

CARDINAL POINT II

Excerpt from Report of Division Commander, 1978

CARDINAL POINT II (CPII) encompassed the 8th Division's FY 1978 training evaluations, and took place during the summer of 1978, largely on "maneuver rights" land surrounding a German training area within the division's garrison region, but using the ranges of the latter. Seven sequential evaluated Field Training Exercises (FTX) took place, each extending day and night over ten days, each for a brigade of two battalion Task Forces--one tank battalion and one infantry battalion, cross-reinforced. To exercise the division's organizational flexibility, the brigade headquarters deployed was usually one other than that to which the battalions were attached in garrison. Division controller teams aided the brigade in portraying the tactical situation, assuring safety, and conducting evaluations. The sequence of key events for CPII is shown in Fig. 17.

PF6, 1978

Day	Tasks
1	<p>Alert</p> <p>Upload as for war</p> <p>Precombat inspection*</p> <p>Movement (by road) to forward assembly area</p> <p>Form combined arms task forces</p> <p>Receive order; troop leading procedures*</p>
2 and 3	<p>Conduct two-day field exercise in defense*</p> <p>Occupy successive positions*</p> <p>Plan fires and maneuver*</p> <p>Maintain security*</p> <p>One Company Team selected to construct strongpoint*</p>
4 through 7	<p>For Task Force Commanders, staffs, and Company Team Commanders: Hybrid battle simulation, 4 battles*</p> <p>For platoons, sections, and TF support elements: FTX, live fire and TES*</p> <p>Company Team at strongpoint continues construction*</p>
8	<p>Reassemble battalions; maintenance</p> <p>Leaders critique strongpoint*</p>
9	<p>Officers conduct cross-country navigation exercise*</p> <p>NCOs march battalions to home station</p> <p>After-operation maintenance</p>
10	<p>Post-exercise inspection*</p>

* Divisional evaluation

Figure 17 Sequence of Events for CP II

On Day 1, the unit was required to upload a wartime issue of ammunition, represented by boxes of appropriate cube and weight. Then followed three operational phases: rehearsal of wartime deployment and exercises in tactical troop leading, evaluations of combat proficiency, and further exercises in movement. Ordered "forward," the battalions had to cross a major river, and march by road to an assembly area, cross-reinforce, and then move into position on unfamiliar terrain for two days of occupying successive positions for defense and delay. Figure 18 (below) portrays the second phase, a four-day period in which the two Task Forces were divided among three different activities: (1) a battle simulation for the two Task Force command groups and their company team commanders, conducted under control of a brigade commander, (2) an extensive evaluation of small-unit training, a series of platoon exercises at 20 different locations using both live fire and TES; and (3) a FTX for a company team actually constructing a strong point. In the third phase, units returned to garrison under orders that stressed cohesion and teamwork.

