COHORT CADRE TRAINING EVALUATION

David J. Knack, CPT

May 1987

FINAL REPORT

Department of the Army
HQ TRADOC, ATTN: ATTG-C
Fort Monroe, VA 23651-5000

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This report provides data and analysis detailing the Pilot COHORT Cadre Training Program as developed by the Soldier Support Center, Infantry, Armor, and Field Artillery Schools. This program was designed to provide cadres of forming COHORT units with appropriate refresher tactical and technical training, as well as familiarization with Unit Manning System/COHORT principles and requirements, prior to the arrival of first term soldiers. The program developed as a result of information gathered by the Unit Manning System (UMS) Field Evaluation which indicated perceived weaknesses in the preparation of COHORT cadres to form and

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(Block 20. Abstract. Cont'd.) train new COHORT companies. This report provides recommendations regarding this program.

DEPARTMENT OF THE ARMY
HEADQUARTERS UNITED STATES ARMY TRAINING AND DOCTRINE COMMAND
FORT MONROE, VIRGINIA 23651-5000

REPLY TO ATTENTION OF

ATTG-C

11 MAY 1987

SUBJECT: COHORT Cadre Training Evaluation

Commander
U.S. Army Forces Command
ATTN: AFOP-TAI
Fort McPherson, GA 30330-5000

1. Attached is the final report of the COHORT Cadre Training Evaluation. This report provides data and analysis detailing the Pilot COHORT Cadre Training Program as developed by the Soldier Support Center, Infantry, Armor, and Field Artillery Schools. This program was designed to provide cadres of forming COHORT units with appropriate refresher tactical and technical training, as well as familiarization with Unit Manning System/COHORT principles and requirements, prior to arrival of first term soldiers. The program developed as a result of information gathered by the Unit Manning System (UMS) Field Evaluation which indicated perceived weaknesses in the preparation of COHORT cadres to form and train new COHORT companies.

2. In March 1985, the Commander, Forces Command requested that TRADOC conduct an evaluation of the effectiveness and projected costs of a Cadre Training program. TRADOC responded with a study of COHORT Cadre Training for 14 company sized units. This report presents the information requested and provides recommendations regarding this program.

3. HQ TRADOC POC is CPT Knack, AV 680-4265.

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Chapter 1

COHORT CADRE TRAINING EVALUATION

Introduction

1-1. Purpose. This report will provide the final compilation of the work of several agencies to determine the effectiveness and project the cost of providing specialized training prior to formation of Cohesion, Operational Readiness Training (COHORT) units. This report will summarize data and draw conclusions as to the success of and need for this purpose.

1-2. Background.

a. In 1981, the Army began testing and implementing the Unit Manning System (UMS) (previously New Manning System). The goal of UMS is to enhance combat effectiveness through increased cohesion in units. The subsystems of UMS are COHORT units and the Regimental System. The Regimental System will not be addressed in this report.

b. The original COHORT concept was to form units from soldiers who had received IET together, joined a cadre at a FORSCOM installation and were stabilized for three years as a unit. This stabilization was designed to increase cohesion and lead to greater training opportunities. As the first units formed, a perception developed that COHORT cadres were not ready to receive the IET graduates and properly form them into highly cohesive units. This perception led to the tasking for development of the concept of COHORT Cadre Training to prepare cadres prior to receiving Skill Level 1 soldiers.

c. COHORT cadre training developed as a two-phase system which included home station and in the schoolhouse training during the period prior to unit formation. Phase I of the program consisted of a Soldier Support Center (SSC) developed "mindset" training package and branch specific exportable training packages to be utilized at the unit's home station. This phase was designed to coalesce the cadre and give them technical preparation required prior to Phase II (schoolhouse) training. Phase II consisted of MOS/branch specific training designed to ensure technical and tactical competence on the part of the cadre.

1-3. Problem. The objective of the COHORT Cadre Training Evaluation was to determine the effectiveness of this program in increasing cadre confidence and, therefore, unit cohesion, and to determine the projected cost of an implemented program.

1-4. Scope. TRADOC has conducted an evaluation of cadre training. Agencies participating in the evaluation include the U.S. Army Soldier Support Center (USASSC), the Walter Reed Army Institute of Research (WRAIR), the Armor, Infantry, and Field Artillery Schools, and the TRADOC Analysis Command (TRAC). Each agency had responsibility for collecting specific types of data and information at predetermined points in the life cycle of COHORT units.

1-5. Study Objectives. The COHORT Cadre Training Evaluation focused on the benefits to be derived from and the associated costs of the proposed two-phased approach to training. Specific objectives were:

a. Determine changes in unit cohesion.

b. Determine changes in cadre confidence/performance.

c. Evaluate costs of a projected program.

d. Recommend courses of action.

CHAPTER 2

METHODOLOGY

This chapter describes the methods and approach used to analyze the COHORT Cadre Training Program as developed for the pilot test by the Infantry, Armor and Field Artillery Schools.

2-1. Program Development.

a. During FY 83, the UMS Field Evaluation feedback from unit cadres both at the company and higher levels expressed concern that unit cadres were not fully prepared to initiate training in their newly formed companies. The original goal was to provide an overall framework for unit startups that would provide technical, tactical, and leader skills to cadres as a group and put them in the best position to form and sustain cohesive companies. To address these perceived needs, HQ TRADOC developed a two-phased COHORT Cadre Training Program in FY 84. Phase I, conducted at home station, consisted of an exportable training support package including the SSC developed COHORT Cadre Leader's Support Package (mind set) and a branch training strategy developed by the Infantry, Armor, and Field Artillery Schools. This approximately two-week program of self-directed training was designed to orient the cadre to the COHORT concept and reinforce branch skills. Phase II, conducted in the branch schoolhouse, was designed to build on Phase I with advanced MOS skills and knowledge. Phase II would last two to three weeks. Cadre training, Phases I and II, was to be accomplished in the period prior to unit formation. Ideally the cadre would complete Phase II at the right time to attend the end of OSUT training for their Skill Level I soldiers.

b. In general, Phase I of the Infantry, Armor, and Field Artillery programs were similar. Phase II varied substantially. The Infantry Phase II included basic infantry skills and live fire training and lasted two weeks. The FA School developed a two-week Phase II that included no live fire and could be trained at home station by a mobile training team. The Armor School utilized the existing three-week Tank Commander's Certification Course (TC^3) to provide technical refresher to cadres.

2-2. COHORT Cadre Training Evaluation Development.

a. Background. In March 1985, the Commander, FORSCOM, requested that TRADOC evaluate the COHORT Cadre Training Program to determine its cost effectiveness if expanded to the entire COHORT force. As a result of this request, a study of 14 company size units was designed. The evaluation was expected to address cohesion enhancement, training effectiveness, and costs of the program.

b. Evaluation Plan. In order to capture key aspects of the effects of Cadre training, the evaluation participants included Walter Reed Army Institute of Research, TRADOC Analysis Command - White Sands Missile Range, the U.S. Army Soldier Support Center and the Infantry, Armor, and Field Artillery Schools. The original milestones called for the evaluation to be complete in August 1986. Completion of the cost analysis has delayed this report.

c. The objectives of the COHORT Cadre Training Evaluation were to determine changes in the unit's cohesion, the cadre's confidence, the cadre's performance and to evaluate costs of the program. Questionnaires, surveys, tests, and feedback were methods used to obtain this information. There were two groups involved in this evaluation. The control group (5 IN and 1 AR) received only Phase I training. The experimental group (3 IN, 2 AR, 3 FA) received both Phase I and Phase II training. Several measures were administered to these groups during the evaluation. The Task Confidence Soldier Survey (SC), designed and evaluated by TRAC-WSMR and administered by TCATA and the Schools' DOES, was administered twice to the control group and three times to the experimental group. The purpose of this survey was to assess changes in the cadre's confidence to perform and train MOS tasks. The Soldier Will questionnaire, designed and evaluated by WRAIR and administered by TCATA, was given to both the experimental and control groups three times. This instrument measured the impact of COHORT cadre training on the unit. The Training Effectiveness Analysis Survey (PIT), designed and evaluated by TRAC-WSMR and administered by the Schools' DOES and TCATA, was given once to both the experimental and control groups. This survey assessed the cadre's perceptions of the effectiveness of Phase I training. The pre- and post-tests, designed by the Schools' DOTD and administered by the Schools' DOES, were used to provide data for determining significant changes in Cadre's performance of MOS tasks before and after Phase II training. Feedback gathered by USASSC from battalion and company leaders furnished cadre arrival information. Analysis of this information and data were provided in reports from TRAC-WSMR, WRAIR, USASSC, and the Schools' DOES.

d. Analysis Plan. Areas of interest and the analytic agency were as follows:

AREA	ANALYSIS AGENCY
Cohesion	WRAIR
Training Effectiveness	TRAC WSMR
Cost Analysis	TRAC WSMR
Branch Analysis	IN, AR, FA Schools
Cadre Arrival/Feedback	SSC
Unit Feedback	Units

In addition this evaluation had access to the quarterly reports of WRAIR, TCATA, Logistics Center (LOGCEN), and SSC provided for the overall UMS Field Evaluation. Each sub-report will be included in its entirety as an annex. The HQDA requested report on cadre arrival, developed by TCATA in September 1986, will be included with the SSC report.

e. All areas of analysis will be addressed in the light of their support for cohesion enhancement. This program encompassed many hours of tactical and technical instruction to ensure that the unit cadres were proficient prior to the arrival at the unit of the SL1 soldiers. The purpose of this was to aid in the enhancement of cohesion in these units.

