECTION
B	SIGNAL MAINTENANCE INSPECTION ALL 145'S & 142'S	PT TEST	VEHICLE MAINTENANCE INSPECTION	ALL COMMON SKILLS
C	PT TEST	VEHICLE MAINTENANCE INSPECTION	ALL COMMON SKILLS	SIGNAL MAINTENANCE INSPECTION ALL 145'S & 142'S
ALL COMPANIES	1300 HOURS M60 M203 DECON NCO	1300 HOURS FIELD SANITATION	1300 HOURS SURVEY & MONITOR	ALL DAY WAKE UP

ILLUSTRATION 1

the responsibility and thrive on the thrust that develops as a result of a job well done.

Let me now elaborate on the mechanics involved in accomplishing this evaluation. The first week is devoted to evaluating common skills (see illustration 1). During this week every soldier in the battalion is evaluated in weapons proficiency, first aid, NBC, basic communications and vehicle maintenance procedures. In addition, he takes the semi-annual physical fitness test. Each soldier goes to every test station with his team chief or with his immediate supervisor in cases where the MOSs are not structured as teams (71L, 76Y, etc.). Also in this week the soldiers are given a one hour written test on general military subjects. This test serves the dual purpose of evaluating their knowledge and familiarizing them with taking written examinations (which can pay a large dividend during the written component of the SQT). A poll of soldiers who recently completed their SQT indicated that almost every one believed they had benefited by the experience gained in taking these written exams.

Also in week one, each team will have its vehicle and generators inspected by mechanics under the supervision of the battalion maintenance officer, and the electronics maintenance shop inspects the signal equipment. The team will also participate in a mounted navigation course. The objective of these checks should be obvious. What good is a team that: cannot find its way to a site, breaks down enroute to a site, cannot apply power to his equipment, or has inoperative signal equipment. If we do not maintain this total system approach, we are short-changing ourselves.

The system is an effective means to determine how well each individual is trained. Although they go to each evaluation station as a team, they are evaluated as individuals. No one strong member can carry the team through.

The MOS portion of the evaluation is administered in week two (see illustration 2). This is done much in keeping with the team/section evaluation in ARTEP 11-35: each team is required to perform its basic MOS tasks according to the battalion's defined conditions and standards. In almost every case, our standards are more demanding than those published. Each evaluator has an evaluation sheet that contains the instructions he gives to the team as well as a place to record the evaluation for each task and subtask.

Any time an evaluator gives a "no go" to a team, he must explain to the team chief why it is given and also write an explanation sheet. All sheets

TEAM EVALUATION WEEK TWO

	MONDAY		TUESDAY		WEDNESDAY		THURSDAY	
	TESTING	CONTROL	TESTING	CONTROL	TESTING	CONTROL	TESTING	CONTROL
AM	5 AN/TRC-145 2 36C TM 1 TSC-76 1 MSC-29	2 GRC-142	5 AN/TRC-145 1 36C TM 1 TSC-76	2 GRC-142	1 MSC-29	4 AN/TRC-145 1 SWBD TM	2 GRC-142	1 SWBD TM
CO A								
PM	5 AN/TRC-145 2 36C TM	2 GRC-142	1 36C TM	2 GRC-142	2 GRC-142 1 MSC-29	4 AN/TRC-145 1 SWBD TM	2 GRC-142	1 SWBD TM
AM	4 GRC-142	1 SWBD TM	3 GRC-142	1 SWBD TM	5 AN/TRC-145 1 36C TM	2 GRC-142	1 36C TM	2 GRC-142
CO B								
PM	2 GRC-142	1 SWBD TM	5 AN/TRC-145	1 SWBD TM	2 AN/TRC-145 1 36C TM	2 GRC-142	1 36C TM	2 GRC-142 4 AN/TRC-145
AM		3 AN/TRC 145	3 05B (RT) 1 TSC-58 1 GRC-142 1 36C TM 1 TSC-76		3 TRC-113 4 GRC-142 1 TSC-76 1 36C TM 3 AN/TRC-145		2 AN/TRC-145 4 TRC-113 1 36C TM	
CO C								
PM		3 AN/TRC-145	2 05B (RT) 2 GRC-142 1 36C TM		3 TRC-113 1 36C TM		2 AN/TRC-145 1 36C TM 2 AN/TRC-113	