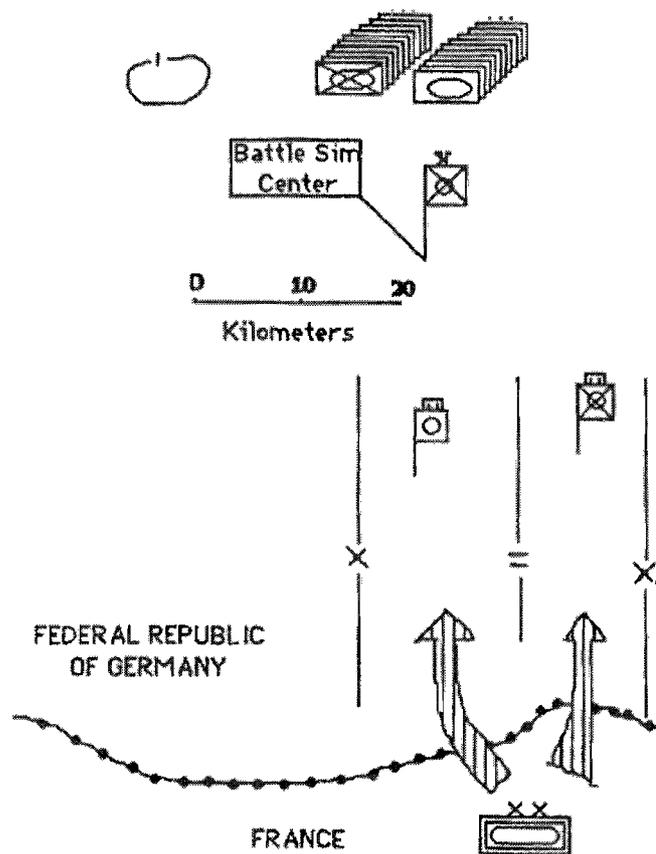


Figure 18. Battle Simulation Phase of CPII

The battle simulation phase extended continuously for 96 hours, based on a scenario in which an OPFOR division drives north out of France toward the brigade that has taken up position as covering force for the division. Four battles then ensue, a defense against a hasty OPFOR attack, then a defense against a deliberate OPFOR attack, followed by U.S. reinforcement, a counterattack, and pursuit. The exercise combined use of actual terrain with notional forces on a congruent map board, represented down to individual armor-antiarmor and indirect fire weapons, headquarters, and logistic elements. OPFOR were controlled by a team of officers from division intelligence, and friendly elements were handled by the Company team commanders, according to the orders they received from their Task Force command group. Combat outcomes were determined using a division-modified version of PEGASUS. Task Force command posts deployed within their assigned zone and displaced realistically, fully camouflaged as they would be in wartime, all radio nets operational. Within each command post there was one specially trained officer-observer, whose task it was to note intra-staff transactions.*

Pre-battle troop leading, including reconnaissance, took place on the ground, but when the company team commanders had received their orders and completed their

* Olmstead, J.A., Elder, B.L., and Forsyth, J.M., *Organizational Process and Combat Readiness: Feasibility of Training Organizational Effectiveness Staff officers to Assess Command Group Performance*, Human Resources Research Organization, Alexandria, VA, IR-ED-78-13, 1978. Cf., Barber, H.F., and Kaplan, I.T., *Battalion Command Group Performance in Simulated Combat*, ARI Technical Paper 353, March, 1979; Barber & Kaplan, *Training Battalion Command Groups in Simulated Combat: Identification and Measurement of Critical Performances*, ARI Technical Paper 376, June 1979.

reconnaissance, they, together with personnel representing the Combat Trains for logistical inputs, were flown to the Battle Simulation Center where they arrayed elements of their commands, weapon system by weapon system, on a 1: 10,000 game board. Thereafter, they "fought" a free-play battle against OPFOR. The team commanders were linked to their Task Force command post by radio, reported developments in the situation to the command group, and reacted to its orders. Some Task Force commanders went forward to confer face to face with one or more of their Team commanders during battle, in which case the latter left the board, and flew to rendezvous on the ground.

The timing of battles was left to the Brigade Commander in his role as Exercise Director. Clock time usually equaled exercise time, but the Exercise Director (Brigade Commander) could at will advance the situation rapidly. He was allowed to halt action, and even direct a restart if he chose to do so in the interests of more effective training. Moreover, the battles were designed to be of unequal intensity and difficulty for the participants. The controllers themselves rated the first battle the least demanding of the Task Forces, and the third battle the hardest; following are indices of controller-assigned difficulty:

Battle 1: 1.00 **Battle 2:** 1.44 **Battle 3:** 1.73 **Battle 4:** 1.29

Incorporated in the exercise were a number of U.S. weapons which the division expected to receive in the year ahead, but with which none of the command groups had previous experience: e.g., artillery-delivered mines, and thermal sights for tanks, for antiarmor weapons, and for artillery forward observers. In some instances, command groups had to school themselves on the characteristics and employment possibilities of these novelties, just as they might were the unit to receive a newly-fielded system amid an actual battle. (We considered, but rejected in the interests of other training goals, injecting into the simulation an OPFOR Weapon X, unknown equipment like a new armor suite for their main battle tanks, to probe whether the U.S. forces could detect and counter the new materiel.)