Chapter 3

Analysis/Conclusions

This chapter presents a compilation of the findings of the different agencies involved. An overview will be presented first, and then specific sections for each agency/group will be developed.

3-1. Overview.

a. In all cases where statistical tests have been used to provide insight into the COHORT cadre training program, the number of units involved is considered small. The samples (control and experimental) are large enough to allow inferences. The units involved were selected from those available for training rather than randomly selected. These analytic characteristics should be considered when using the results of this analysis for decisions.

b. The analysis of the program was based on data collected primarily through the administration of questionnaires. WRAIR attempted to determine a difference in Soldier Will (Cohesion) through the use of its questionnaire developed and proven in the UMS Field Evaluation. TRAC-WSMR in the Training Effectiveness Analysis (TEA) portion of its report determined the effect of training on cadre confidence to train and perform specific tasks. TRAC-WSMR also provided a cost analysis to represent the investment required to expand this program to the COHORT force as projected prior to recent expansion decisions. Effects on cohesion, confidence and cost, as presented by these reports, were the key elements in determining the effectiveness of the training program and the basis for recommendations. In addition, SSC provides explanation and documentation of flaws that hindered the evaluation. The schools have provided input to the TEA and overall analysis. Two units provided after action reports which will be reviewed here and are included.

3-2. WRAIR Special Cadre Study (Annex A).

a. The most important aspect of COHORT is the theory that increased cohesion will enhance a unit's ability to train and fight more effectively. COHORT Cadre training evolved from the premise that cadres who had not worked together prior to unit formation and may have come from nontroop assignments were not well prepared to collectively train Skill Level (SL) 1 soldiers and that this lack of preparation inhibited increased cohesion in these units.

b. In order to test this proposition, WRAIR administered its Soldier Will questionnaire measuring both horizontal (across the same rank) and vertical (among ranks) cohesion of the control units (not attending Phase II) and the experimental (Phase II trained) units. Questionnaires were also administered to the cadre in order to assess cadre confidence 45 days prior to formation. The entire unit was tested for cohesion on formation and again at 120 days after formation.

c. Results. MRAIR's analysis of the data indicates that Phase II cadre training did not enhance cadre self confidence during the initial formation of the units. The experimental group statistics indicate that cohesion development was lower than in the control group. In cadre confidence the experimental group exhibited significantly lower scores at 120 days after formation than the control group (TABLE 1).

TABLE 1

Means and Standard Deviations for the Scale Assessing the Experimental and Control (Cadre) Groups Across Three Points in Time.

	CADRE CONFIDENCE			
	Experimental		Control	
	Mean	SD	Mean	SD
Time 1 (45 days before formation) n(39/55)	67.79	13.47	67.10	15.89
Time 2 (Formation date) n(81/103)	65.51	16.58	68.66(*a)	14.16
Time 3 (120 days after formation) n(100/68)	60.91(*a/b)	14.68	68.06(*b)	14.13

* Indicates that the Time 3 Experimental group scores were significantly lower ($p < 0.05$) than either the Time 2 or Time 3 Control group scores.

At formation the experimental group exhibited higher horizontal cohesion than the control group. At 12ϕ days there was significantly lower horizontal bonding in both groups (normal in COHORT units) but no difference between the units. This result suggests the possibility that either: (1) cadre training had no affect on horizontal cohesion or (2) cadre training could have had a detrimental affect on horizontal cohesion since the experimental group started with higher horizontal bonding but at 12ϕ days was no different than the control (TABLE 2).

TABLE 2

Means and Standard Deviations for the Horizontal Cohesion Scales Assessing the experimental and control Groups Across Two Points in Time.

	Horizontal Cohesion			
	Experimental		Control	
	Mean	SD	Mean	SD
Time 2 (formation date) n(199/427)	66.57	18.87	62.38*	17.96
Time 3 (12ϕ days after formation) n(422/242)	56.ϕ8(*)	18.26	55.94(*)	17.74

* Indicates that Time 3 Experimental and Control groups were significantly lower ($p < ϕ.ϕ5$) than either of the Time 2 groups. The Time 2 Control groups were significantly lower ($p < ϕ.ϕ5$) than the Time 2 Experimental group. There were no differences between the Time 3 groups.

In vertical cohesion cadre training appears to have had no affect in enhancing or reducing cohesion (TABLE 3).

TABLE 3

Means and Standard Deviations for the Vertical Cohesion Scale Assessing the Experimental and Control Groups Across Two Points in Time.

	Vertical Cohesion			
	Experimental		Control	
	Mean	SD	Mean	SD
Time 2 (formation date) n(198/427)	65.66	18.80	63.07	17.58
Time 3 (120 days after formation) n(412/236)	49.93*	20.44	50.12	19.10

* Indicates that the Time 3 Experimental and Control groups were significantly lower ($p < .05$) than either of the Time 2 groups. The Time Experimental and Control groups did not differ from each other.

d. Conclusions. WRAIR data indicates that COHORT Cadre training was ineffective in enhancing cohesion of COHORT companies.

3-3. TRAC-WSMR Training Effectiveness Analysis (TEA) (ANNEX B).

a. TRAC-WSMR undertook to measure the difference in confidence to train/perform the tasks taught in the cadre training program to determine if instruction was effective. In order to test this area, TRAC-WSMR administered questionnaires to determine confidence changes/effectiveness of Phase I (home station) training and analyzed pre- and post-test data to determine the effectiveness of Phase II (schoolhouse) training.

b. Results.

(1) Phase I Home Station Training was ineffective in the enhancement of cadre confidence to train/perform. In fact, artillery cadres showed a significant decrease in confidence ratings. A number of factors contributed to the result. Primarily, there is little evidence that Phase I training was actually conducted by the units (see para 3.4) and therefore was unlikely to have had any positive affect. Therefore, the ineffectivenss of Phase I training cannot be attributed to the quality of the materiels but to Phase I's non-use.

(2) Training at the school had a significantly positive effect on cadre confidence to train/perform MOS tasks regardless of unit type. When looked at by unit type, Infantry and Armor cadres showed higher confidence to perform specific individual tasks after Phase II while Field Artillery showed no change.

These results do not contradict the WRAIR analysis which addressed cohesion and overall confidence as opposed to individual confidence in ability to perform/train specific tasks.

c. Conclusions.

(1) Phase I training was ineffective in enhancing cadre confidence to train/perform MOS related tasks across all unit types.

(2) Phase II training was effective in enhancing cadre confidence to train/perform MOS related tasks for Infantry and Armor units.

(3) Phase II training had no affect on cohesion in units. (See para 3-2)

3-4. SSC COHORT Cadre Training Evaluation (ANNEX C).

a. SSC developed the exportable COHORT Cadre Leader's Training Support package (mindset) to be used independently from the proponent portions of Phase I. SSC documented in its report the strength figures for cadre from eight units in the evaluation and tracked the delivery and utilization of Phase I training materials by subject unit. The SSC report also indicates that 4 of 15 units to whom Phase I was to be delivered did not receive the package, one unit received it late. In only 2 cases did units utilize the entire package and all other units tailored their use to time available and perceived requirements.

b. Analysis of the cadre strength data by SSC indicates that cadre continued to arrive until at least 45 days after formation. Also included in Annex C is the TCATA report on cadre arrival. Review of these two reports indicates that timely cadre arrival was a problem in COHORT units. This detracted from the ability to conduct cadre training prior to unit formation. Also hindering Phase I training, was the fact that cadres were forced to spend time on administrative preparation for unit formation as opposed to training.

c. Conclusions

(1) COHORT Cadre Training Phase I was not delivered in a consistent manner and, when materials were received, they were not utilized as designed.

(2) Timely cadre arrival and preparation is key to the smooth formation of units.

(3) Cohesion/confidence cannot be enhanced by a program that is not utilized (see para 3.2 and 3.3).

3-5. Proponent School Input (Armor, Field Artillery, Infantry, ANNEX D).

a. Each proponent school was asked to analyze results of both pre- and post-test data to determine the effectiveness of Phase II training. In each case school analysis showed significant increases in the scores of post-tests vice pre-tests. This indicates that the tasks being trained were being learned by the cadres.

b. Conclusions.

(1) The proponent schools are capable of training selected tasks to standards.