ILLUSTRATION 2

		M-16					NBC			1ST AID			PMCS	CEOI			TOTAL MOS				LAND NAV.			PT TEST SCORE	
NAME	TEAM #	ASSY	LOAD	LAW	CLAYMORE	MASK	NERVE	BLOOD	DECON	HEAT	COLD	BURN	PMCS	2404	CEOI	RADIO	GMS	GO'S	NO GO'S	%	GO'S	NO GO'S	%	GO	NO GO	
SGT SMITH	A-230	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	91	16	0	100	9	0	100	G		412
SP4 JONES	A-230	G	G	N	G	G	N	G	G	G	G	G	G	G	N	G	82	13	3	81	.....	.....	.....	G		480
PVT ROBERTS	A-230	G	G	N	G	G	G	G	N	N	G	G	N	G	N	N	55	9	7	56	.....	.....	.....	G		320

ILLUSTRATION 3

are then turned into the S-3 for review, and they will eventually be given to the company commanders.

The final step in completing a successful team evaluation is to process all the data accumulated and provide it to the companies in the form of meaningful feedback. Each company is given the evaluator's sheets for the MOS evaluations, each individual's common task scoresheet, and a company profile for common tasks and for each MOS. Each team chief is given a result sheet for his team (see illustration 3).

The company commander (or team chief) can then analyze these results, decide where the weak areas and weak individuals are and take corrective action.

It should be mentioned that the program is dynamic. At the end of each evaluation cycle, there is a complete review by the battalion staff and company commanders. Recommendations are made to add, delete, or modify. Since the SQT is now a fact-of-life for signal units, a review of the test notices for each MOS is included in this planning process. Not only are the tasks modified, but the conditions under which they are performed are also varied. Teams are now being required to perform some tasks during hours of darkness or while employing full NBC protective measures. These changes are all made in the interest of providing the best possible training and training evaluations to the teams.

Does the system work? Obviously, I think so, along with many other people who have been associated with this battalion over the past four years. However, providing objective results for a training program and its associated evaluation is almost impossible. The only real proof comes when your subscribers are satisfied with the services you provide. One example of meaningful proof we received came after the NATO FTX-Constant Enforcer in the autumn of 1979. The Commanding General of the 8th Infantry Division made the statement: "Communications were superb! At no time during the exercise was the operation of the Division jeopardized or slowed by any lack of communication. You guaranteed the success of the exercise."

Our success was accomplished through adherence to the training techniques and evaluation methodology presented here, coupled with a very conscious effort to avoid "training-up" for any single event. As an interesting supporting comment, I can tell you that every Signal MOS in the battalion that took the 1979 SQT established a mean score from 2 to 25 points above the Army mean. Does this system work? I am convinced that it does.

Before any of you rush to implement this program in your unit, a word of caution should be given. This is obviously an evaluation given in addition to those mandatorily imposed on us. We must still conduct our SQT s. Our unit has been successful in convincing our division that a battalion ARTEP serves little purpose, but you may still have to go through it. I point this out because the program requires a sizable investment of your S-3 section's time as well as four weeks a year from everyone. That is not a cheap price, but it accomplishes what we must do to have a TOTAL training program. It orients our evaluation to our training methodology and provides us with well-trained soldiers capable of performing their prime mission 365 days a year.

Maj. Dwight E. Lee, who is assigned to the Armed forces Staff College, is a graduate of West Point. He earned his MSEE from the University of Arizona in 1973. Lee is a veteran of twelve years military service, including one year in Vietnam.