After each battle, play was suspended and an after action review was conducted. The Brigade Commander led a discussion for all participants, including the board controllers, asking what went operationally right or wrong in the course of the action. Then the officer-observer who had been in the Task Force command post privately briefed his Task Force commander on his observations of the functioning of the command group. Time was also made available to the Task Force to concert plans for improving their performance on the next battle.

Improve they did. A fairly elaborate evaluation organization was in place to record changes in the performance of each participating command group, supervised by a team of scientists from the US Army Research Institute for the Behavioral and Social Sciences (ARI), and the Human Resources Research Organization (HumRRO). These adopted two independent measures of effectiveness (M.E.): one was a military scale (Military M.E.) which rated effectiveness in terms of mission accomplishment, ground area controlled, resources remaining at battle end, and force exchange ratios; the second was an "organizational effectiveness" scale (OE M.E.) which rated the process, or interpersonal relations, within the command group in terms of reality testing (sensing, communicating information, and ability to learn from success/failure to modify the process), adaptability (decision-making, coping with changes in the situation, and transmitting decisions, orders, and other implementing directions), and integration (actions to compensate for disruptions in the process, or to stabilize it). By both M.E., and according to recorded judgments of interviewed participants, effectiveness advanced significantly throughout the four days, from battle to battle. The data were internally consistent: the scores using Military M.E. correlated well with scores using OE M.E., and both moved upwards as the exercise progressed. "Learning curves" were recognizable, and these had evidently not yet reached the point of diminishing return: a fifth battle would probably have produced further improvements. In reporting on outcomes, the battalion command groups, not otherwise identified, were divided

into six upper-half performers, and six lower-half performers, using the OE M.E. Figure 19 shows these results.