(2) The results of previous information (para 3.2 and 3.3) indicate that these tasks, while properly trained, did not in this test, lead to enhanced cohesion after unit formation.

3-6. Unit After Action Reports (AAR) (ANNEX E). One requirement of the Cadre Evaluation was the submission of AARs by units receiving the training. Only two reports were received. These AARs concentrate on problems or satisfaction with the training as it was conducted rather than its impact on unit development. For these reasons no conclusions can be drawn.

3-7. TRAC-MEMRs COHORT Cadre Training Cost Analysis (ANNEX F).

a. TRAC-MEMRs cost analysis includes two portions: an historical summary of the costs incurred during the evaluation and a projection of future costs. In both, costs are separated by Phase to allow comparison between the costs of Phase I and Phase II. Additionally, an excursion was run to evaluate the possible export of Phase II to units using Mobile Training Teams (MTT). The cost evaluation was redirected in August 1986 to include projected cost and was not available until March 1987.

b. Results. Table 4 summarizes the historical cost per student of the program.

TABLE 4

HISTORICAL COSTS CADRE TRAINING

182 Students	PH I per student	690.00
	PH II per student	5,051.00
	TOTAL	5,741.00

Table 5 summarizes the cost per student of the program projected to include COHORTs as planned prior to recent CSA decisions on UMS expansion.

TABLE 5

PROJECTED COSTS CADRE TRAINING

10,929 Students	PH I per student	84.00
	PH II per student (no ammo)	1,609.00
	TOTAL	1,693.00
	Ammo cost per student	1,509.00
	TOTAL w/ammo	3,202.00

c. Conclusions.

(1) This program required substantial expenditures to operate historically ($5,741 per student).

(2) Costs would decrease per student in a fully implemented program ($3,202 per student) but are still substantial.

(3) There is no indication that these expenditures will lead to enhanced cohesion in units (see para 3.2)

CHAPTER 4

RECOMMENDATIONS

4-1. The results of this evaluation lead to the conclusion that COHORT Cadre Training as it was designed was not effective in enhancing cohesion in units. While specific tasks were taught and learned, those tasks did not necessarily improve the cadre or the unit in terms of cohesion after formation. The following specific recommendations are offered:

a. That COHORT Cadre Training as developed for this evaluation not be funded or pursued further.

b. That if the need for cadre training prior to formation is surfaced through normal evaluation (Branch Training Teams, IG inspections, etc.) the exact requirements be documented as outlined in TRADOC Regulation 350-7, Systems Approach to Training, through Front End Analysis (FEA), prior to development of a comprehensive coordinated training program.

ANNEX A

DEPARTMENT OF THE ARMY
WALTER REED ARMY INSTITUTE OF RESEARCH
WALTER REED ARMY MEDICAL CENTER
WASHINGTON, D.C. 20307

IN REPLY REFER TO:

SGRD-UWI-A

SUBJECT: Special Cadre Study

Commander, TRADOC
ATTN: ATTG-C (CPT KNACH)
Ft. Monroe, VA 23651

1. References:

a. TRADOC message 25 Nov 86, SAB.

b. 12 December 1986 telephone conversation between LTC Martin (WRAIR) and CPT Knach (TRADOC) SAB.

2. Enclosed is the final report on the Special Cadre Study. If you have additional questions, please contact me directly.

JAMES A. MARTIN
LTC, MS
Deputy Chief, Dept of Mil Psy

Introduction

The COHORT Cadre Training effort was designed to prepare cadre members for leadership roles in new COHORT units. There were two general types of treatment or phases to this training program. Phase I was a two week program given to cadre 30-60 days prior to unit formation. The training was conducted at the home station and provided instruction in three areas: training to enhance branch and MOS skills; information pertaining to the Unit Manning System; and training in organizational effectiveness (e.g., how to counsel and correct training errors, etc). Phase II was conducted at the TRADOC branch training center and was given approximately two weeks prior to unit formation. This training was primarily designed to enhance branch MOS skills. It also allowed cadre to observe their soldiers during the last two weeks of OSUT training.

It was expected that units in which the cadre had opportunities for leadership and indepth MOS skill training, and in which cadre were able to spend time with first-term soldiers during OSUT training would display greater cohesion among first term soldiers than units in which cadre did not receive this training. Based on available survey information, this report attempts to determine whether this expected result actually occurred.

Method

The sample was comprised of fourteen COHORT companies conveniently available for study. Eight of these were infantry, three armor, and three field artillery. Seven companies were selected to receive the Cadre Training experience (Experimental Units) and seven companies were similarily selected as Control Units.

The measures used to assess the variables of interest came from work currently underway in WRAIR's study of the Army's Unit Manning System. The measures used included:

a. Cadre Confidence. This is a measure comprised of 8 items designed to assess NCO self confidence. Each item was written using a 5 point Likert scale with possible responses ranging from strongly disagree (1) to strongly agree (5). Example questions include: "If I have to go into combat, I have a lot of confidence in myself." Individual item scores were added together to create a summative score which was mathmatically converted to a measure of cadre confidence with a range of 0 (low) to 100 (high).

b. Soldiers' Perceived Horizontal Cohesion. This is a

measure comprised of 13 items designed to assess first term soldiers' perceptions of bonding among first term soldiers in their company. Each of these items was also written on a 5 point Likert scale with scores ranging from strongly disagree (1) to strongly agree (5). Example questions include: "There is a lot of teamwork and cooperation among soldiers in my company." The same mathmatical process was used to create a horizontal cohesion measure with the range of 0 (low) to 100 (high).

c. Soldier Perceive Vertical Cohesion. This is a measure comprised of 16 items designed to assess first-term soldiers' perceptions of bonding across ranks in their company. Each item was written using a 5 point Likert scale with scores ranging from strongly disagree (1) to strongly agree (5). Example questions include: "NCO's most always get willing and whole-hearted cooperation from soldiers in this company." Individual item scores were added together to create a summative score which was mathmatically converted to a scale with a range of 0 (low) to 100 (high).

Questionnaires containing these measures were administered by BDM contract field data collectors at three specified points in time. Of interest were the questionnaires administered to unit cadre 45 days prior to unit formation, again on formation day and finally 120 days after rotation. Also of interest were the questionnaires administered to first-term soldiers on

formation and again 120 days after formation.

Data Analyses

The premise of this study was that cadre who received the special training would view themselves differently (enhanced confidence) and that this would result in leadership behaviors that would later enhance cohesion in their units (as measured by first-term soldiers scale scores). Based on these hypotheses, the first analysis centered on differential change in the Experimental vs Control group cadre scores from the preformation (T_1) to the formation (T_2) and then to the post-formation (T_3) survey points.

Assuming that cadre differences were found, the second analysis was designed to look at any differential change in the first term soldiers scores from the formation (T_2) to the post-formation (T_3) survey administrations.

Results

Unit Cadre.

A One-Way ANOVA, with A Posterior contrasts (Tukey HSD), was used to compare the Experimental and Control groups across three

points in time. Table 1 highlights the Means and Standard Deviations and indicates a delayed effect in the opposite direction of the intended effect. Based on the information available, it was not possible to attribute any benefit to cadre confidence from the Cadre Training Program.

First-Term COHORT Soldiers.

One-Way ANOVAs, with the same A Posterior contrasts (Tukey HSD), were used to compare, levels of horizontal and vertical chohesion in the Experimental and Control groups across two points in time. It must be emphasized however, that our inability to document the expected change in the Cadre scores prevents any attribution of possible increased Experimental group scores to the originally predicted benefits of the Cadre Training Program.

Table 2 highlights the Means and Standard Deviations and indicates significant differences for the Horizontal Cohesion measure. The Experimental and Control groups were different (Experimental higher) at Time 2 (baseline measurement point). The scores for both groups fell significantly from Time 2 to Time 3 (the second measurement point). At Time 3 there was no statistically significant difference between the two groups on the horizontal cohesion measure.

Table 3 highlights the same information for the vertical

cohesion measure. In this case both the Experimental and Control groups had significantly lower Vertical cohesion scores at Time 3 when compared to time 2. At Time 3, there was no statistically significant difference between the Experimetnal and Control groups on the Vertical cohesion measure.

Limitations

Four issues hampered the analysis of these data and pose severe threats to the validity of any findings.

1. Extensive field interviewing and observation by Soldiers Support Center representatives suggested that the planned training was carried out differentially and not according to the original research schedule. We believe that some cadre members in the units designated to receive special training never received this training. Unfortunately, it was not possible to distinguish these individuals in the analysis.

2. It was also not possible to match participants scores across the survey period. This severely restricted possible approches to the analysis of these data.

3. There was no information on response rate by unit at

each questionnaire administration. Based on the extreme variability in the number of respondents in each rank category at each point in time, it was apparent that there was very little overlap in the respondent groups across time. This raises the possibility of some systematic biasing in the samples across time.

