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Toward a Combined Arms Training Center

Modern weapons systems have changed the tempo, the lethality, and the range of warfare. As U.S. Army divisions trained for their foreseeable wartime missions, they have increasingly felt constrained within the land presently allocated to them ~~for training~~ at or near their peacetime station. ^{Our} An army must train as it expects to fight. It must have leaders who in peacetime exercises learned to ^{have} gauge ^{to} terrain, estimate weapon ranges, and ~~acquire confidence in dominating~~ ^{to deal confidently with} the heightening challenges of time and space. It must have maneuver and fire support units which have demonstrated the capability to move responsively and swiftly, to emplace, fortify, and camouflage, and to do so at night as well as in the day. It must be able to contest the electromagnetic spectrum, to achieve superiority in that invisible domain as surely as over ~~the~~ ground in front of ^a ~~any~~ battle position. Virtually everywhere it is stationed, the U.S. Army is hard pressed to provide such training. Land, ^g which ~~was~~ ^{was} once ample for the training of divisions, is today scarcely adequate for ^{exercising} brigades. And in most places where the Army is stationed, it is difficult, if not impossible, to train aviators in nap-of-the-earth flying, or ^{to expose} any element of the command ^{to simulated} in electronic warfare. The Federal Aviation Agency, the Federal Communication Commission, the Environmental Protection Agency, and other agencies or groups, public and private, operate to restrict the Army's use of its reservations, and the air space overhead. ^{But} The Army's posture ^{at current stations} ~~in this~~ ^{TRADOC} respect is the subject of a separate discussion. The purpose of this paper is to describe the U.S. Air Force approach to the problem of training

MMW 119

Footnote

** The USMC
Tactical Warfare Assessment and Evaluation*

south of Fort Irwin. ~~The~~ Tactical Warfare Assessment and Evaluation

system (TWAES), does not incorporate MILES or anything like it, and works best for maneuvers afoot. But TWAES demonstrates that technology can handle the complex situations of ground warfare.]

Thirdly, some combination of MILES and ~~PLRS~~ ^{plus} the sort of instrumentation ^{and simulators} that

^{TAC uses in ACMI} the Air Force ~~has for its AICM force at Wendover Hill~~ should permit

^{portraying} ~~the simulation~~ of the enemy electronic and air defense environments, ^{and} ~~working out~~ ^{procedures for cooperative} and the ~~monitored~~ utilization of U.S. Army and U.S. Air Force aircraft ^{in combat} against the high threat which would exist on the forward edge of the

enemy's battle area. ^{For example,} ~~the~~ cooperative suppression, and Army designation of targets or control of air strikes, could be ^{TAC} ~~practiced~~ ^{acted out.}

Fourthly, it would be ^{possible} ~~important~~ to reproduce the ^{offensive} EW capability of Soviet-equipped

forces so as to challenge thoroughly the electric countermeasures employed by U.S. forces, and to cause them to integrate ^{EW with all} ~~fire~~ ^{and} maneuver.

*Must
TRAIN*

Equipped as outlined above, we could conduct a period of training at Fort Irwin for combat ~~maneuver~~ battalions which might contain four modules:

Module 1: Intelligence. Assemble at Fort Irwin a pool of ^{Soviet-type} ~~OPFOR~~ equipment, and bring together the very best demonstrations of ^{that} equipment in use. (Actual, or on television tape, together with miniaturized radio-controlled equipment.)

Module 2:

An EW module. With simulators or actual equipment we should demonstrate to participants the capabilities of Soviet-type gear to locate, to identify, to listen, and to jam US electronic emitters of all sorts.

Module 3:

An engagement simulation module. On an instrumented range we should pit force on force, with strength ratios appropriate for the mission (e.g., three to one on defense, one to three for the attack). Arrangements should be sufficiently flexible to permit exercising at least a battalion, with options to handle forces as large as a division. In all cases, through use of a simulation ~~similar to~~ ^{like} the Combined Arms Tactical Training Simulator (CATTS), it should be possible to exercise a headquarters one echelon above that which is actually being played on the ground.

Module 4:

A live-fire module which might present for ground forces a target servicing problem of delay or defense, involving the use of attack helicopters and tactical air, against target arrays representing the first and second echelon of ~~the~~ ^a breakthrough attack, with ~~the~~ ^{its} associated EW. ~~Arr-~~ ^{or}

~~Similar~~ live-fire exercises could be built around the same target array, but involving ^{a limited objective} counterattacks ~~or attacks~~ ^{with a different array, an attack could be staged.}

We may need a fifth module for attack helicopters, so that they could do advanced nap-of-the-earth flying, target acquisition, and engagement against realistic target arrays and EW simulators before they are engaged in modules three or four.

Obviously, such exercises would be expensive to conduct, and would entail ^{large outlays} ~~more job days~~ for troop transportation and support. ^{Probably, about} ~~Approximately~~ 10

working days would be required to take advantage of the modules sketched

in the foregoing. Assuming therefore that the facility would be used by active forces arriving in relays, the facility ought to be able to handle 24 brigades ^{annually,} allocating each a two week period, or provide one division one month. The Active Army should ~~contract with~~ ^{assume that} the California National Guard ^{that they will be provided} ~~to provide them~~ training equivalent in man-days to that they are presently conducting, with the added advantage of being able to use the ^{new} instrumented ranges, and other training facilities.