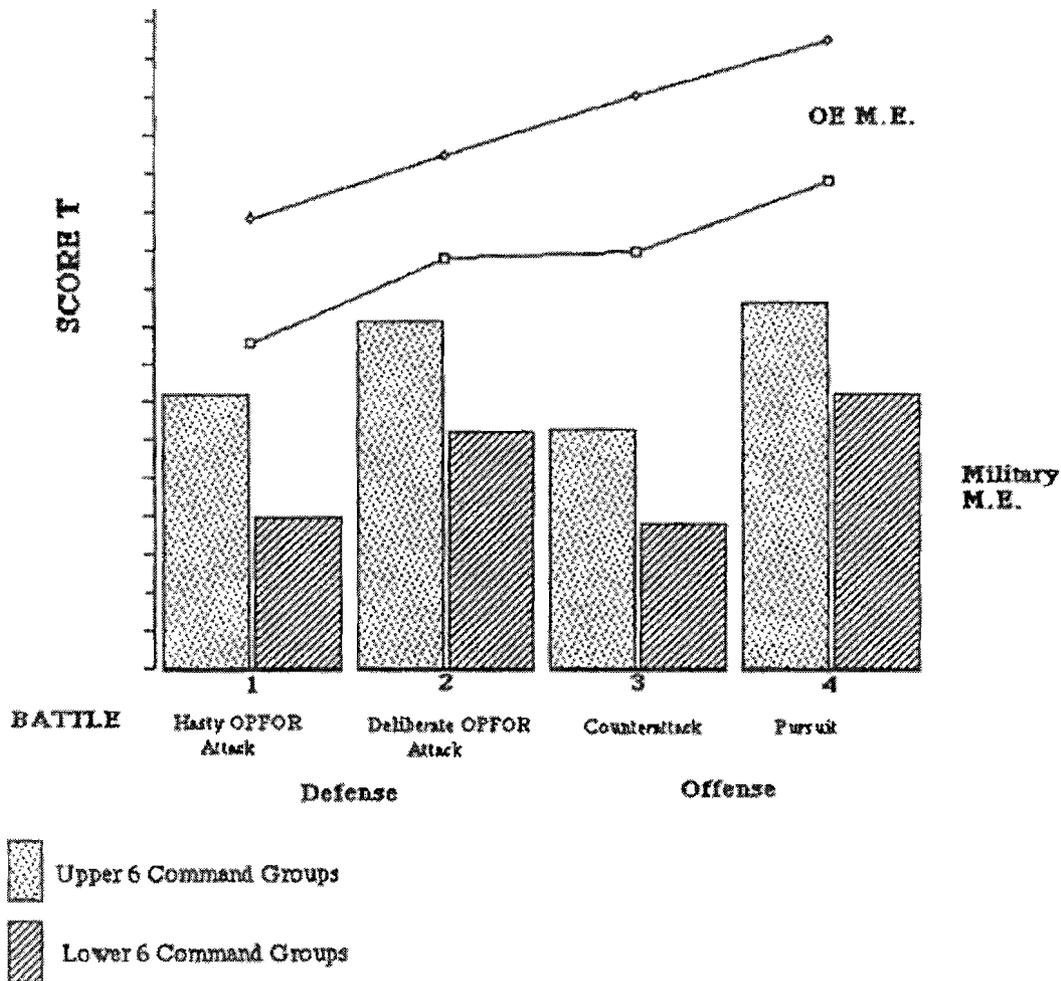


Figure 19. CP II Battle Simulation Evaluations

These outcomes occasioned some surprise among the command groups at brigade and division. In the first place, all the participating battalions had known for at least six months what tasks, conditions, and standards would figure in CARDINAL POINT II.*

While there were differences among them in organization and equipment, they were all well-practiced in cross-reinforcing, in operating as Task Forces, and in exploiting the potential of each weapon system in the division. Brigade and division both reported them all as having the same high readiness. Moreover, all twelve battalion commanders had been selected by a Department of the Army Command Selection Board, and they were remarkably alike in age, experience, schooling, and previous efficiency ratings. But during the CP II Battle Simulation, marked differences became evident among those commanders in their ability to lead in battle, and in the effectiveness of their command groups.

* Letter, Headquarters, 8th Infantry Division, 9 January 1978, "78 Divisional Evaluations per ARTEP 71-2—CARDINAL POINT II." The name derives from this notion: "...will serve to orient our professional compasses both over the next six months as we prepare for it, and afterwards, when we can address diagnosed weaknesses in our FY79 training."

The scores of battalion command groups for Battle 1, before the first after action review, and before opportunity to rectify egregious error and omission, probably fairly depicts their state of readiness as they entered the exercise. The OE M.E. improved fairly steadily from Battle 1 through Battle 4, but the Military M.E. regressed between Battle 2 and Battle 3 as the mission shifted from defense to offense —understandably, since offense had theretofore received little emphasis in divisional training overall. The change in scores from Battle 1 through Battle 4, reflecting experiential learning, cumulative feedback and rectification, measures the overall ΔT from the four days of battle simulation. Figure 20 summarizes these results by dividing scores for Battle 4 by those for Battle 1.

Military M.E.	Upper Half	1.35
	Lower Half	1.82
OE M.E.	Upper Half	1.94
	Lower Half	3.68

Figure 20. ΔT as Factor Battle 4/Battle 1

Except for the command groups rated by the Military M.E. in the upper half, all ratings show an approximate *doubling of effectiveness*. Gains in effectiveness, whether measured by the Military or the OE M.E., were much more pronounced for the less effective performers. Nonetheless, the spread among the participants remained significant; as Figure 21 shows, "lower half" command groups finished Battle 4 about where "upper half" command groups finished Battle 1.