4. In addition to these limitations, the original study design did not include complete representation among the types of units (Infantry, Field Artillery, and Armor) for each study group considered. Based on other WRAIR research, unit type is a consistently significant predictor of scores on the various Soldier Will scales.

Conclusion

Based on the information available for analysis, there is no reason to believe that the Cadre Training Program had the effect that was originally intended. Infact, a negative cadre effect was suggested by the data. The are many possible expainations for this negative effect (e.g., cadre disappointment in their ability to achieve the expectation they developed for themselves as a result of the training program). At this point however, any explanation could only be based on speculation.

An assessment of horizontal and vertical cohesion among the

first-term soldiers in these samples was in a direction consistent with other WRAIR research, namely a significant decrease in scores across time with the largest decrease occuring in the first few months after the completion of OSUT training. There was no difference between the experimental and control groups in the amount of this decline.

TABLE 1

Means and Standard Deviations for the Scale Assessing the Experimental and Control (Cadre) Groups Across Three Points in Time.

	Experimental		Control	
	Mean	SD	Mean	SD
Time 1 n(39/55)	67.79	13.47	67.10	15.89
Time 2 n(81/103)	65.51	16.58	68.66(*a)	14.16
Time 3 n(100/68)	60.91(*a/b)	14.68	68.06(*b)	14.13

* Indicates that the Time 3 Experimental group scores were significantly lower ($p < 0.05$) than either the Time 2 or Time 3 Control group scores.

TABLE 2

Means and Standard Deviations for the Horizontal Cohesion Scales Assessing the experimental and control Groups Across Two Points in Time.

	Horizontal Cohesion			
	Experimental		Control	
	Mean	SD	Mean	SD
Time 2 n(199/427)	66.57	18.87	62.38*	17.96
Time 3 n(422/242)	56.08(*)	18.26	55.94(*)	17.74

* Indicates that Time 3 Experimental and Control groups were significantly lower ($p < 0.05$) than either of the Time 2 groups. The Time 2 Control groups was significantly lower ($p < 0.05$) than the Time 2 Experimental group. There were no differneces between the Time 3 groups.

TABLE 3

Means and Standard Deviations for the Vertical Cohesion Scale Assessing the Experimental and Control Groups Across Two Points in Time.

	Vertical Cohesion			
	Experimental		Control	
	Mean	SD	Mean	SD
Time 2 n(198/427)	65.66	18.80	63.07	17.58
Time 3 n(412/236)	49.93*	20.44	50.12*	19.10

* Indicates that the Time 3 Experimental and Control groups were significantly lower ($p < 0.05$) than either of the Time 2 groups. The Time 3 Experimental and Control groups did not differ from each other.

ANNEX B

PREFACE

In accordance with DA letter dated 19 October 1983, "Responsibilities of Study Performing and Study Sponsoring Organization", a copy of this report was provided to the proponent, Training Concepts Analysis Directorate, US Army Training and Doctrine Command, Fort Monroe, VA., for their concurrence or nonconcurrence. The review and comments from the Training Concepts Analysis Directorate are provided in appendix E, pages E-2 through E-6. The responses of the US Army TRADOC Analysis Command (TRAC), Training Effectiveness Analysis Directorate to the proponent's comments are also in appendix E, pages E-7 and E-8.

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COHESION OPERATIONAL READINESS TRAINING
Cadre Training Effectiveness Analysis

CHAPTER 1
INTRODUCTION

1.1 PURPOSE

This report documents the results of the COHORT (Cohesion, Operational Readiness, and Training) Cadre Training Effectiveness Analysis (TEA). The Training Effectiveness Analysis (TEA) Directorate and the Special Studies Directorate, Resource Analysis Division, of the TRADOC Analysis Command (TRAC)* were tasked by the Deputy Chief of Staff for Training (DCST), Headquarters Training and Doctrine Command (HQ TRADOC), to provide analytical support for the evaluation of the COHORT Cadre Training Program. This document presents only a part of a broad scale, comprehensive study involving several different analytical agencies (e.g., TRADOC Combined Arms Test Activity (TCATA), the Directorate of Evaluation and Standardization (DOES) of the Armor, Infantry, and Field Artillery schools and TRAC). Data collection by TRAC will be integrated with findings from the other participating agencies in the final comprehensive report. The Project Coordination Sheet documenting TRADOC Systems Analysis Activity (TRASANA)[1] and HQ TRADOC responsibilities is attached as appendix A.

1.2 BACKGROUND

a. In 1981, the Army began implementing the New Manning System (NMS) which changes the process by which Army organizations are manned. The primary objective of the NMS is to reduce personnel turbulence and to enhance combat effectiveness by fielding more cohesive and more thoroughly trained units. Toward that objective, one of the central concepts of the NMS is the COHORT unit.

b. Soldiers assigned to COHORT units remain together throughout basic training and duty assignment. By stabilizing unit personnel throughout a tour of duty, more in-depth training can be accomplished than is normally possible. Rather than having to spend time training frequent newcomers to the unit in basic skills, the cadre have the opportunity to develop and conduct progressive, long term, and challenging training programs. To take advantage of that opportunity, the cadre must be trained to be skilled leaders, competent technicians, and proficient trainers. Toward that end,

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The cost portion of this study is being published under separate cover.

[1]When referring to previous material and documents, the acronyms TRASANA and TRAC are synonymous.

the unit cadre undergoes a training program prior to formation of the COHORT unit. During training, the cadre is oriented toward the COHORT unit concept, given refresher training in tasks specific to the Military Occupational Speciality (MOS) of each individual, and trained to train others in MOS-specific skills.

c. Part of this training (phase I) is conducted in the unit and part is conducted at the appropriate training school (phase II). Training in the unit focuses on orientation toward the COHORT concept and task performance. Training at the school focuses on training others to perform MOS-specific tasks. TRADOC is conducting a COHORT cadre training evaluation to determine the efficiency (cost and training effectiveness) of the training plan and tasked the TEA Directorate and Resource Analysis Division to participate in the evaluation.

1.3 PROBLEM

One of the objectives of cadre training is to instill in the cadre the confidence necessary to lead and train others. The specific problem addressed by the TEA is to assess the extent to which cadre training affects individual confidence in the ability to perform and the ability to train others to perform MOS-specific tasks.

1.4 IMPACT OF PROBLEM

Unless the cadre are competent technicians and trainers, the advantages offered by COHORT unit organization probably will not be realized. Technical competence alone, however, is not a sufficient qualification. Self-confidence also is necessary. If confidence is lacking, the cadre may not be able to communicate effectively with subordinates nor set the proper example in a manner required to achieve effective unit training.

1.5 SCOPE

TRADOC is conducting a comprehensive evaluation of cadre training. Agencies participating in the evaluation include the US Army Soldier Support Center (USASSC), the Walter Reed Army Institute of Research (WRAIR), the TRADOC Combined Arms Test Activity (TCATA), the Directorates of Evaluation and Standardization (DOES) of the Armor, Infantry, and Field Artillery schools, and TRAC. Each agency has responsibility for collecting specific types of data and information at certain points in the life cycle of COHORT units. The focus of TRAC's input to TRADOC's comprehensive evaluation includes an assessment of the impact of cadre training on confidence to perform and to train MOS-specific tasks, eliciting soldier perceptions of the effectiveness of phase I training, and a cost comparison of the alternative approaches to Cadre training. The results of the TRAC study will be incorporated into the final comprehensive report published by TRADOC.

1.6 STUDY OBJECTIVES

The TEA focused on the benefits to be derived from, and the associated costs of, the two-phased approach to Cadre training. The specific objectives of the TEA were to:

a. Assess changes in confidence to perform and to train MOS-specific tasks as a result of Phase I Cadre training.

b. Assess changes in confidence to perform and to train MOS-specific tasks as a result of Phase II Cadre training.

c. Elicit soldier perceptions of the effectiveness of Phase I training.

d. Provide cost comparisons of the alternative approaches to Cadre training.

CHAPTER 2
METHODOLOGY

This chapter describes the sample, measures of training effectiveness, data collection instruments and efforts, and the approach used to analyze the results of the data collected in the COHORT Cadre TEA.

2.1 SAMPLE

The cadre from nine different COHORT units were included in the TEA, seven experimental units and two control units.[2] The difference between experimental and control units was that the experimental units underwent two-phased training (phase I in the unit and phase II at the school) whereas the control units received only training in the unit. The types of COHORT units and the number of cadre surveyed are presented in table 2-1.

TABLE 2-1
COHORT UNITS SURVEYED

Experimental	Number of Units	Number of Cadre
Armor	2	34
Artillery	3	37
Infantry	2	46
Control		
Infantry	2	21

The majority of the MOS represented in the sample were MOS 11B, 13B, 19E, and 19K.* A total of 21 Infantry (MOS 11B) soldiers made up the control unit's sample. The grade composition, average time in service, and average time in the MOS of the soldiers comprising the two samples is summarized in table 2-2. The numbers are based on individuals who answered the demographic section of the surveys. (Although the differences between the experimental and control infantry groups in terms of time in the Army and time in the MOS seem large, the differences were not statistically significant as determined by means of the t-test.)