The implications for facilities at Fort Irwin would be principally a build-up in maintenance capabilities, so as to handle pools of additional combat equipment. Sufficient gear would have to be brought in to support ^{at least} one brigade's worth of combined arms maneuver. ~~Drawn from war reserve stocks,~~ this equipment should be drawn from storage as gear would be drawn from one of the storage points in Germany. After use, it should be returned to ^{its} "as stored" condition, and turned in for use by the succeeding unit. Additional flexibility could be generated by providing ^{a second or third brigade's worth of equipment} to be used in rotation, or to meet occasional requirements for ^{multi-} ~~two~~ brigade maneuvers. ^{Two or more} ~~Second~~ set of equipment would facilitate maintenance, and ease the administration of withdrawal and turn-in.

While the participating troops would obviously come from the armored and mechanized divisions of FORSCOM and Seventh Army, TRADOC also needs access to this facility. Training for officers and enlisted men who must man

our armor and mechanized vehicles is severely constrained by the available land at Fort Knox and Fort Benning, where such training has traditionally taken place. Officers and NCO's in TRADOC service schools might be flown in to Fort Irwin for gunnery practice, and to serve as controllers for the maneuvers. Assuming the instrumented range took most of the judgment away from the controller function, and confined his contribution to that of keeping participants honest, resetting MILES equipment on casualties, and otherwise insuring smooth operation of the simulation, these young leaders could ^{hereby} be afforded a unique opportunity to watch an actual force in the field coping with advanced tactical problems. ^{TRADOC trainees} Soldiers undergoing recruit training in mechanized infantry or scout MOS's could be flown in for gunnery and maintenance training in the field. Conceptually, these troops ^{could} ~~would~~ be in OSUT companies, and would be flown into Irwin for their penultimate week of training. (This type training could be readily conducted at Dugway; a decision on ^{the choice between the two} ~~that~~ should be made following an analysis of the loading on Fort Irwin.)

As a general concept of operation, Fort Irwin could best be employed as ^{a battalion} ~~an Italian~~ training ground. Somewhere in about the sixth month of ^{his} ~~each~~ command, ~~the~~ battalion commander should take his battalion to Fort Irwin. This would provide for a year or more of time in command in which to set right the training deficiencies discovered in the course of the Irwin experience, ^{and give maximum payoff in readiness.}

Fort Irwin should be a TRADOC post for the following reasons:

- a. TAC learned early in its Nellis experience that ^{to} the degree to which the exercise was considered as an operational readiness test, to

that degree its training value was attenuated. Commanders tended to use "safe", wooden tactics, and pilots followed suit. Everybody paid more attention to doing the "right thing", than reacting to the threat. TAC holds that the experience should be considered training, and only training, if full return on investment is to be realized. Accordingly, having TRADOC rather than FORSCOM run the post would ~~make sense~~ ^{remove the OATT threat.}

b. ^{The} Post ought to serve USAREUR as well as FORSCOM. Having TRADOC operate ^{it} the post may facilitate relations with the two other MACOM principal users.

c. TRADOC could collect high density data from ordinary, day-to-day troop operations which would shed light on tactical concepts, organizations, weapons systems, and tactics. If we are careful to establish automated procedures for collecting such data, analyzing and retrieving same, we ought to be able to learn a great deal about the Army that we cannot now know. Every round fired at Fort Irwin ~~would~~ ^{should provide stochastic data to} help us build our equivalent of an AMSAA curve. Every maintenance deficiency, every part supplied, could amplify ^{information} available to DARCOM and TRADOC to estimate training deficiencies and materiel insufficiencies.

d. The instrumented range and the related critique equipment should be considered a testbed for developing training technique^A which can be exported to the division posts. TAC has discovered that base commanders are now building ranges like those at Nellis so that pilots can train at home station under the conditions found to be efficacious in RED FLAG. There is even talk of another ~~testbed~~ ^{ACMI} at Eglin Air Force Base. We should

view Fort Irwin ^{as a festival} to learn how to train with advanced techniques, which can then be hardened and packaged for broader use throughout the Army. For example, we ought to be able to learn at Fort Irwin ^{improved} ~~advanced~~ maneuver control techniques which would enhance the value of traditional maneuvers such as REFORGER. Moreover, we ought to be able to devise instrumentation packages which would increase the usefulness of severely constrained training areas like Grafenwohr and Hohenfelds.

e. Close cooperation with TAC in the actual employment of air and ground together offers the best opportunity for working out joint procedures which will stand up in combat. Rather than seeking to right a commonly agreed doctrine, we should simply go out and find out how to cooperate with the Air Force to designate targets with laser, to bomb by beacon or radar or close support, to control air strikes from tanks or scout helicopters, to conduct joint anti-aircraft and ECM operations, and to plan such operations as we will have to plan them in battle. All of this is TRADOC's sphere, our responsibility for embedding in US Army doctrine, infusing into the force, teaching in our schools, and otherwise insuring that what is learned at Nellis and Fort Irwin becomes the property not of one MACOM, but of the entire Army.

What is to be done? A task force headed by DCST, but with representation from the Engineer, the DCSLOG, the DCSRM, the DCSORI, and CD put together a proposal for the Chief of Staff of the Army recommending his adoption of this plan. The proposal would take the form of a written PARR submission, with cost estimates, and a briefing. The objective would be to get to the Chief of Staff of the Army not later than mid-January, with a briefing which had already been presented in USAREUR and in FORSCOM, together with their comments.