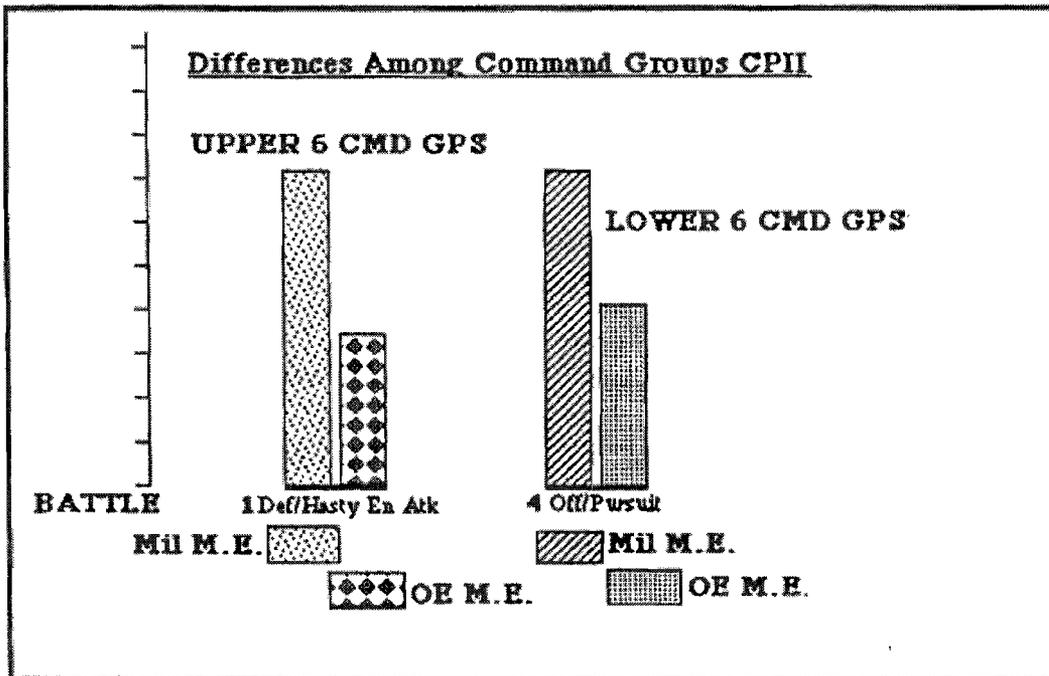


Figure 21. Differences among Command Groups CPII

The largest measured differences among command groups were Military M.E. ratings on Mission Accomplishment, Area Controlled, and Force Exchange Ratio, all performances central to successful implementation of U.S. Army doctrine for winning in battle against foes superior in numbers. Command Groups that were rated high by organizational effectiveness measures (OE M.E.), performed well by operational measures (Military M.E.). Being enabled thus to perceive differences in effectiveness among these command groups was, in itself, a signal contribution to the readiness of the division, informing its commanders where and how to act to ameliorate T in subsequent training.

I personally had expected the battle simulation to show significant differences in effectiveness among my battalion commanders and their staffs. At TRADOC, I had seen reports from over forty battalion command groups of battalions stationed in the United States evaluated by the Combined Arms Tactical Training Simulator (CATTS) at the U.S. Army Command and General Staff College (USAC&GSC), among whom there had been a substantial spread in effectiveness. One of the statistics I used to cite from that era compared a "qualified command group" with an "unqualified command group" (those labels were my own, not used by the CATTS controllers or USAC&GSC) both of whom chanced to encounter the same size enemy force on identical terrain. In both instances, the OPFOR had a 4:1 advantage in numbers. The "qualified command group" led its unit to victory in the ensuing battle, emerging with 22 tanks after cutting the OPFOR down to 12; the "unqualified command group" in very similar circumstances found itself withdrawing with just 5 remaining tanks, pressed hard by 35 OPFOR tanks. ♦

In CARDINAL POINT II, 1 was the only officer in the Division privy to all unit identifications and ratings. I must confess that I was surprised to find among the lower six command groups one commander I had theretofore regarded highly, and one other commander in the upper six whom I had expected to manifest grave difficulties. In the first instance I had been misled by the commander's personal brilliance and persuasiveness; he had simply not formed a team within his command group, and found that he could not carry prolonged action on his own shoulders. In the second, a competent staff carried along a plodder, and his team performed along with the very best. Again, the evaluation of effectiveness was of utility to me as I modified plans for training their respective brigades thereafter.

♦ Gorman, P.F. "Trends in the Army Training System," transcript of remarks to the Army War College, 21 January 1977.