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[2] *Data surveys from an additional experimental and 4 control units were administered at inappropriate times so the data were not included in the analysis.*

**Additional MOS included 11A, 11C, 11H, 12A, 12B, 12C, 13E, 19D, 19Z, 63D, 76Y, and 96B.*

TABLE 2-2
CADRE SAMPLE DESCRIPTION SUMMARY

Unit	N	Grade (Percent N in Each) E-4	E-5	E-6	E-7	E-8	O-1	O-2	O-3	Avg Months in Army	Avg Months in MOS
Experimental											
Armor	34	6(18)	14(41)	4(12)	2(6)	1(3)	2(6)	3(9)	2(6)	61	40
Artillery	37	4(11)	10(27)	12(32)	5(14)	1(3)	-	3(8)	2(5)	96	72
Infantry	46	9(20)	19(41)	8(17)	6(13)	1(2)	2(4)	-	1(2)	81	56
Control											
Infantry	21	-	5(24)	9(43)	3(14)	1(5)	2(10)	-	1(5)	104	70

2.2 MEASURES OF TRAINING EFFECTIVENESS

The impact of cadre training on soldier confidence to perform and to train MOS-specific tasks was assessed by the administration of a Task Confidence Soldier survey (SC). In addition to the SC survey, a cadre Training Effectiveness Analysis survey (designated P1T) was administered to obtain soldier perceptions of training in the unit.

2.2.1 Task Confidence Soldier Survey (SC)

The training schools provided TRAC with a list of tasks for each type of COHORT unit. The list from the Armor School included 41 tasks for M1 equipped units, 42 tasks for M60A1 equipped units and 41 tasks for M60A3 units; the Infantry School list included 81 tasks; and the Artillery School list included 50 tasks. From these task lists, the TEA Directorate developed the SC Survey. The SC survey listed each task and asked the soldier to rate his confidence to perform and to train each task using a six-point Likert-type scale. The first part of the survey assessed confidence to perform each task, and the second part assessed confidence to train each task. A copy of the SC survey for each unit type is at appendix B.

2.2.2 Cadre Training Effectiveness Analysis Survey (P1T)

The P1T survey was designed to elicit Cadre perceptions related to the overall effectiveness of phase I training in the unit. This survey consisted of 33 statements about training. The soldier indicated the extent of his agreement or disagreement with each statement using a six-point rating scale. The training factors described in the survey included:

- Organization and usefulness of preliminary Phase I materials (COHORT-specific materials prepared and supplied to the unit by USASSC).
- Organization of phase I training
- Adequacy of the physical facilities
- Training aids and tests

- Instructors
- Equipment
- Extent to which training objectives were accomplished

A copy of the P1T survey is at appendix C.

2.3 DATA COLLECTION EFFORTS

TCATA as well as Armor, Infantry, and Field Artillery schools (DOES) were tasked by HQ TRADOC to collect a variety of data at specific times during COHORT training. The US Army TRADOC Analysis Command (TRAC) was tasked by HQ TRADOC to reduce and analyze certain data collected by these external organizations. TRAC did not collect nor supervise the collection of any of the data discussed in this report.

2.4 DATA COLLECTION EVENTS

2.4.1 Experimental Units

The SC survey was administered to the experimental units at three different points in time. The first administration (SC1) occurred 30-45 days prior to phase I cadre training to provide a baseline to assess changes in confidence. SC1 was administered by TCATA contractor personnel at the unit home station. The second administration (SC2) occurred immediately following phase I and just prior to phase II training. SC2 was administered by DOES personnel at the training school when the unit arrived for school training. The final administration of the survey (SC3) was given immediately following phase II training and also was administered by DOES personnel.

2.4.2 Control Units

Since control units did not train at the schools, SC2 was not administered. The SC survey was scheduled to be administered to the control units at two different times. SC1 was scheduled for administration 30-45 days prior to unit training and SC3 was scheduled for administration on unit formation date. Administrations of both surveys were conducted by TCATA contractor personnel.

2.4.3 P1T Survey

Administrations of the P1T survey were scheduled to coincide with SC2 for the experimental units and SC3 for the control units (i.e., at the conclusion of training in the unit). DOES personnel at the schools administered the P1T survey to experimental units. TCATA contractor personnel administered the P1T survey to control units. Table 2-3 summarizes the survey administration schedule.

TABLE 2-3
SCHEDULE OF SURVEY ADMINISTRATIONS

Experimental Units

SC1 - 30-45 days prior to the start of training in the unit
SC2 - At the conclusion of training in the unit (Phase I) - Prior to school training (Phase II)
SC3 - At the conclusion of school training (Phase II)
P1T - Following Phase I prior to Phase II (coincided with SC2)

Control Units

SC1 - 30-45 days prior to the start of training in the unit
SC3 - At the conclusion of training in the unit
P1T - At the conclusion of training in the unit (coincided with SC3)

2.5 DATA ANALYSIS PROCEDURES

2.5.1 Task Confidence Soldier Survey (SC)

The SC survey assessed changes in confidence to perform and to train job tasks. For each task, the respondent, using a six-point rating scale, rated how confident he was in his ability to perform that task and how confident he was in his ability to train others to perform that task. Changes in ratings across the different administrations of the SC survey were analyzed on a task-by-task basis. Given the schedule of survey administrations, the procedure allowed the following assessments and comparisons:

- Initial levels of confidence for each task
- Changes in confidence following training in the unit (for both control and experimental units)
- Changes in confidence following school training (for experimental units)

The analyses allowed an assessment of the overall impact of each cadre training alternative on soldier confidence and the distinct effects of each phase of cadre training for the experimental units.

2.5.2 Cadre Training Effectiveness Analysis Survey (P1T)

The P1T survey was designed to assess cadre perceptions of the effectiveness of training in the unit for each area listed in section 2.2.2. The survey also allowed soldiers to indicate that no specific COHOPT training program had been conducted in the unit, or that they had been assigned to the unit too late to participate in such a training program. If a soldier indicated no training took place or that his assignment to a unit was too late, he was instructed not to complete the survey.

CHAPTER 3
ANALYSIS

This chapter presents the results of the analysis of the SC and PLT survey data. The chapter begins with an overview of the major findings followed by specific results from each comparison made during the analysis.

3.1 OVERVIEW

a. Since the number of study units by unit type was very small, statistical tests of significance generally were not possible by unit. For that reason, the analysis focused on the number of tasks for which mean confidence to perform/train either significantly increased or decreased from one SC administration to another.[3] As might be expected, there was a strong, positive correlation between confidence to perform and confidence to train ratings.[4] Thus, throughout this chapter, statements about confidence refer to both perform and train unless otherwise noted.

b. Since comparisons of control and experimental units were limited to infantry units, it is inadvisable to generalize the results. In addition, it should be noted that these units were not randomly selected from all possible units available. Nevertheless, the comparison of infantry control units to infantry experimental units indicated that the overall effect of conducting all training in the unit (control units) was generally positive but limited to relatively few tasks. There also were instances in which confidence in certain tasks decreased following training in the unit for the control units. In contrast, the percentage of tasks that showed increased confidence following training in the unit plus school training (experimental units) was three to five times greater than in control units, and there were no instances of confidence decreasing following training.

c. For the experimental units, a comparison was made of confidence changes following training in the unit and following all training (unit plus school training). Although exact percentages varied among unit types, the general pattern was the same. Specifically, phase I training in the unit had very little positive effect on confidence and tended to lower confidence ratings for many tasks in certain units. That effect was completely reversed following additional training at the school. Following school training,

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[3]Significant changes in confidence to train or to perform specific tasks was determined by means of the sign test using the .05 level of rejection.

[4]The Pearson product-moment correlation between confidence to perform ratings and confidence to train ratings was calculated for SC1, SC2, and SC3. The resulting coefficients were 0.96, 0.92, and 0.90 respectively, and all were statistically significant ($p < 0.01$).

confidence increased for a high percentage of tasks and decreased for only a small percentage of tasks. That pattern of results was consistent for every experimental unit included in the study and for both confidence to perform and confidence to train.

d. There were limited data available from the schools to examine possible relationships between confidence to perform and actual performance scores. Based on the data that were available, there were no significant relationships between confidence and actual performance. Instead, the primary effect of school training was to increase confidence for those soldiers with initially low levels of confidence even though those soldiers did not show any difference in performance compared to soldiers with moderate to high initial levels of confidence.

e. Finally, with the exception of two units, all P1T surveys were returned blank because: (1) training materials were not received, and (2) individuals did not have time to study the training materials.[5] The P1T surveys that were received from contractor personnel document that little or no systematic Cadre training occurred at the unit home station, or that soldiers were being assigned to the unit too late to participate in training at the unit, or both.

3.2 CONTROL VERSUS EXPERIMENTAL UNITS

The original selection of control units included five Infantry and one Armor (M60A3). However, due to difficulties in administration of the surveys, data were received from only two Infantry control units. That limited the comparison of control to experimental units to Infantry only. For the control units, the percentage of tasks for which confidence changed from SC1 to SC3 was determined. Since the issue of the comparison was to compare training only in the unit (control units) to training in the unit <u>plus</u> school training (experimental units), experimental unit data were derived from changes in confidence between the SC1 (pre-training) and SC3 (post-school training) survey administrations. Table 3-1 summarizes the mean percentage of tasks for which confidence to perform and to train significantly increased or decreased for each unit type.

TABLE 3-1
Mean Percentage of Tasks for which Confidence Significantly Increased or Decreased from Pre- to Post-Training for Control and Experimental Units

Unit Type	No. of Units	Confidence to Perform		Confidence to Train	
		Increased	Decreased	Increased	Decreased
Control	2	1%	0%	1%	0%
Experimental	2	35%	4%	33%	0%

[5] *See instructions given to the soldier on the survey form itself, appendix C.*

As shown in table 3-1, the addition of school training had a significantly positive effect on the percentage of tasks for which confidence to perform and confidence to train increased. There was also a small percentage of tasks for which confidence to perform decreased in both control and experimental units. A decline in confidence may indicate that training pointed out deficiencies of which the soldier was not aware, but also suggests that the soldier did not acquire the necessary skills/knowledge to correct such deficiencies.

3.3 EXPERIMENTAL UNITS

a. The analysis presented (section 3.2) does not indicate whether the positive effect observed in experimental units was due to training in the unit or training at the school. It is possible that the difference between experimental and control units was due to chance factors in selecting the units, and that the effect was due to the specific units surveyed and not to school training. In this section, the differential effects of training in the unit (phase I) and training in the unit plus in the school (phase I plus phase II) are examined for each unit type and each experimental unit.

b. Experimental units were comprised of two Armor, two Infantry, and three Artillery units. Mean percentage of tasks for which confidence significantly increased or decreased by unit type was found by averaging across units of each type even though the Table of Organization and Equipment (TOE) varied between some units. (To analyze the data by TOE within unit types would have the effect of identifying certain units.) The general pattern of results indicated that phase I training (SC1 to SC2) had little positive effect on confidence to perform/train. In the case of the Artillery units, a significant decrease in confidence ratings to perform/train a high percentage of tasks was noted. Following school training (SC1 to SC3), the change in confidence scores was significantly positive and very few tasks showed a decline in confidence ratings. This effect was consistent across unit type. Figure 3-1 shows the differential effects of phase I versus phase I plus phase II for each unit type and for both confidence to perform and confidence to train. It is interesting to note that school training had as great a positive effect (even slightly greater) on confidence to perform as on confidence to train.

c. Given the small number of units in each unit type (Armor, Infantry, and Artillery), it was possible that the results given in section 3.3(b) for experimental units was due to a statistical artifact in the averaging process. In other words, with only two or three units, one unusually high or low score could distort the mean and result in an invalid descriptive statistic. To insure that was not the case, the percentage of tasks for which confidence to perform and to train changed significantly across phase I and across phase I plus phase II was found for each experimental unit.[6] Figure 3-2 presents the results for changes in confidence to perform tasks,

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[6] *The specific tasks for which confidence to train or to perform significantly increased or decreased (as determined by the sign test using the .05 level of rejection) for each unit type across different SC administrations are highlighted in Appendix D by bold type.*

and figure 3-3 presents the results of the same analysis for confidence to train tasks. Reference to figures 3-2 and 3-3 shows that the general pattern of results, described in section 3.3(b), is the same across all units and for both confidence to perform and confidence to train. These data suggest that the generally positive effect of additional school training is consistent across unit types and specific units.

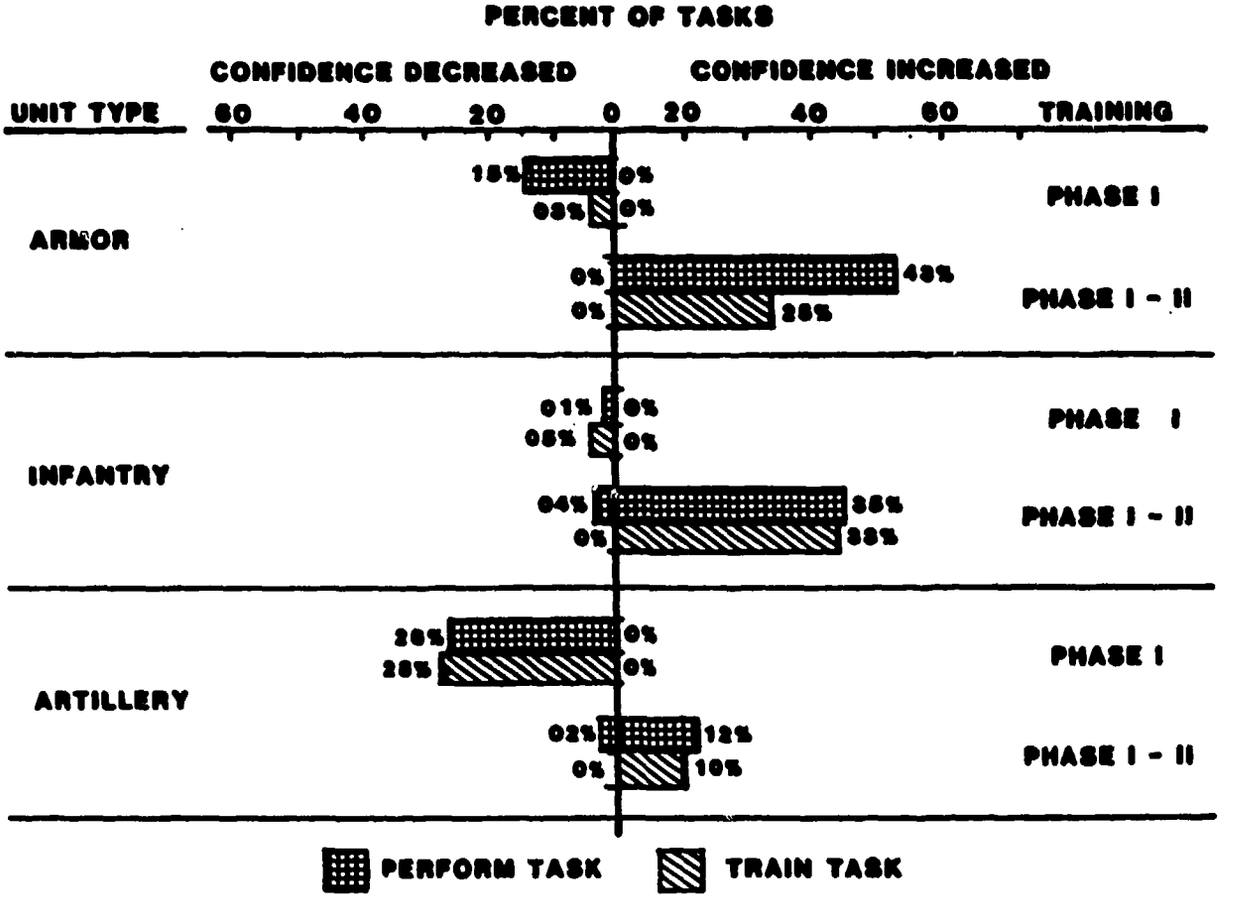


Figure 3-1. Mean Percentage of Tasks for which Confidence Significantly Increased or Decreased as a Result of Phase I and Phase I Plus Phase II Training by Experimental Unit Type.

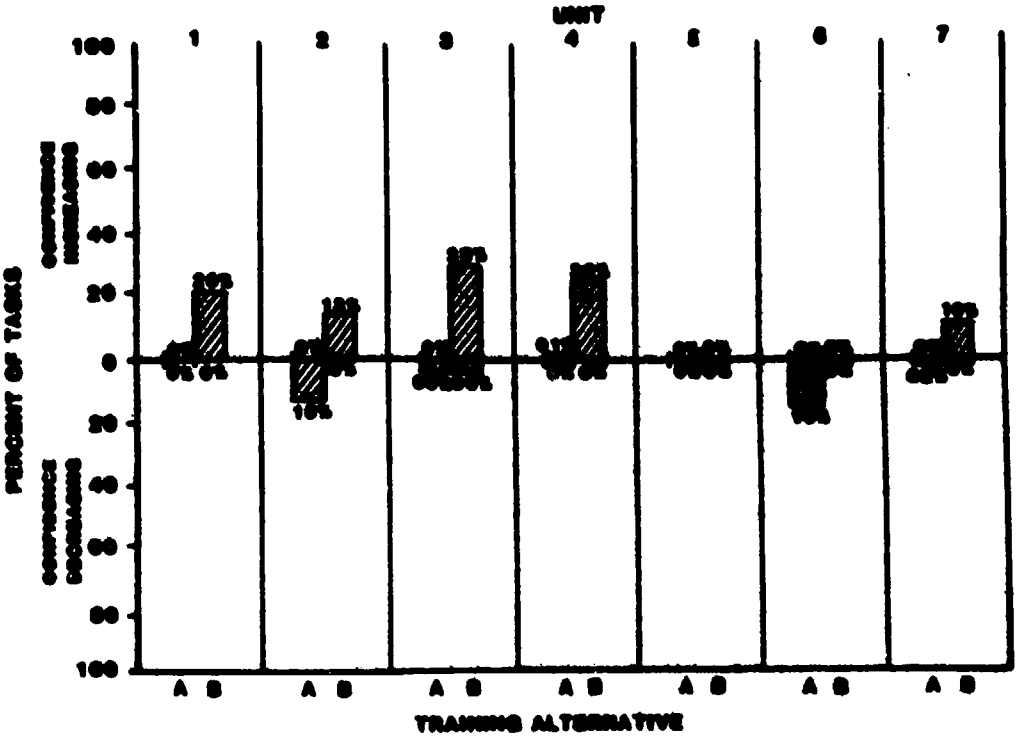
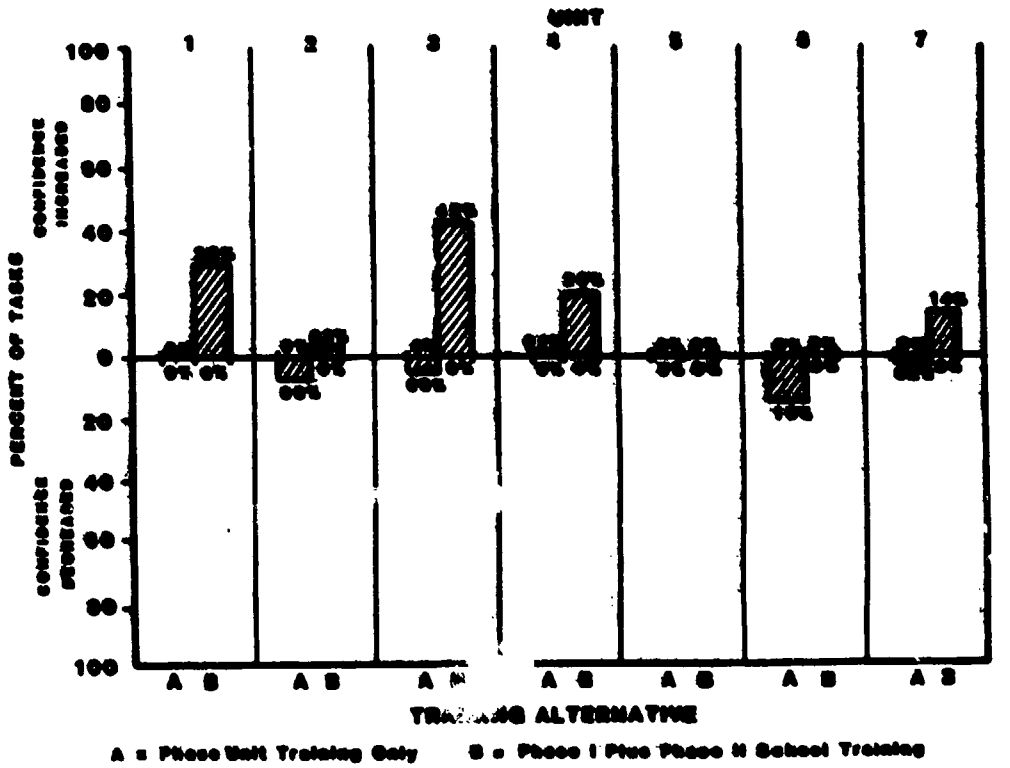


Figure 3-2. Percentage of Tasks for which Confidence to Perform Significantly Increased or Decreased as a Result of Phase I Training (A) and Phase I Plus Phase II Training (B) for each Experimental Unit.



A = Phase Unit Training Only B = Phase I Plus Phase II School Training

Figure 3-3. Percentage of Tasks for which Confidence to Train Significantly Increased or Decreased as a Result of Phase I Training (A) and Phase I plus Phase II Training (B) for each Experimental Unit.

3.4 CONFIDENCE AND ACTUAL PERFORMANCE

a. In addition to the TRAC confidence surveys (SC2 and SC3), the DOES at each school collected actual performance data prior to and at the conclusion of phase II training for the experimental units. Unfortunately, most of the performance data were not collected in a manner that allowed comparison with the confidence survey data. The different schools administered different types of tests, tested task areas (eg., land navigation) rather than specific task performance, included in the test tasks/knowledge not included in the confidence survey, and vice versa. These differences among the schools and between the tests and surveys limited the extent to which possible relationships between confidence and performance could be examined. The only performance data comparable to the survey data came from Armor school tests.

b. The Armor school administered 18 hands-on tests (HOT). Each was scored on a GO, NO GO basis. Of these, 17 tasks matched the ones included in the confidence survey. Both surveys (SC2 and SC3) and performance data (pre- and post-training) were available for 21 soldiers. The GO, NO GO scoring procedure required a biserial type correlation to determine if there was any relationship between confidence and performance scores on each of the 17 specific tasks. However, the number of tasks on which all, or nearly all, soldiers scored a GO, either on the pretest or on the posttest, made a biserial analysis for each task difficult. For that reason, performance across all 17 tasks was aggregated to yield a single score, specifically number of GOs. The difference between the number of GOs on the pretest and the number of GOs on the posttest was derived for each soldier and recorded as a performance change score. A similar aggregation was applied to responses on the confidence survey (confidence to perform). Survey scale responses for the corresponding 17 tasks were summed for SC2 and for SC3. The difference between the SC2 total and the SC3 total was found for each soldier and recorded as a confidence change score. (This procedure eliminated four soldiers from the analysis who had checked "DO NOT PERFORM" on one or more of the 17 tasks.) The resulting performance and confidence change scores provided the data for analyzing possible relationships between confidence and performance.

c. For the 17 soldiers included in the analysis, there was a statistically significant increase in the number of GOs from the pretest to the posttest ($t = 7.19$, $df = 16$, $p < 0.01$). The average increase in the number of GOs was 4.82 tasks per soldier. There also was a statistically significant increase in confidence to perform tasks from SC2 to SC3 ($t = 2.54$, $df = 16$, $p < 0.05$). The average increase was 0.44 scale units per task per soldier. However, there was no significant correlation between performance and confidence change scores ($r = 0.04$, $p < 0.05$). Inspection of the confidence change scores suggested that the degree of change was a function of the initial level of confidence. To test that hypothesis, the soldiers were divided into three groups, an upper, middle, and lower group, on the basis of initial confidence scores. There were no significant differences between the three groups in terms of actual performance on the pretest or in performance change scores. There were significant differences

in confidence change scores among the three groups ($F = 5.10$, $df = 2.14$, $p < 0.05$). A Newman-Keuls post hoc test indicated that soldiers initially low in confidence showed a significantly greater increase in confidence ($\bar{X} = 1.03$ scale units increase per task) than soldiers in the middle group ($\bar{X} = 0.14$ scale unit increase per task) or soldiers in the upper group ($\bar{X} = 0.09$ scale unit increase per task). The difference between the middle and upper groups was not statistically significant. These results suggest that the school training primarily increased confidence among soldiers with initially low self-confidence. Since these results were drawn from a small sample of soldiers at one school, the reader is cautioned not to generalize the results beyond this study.

3.5 OVERALL SOLDIER CONFIDENCE

a. Up to this point, the analysis has focused on confidence to perform/train specific tasks. In this section, the emphasis is on how individual soldier confidence over all tasks changed as a result of training in the unit only or training in the unit plus training at the school. For each soldier, a single confidence score was determined for each survey administration by averaging individual soldier confidence ratings over all tasks. This single rating was calculated for SC1, SC2, and SC3 separately and changes in the rating across survey administrations were analyzed statistically by means of the matched pairs t-test using the .05 (or lower) level of rejection. The results are summarized in table 3-2.

b. For soldiers in the experimental Armor and Infantry units, there was no significant change in mean confidence ratings following training in the unit, but there was a significant increase in confidence ratings following training at the school for both confidence to perform and confidence to train. For the Infantry control units, there were no significant changes. Soldiers in the Artillery units showed a significant decline in confidence ratings following training in the unit. Again, a decline in confidence ratings probably indicates that training in the unit made the soldier aware of skill deficiencies he or she was not aware of prior to training and, as such, is not a negative effect of training. On the other hand, training in the unit must not have corrected such deficiencies. If the deficiencies had been corrected, an increase in confidence ratings would be expected. Following school training, there was an increase in confidence ratings for the Artillery soldiers, but the increase was not statistically significant.

3.6 CADRE TRAINING EFFECTIVENESS ANALYSIS SURVEY (PIT)

The respective schools were tasked to provide all units with necessary training materials on which to base and conduct training in the unit. The PIT survey was scheduled to be administered to all control units at the end of training and to all experimental units at the end of training in the unit (Phase I). The survey was designed to elicit cadre perceptions of the

effectiveness of training in the unit. Except for two units, one experimental and one control,[7] all PLT surveys were returned to TRAC unanswered. On the survey, the Cadre indicated that no training materials had been received, or that they had been assigned to the unit too late to participate in training at the unit.[8] Since TRAC analysts had no direct contact with the units, it is not possible to determine if training materials were not received, or were received but not used, or even were used but individual cadre members were not aware of any specific training taking place. Based on informal communication with contractor personnel at the unit home station and school personnel, there is evidence that training materials were sent to the units but not used, at least not in any systematic way. Similar evidence suggests that many cadre members were assigned to the experimental units just prior to going to the school, so they could not have participated in training at the unit home station anyway. The PLT survey data indicated that 26.1 percent of the soldiers given the survey had been assigned to the unit for less than two weeks.

TABLE 3-2
MEAN CONFIDENCE RATINGS OVER ALL TASKS

Unit Type	Survey			Mean Differences	
	SC1	SC2	SC3	SC1-SC2	SC1-SC3
Artillery					
Perform	4.73	4.39	5.04	-.40**	+.25
Train	4.67	4.36	4.97	-.31*	+.30
Armor					
Perform	4.97	4.81	5.29	-.16	+.32**
Train	4.94	4.76	5.20	-.18	+.26*
Infantry					
Perform	4.19	4.18	4.38	-.01	+.19*
Train	4.07	4.04	4.36	-.03	+.29**
Infantry Control					
Perform	4.47	-	4.54	-	+.07
Train	4.55	-	4.57	-	+.02

* $p < .05$
** $p < .01$

Note: Mean differences were evaluated statistically by means of the matched pairs t-test.

[7] *In both cases, the PLT survey was administered at an inappropriate time in training and the results were not included in the analysis.*

[8] *See instructions given to the soldiers on the survey form in appendix C.*

3.7 SUMMARY AND DISCUSSION

Overall, analysis of the survey results indicates that the addition of school training has a significant positive effect on the confidence of cadre members to perform and to train MOS-related tasks. That finding seems to be consistent across all unit types (Armor, Infantry, and Artillery). The analysis further suggests that the positive effect of school training impacts more on soldiers with initially low levels of confidence. The lack of any significant positive effect of training in the unit may be due to the lack of systematic training occurring in the units.

CHAPTER 4
SUMMARY OF ANALYSIS

A summary of the TEA findings related to each study objective is presented below.

4.1 **Objective 1:** Assess changes in confidence to perform and to train MOS-specific tasks as a result of phase I cadre training.

Phase I training in the unit had either little or no effect on confidence to perform/train or, in the case of Artillery units, resulted in a high percentage of tasks for which confidence ratings significantly declined. Although decreased confidence ratings do not imply a loss of actual proficiency, it does indicate the soldier has questions about his or her abilities that were not answered during training and may adversely affect his or her ability to lead and train others. Analysis of survey data and input from other evaluators suggested that the lack of a positive effect of, or even a negative effect of, phase I may be due to the lack of systematic cadre training occurring in the units.

4.2 **Objective 2:** Assess changes in confidence to perform and to train MOS-specific tasks as a result of phase II cadre training.

Phase II school training generally had a significantly positive effect on confidence to perform/train MOS-specific tasks. The positive effect varied in magnitude across units but held true for each unit type (Armor, Infantry, and Artillery), generally for all units and for individual soldiers. For Armor units, there was no indication that increased confidence was significantly related to an increase in actual performance (see paragraph 3.4). Instead, the positive effect of Armor school training seemed to impact primarily on soldiers with initially low levels of confidence regardless of actual proficiency. Increased confidence should enhance the ability of the cadre to lead and train soldiers in the unit, so should be viewed as a positive effect of school training. The extent to which school training affects actual performance will be reported in the respective DOES reports.

4.3 **Objective 3:** Elicit soldier perceptions of the effectiveness of phase I training.

Results from the PIT survey data and input from other evaluators suggest that there was little or no systematic cadre training during phase I. If there was a phase I training program applied in the unit, cadre members did not recognize it as such. Since apparently there was little or no training in the unit, it was not possible to assess effectiveness of proposed training or the training materials prepared by the respective schools.

4.4 **Objective 4:** Provide cost comparisons of alternative approaches to cadre training.

(The cost findings for the above objective will be addressed under a separate cover at a later date.)

CHAPTER 5
CONCLUSIONS

5.1 CONCLUSIONS

The following conclusions can be derived from the results of the TEA:

a. There is evidence that very little or no systematic cadre training was being conducted at the unit home station during this study.

b. Unit training often was not effective because training materials were not received, or were received but not used. Often, cadre members were assigned to the unit too late to participate in training at the unit.

c. Based on data from this study, cadre training in the unit had little positive effect on confidence to perform and train MOS-specific tasks.

d. After training in the unit, a significant decrease in confidence ratings for a high percentage of tasks was shown for Artillery units, whereas the Infantry and Armor units showed a significant decrease in confidence ratings for a much lower percentage of tasks.

e. Training at the school had a significantly positive effect on confidence to perform and train regardless of unit type.

f. The significantly positive effect of additional school training was consistent across unit types and specific units.

g. In the Armor units, cadre members whose confidence was low at the start of school training benefitted most from the additional training at the school.

h. Over all tasks, individual soldier confidence to train and to perform showed no significant change as a result of phase I training, but a significant increase after phase II training in the Armor and Infantry units.

i. Over all tasks, soldiers in the Artillery units showed a significant decrease in rated confidence to perform and to train following phase I. There were no significant changes in confidence following phase II training.

j. Based on the number of units and individuals, and the fact that the units were not randomly selected, it is not advisable to generalize the results beyond this study.

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3. Warwick, D.P. and Liniger, C.A., "The Sample Survey: Theory and Practice", New York: NcGraw - Hill, 1975.

4. Winer, B., "Statistical Principles in Experimental Design", New York, McGraw - Hill, 1962.

APPENDIX A

PROJECT COORDINATION SHEET

PROJECT COORDINATION SHEET

I. **PROJECT TITLE:** COHORT Cadre Training Effectiveness Analysis

II. **PROPONENT ELEMENT:**

Headquarters US Army Training and Doctrine Command (TRADOC)
Office of the Deputy Chief of Staff for Training (DCST)
Fort Monroe, Virginia 23651-5000

POINTS OF CONTACT:

MAJ Robert Begland or MAJ Kenneth Martin
Training Concepts Analysis Division
AUTOVON 680-4265

III. **TRASANA ELEMENT:**

US Army TRADOC Systems Analysis Activity (TRASANA)

(1) Training Effectiveness Analysis (TEA) Division
AUTOVON 258-4265

(2) Special Studies Division
AUTOVON 258-3136

STUDY MANAGER:

Dr. Edward L. George
Chief, Analysis Branch II
AUTOVON 258-2043

POINTS OF CONTACT:

TEA Division
Dr. Claude R. Miller or Ms. Lounell Southard
Analysis Branch II
AUTOVON 258-2043/4223/4672

Special Studies Division
Ms. Jane L. Repko
Resource Analysis Branch
AUTOVON 258-4617/2651

IV. **BACKGROUND:**

a. COHORT (COHesion, Operational Readiness, and Training) is a concept central to the Army's New Manning System. In a COHORT unit, the

soldiers remain together from basic training through duty assignment. The COHORT unit cadre assume control of the soldiers toward the end of basic training, then cadre and soldiers move to the field as an operational unit.

b. By stabilizing unit personnel throughout a tour of duty, a more in-depth training program can be achieved than is normally possible. Rather than having to spend so much time training frequent newcomers to the unit in basic skills, the cadre have the opportunity to develop and conduct a progressive, long term, and challenging training program not only for individuals but also for teams and crews. To take advantage of the opportunity available for training in COHORT units, the cadre members need to be skilled leaders, competent technicians, and proficient trainers.

c. To achieve that goal, cadre members go through a two-phased training program. Phase I, conducted at the operational unit, is designed to orient the cadre toward the COHORT concept and develop technical competency in MOS-specific skills. Phase II is conducted at the appropriate training school (Armor, Infantry, or Field Artillery) and emphasizes training in how to train others in MOS-specific skills.

d. TRADOC is conducting a COHORT Cadre Training Evaluation to determine the efficiency (cost and training effectiveness) of the cadre training plan and has tasked the TEA Division and Resource Analysis Branch to participate in the evaluation.

V. **DESCRIPTION:**

a. The TRADOC Cadre Training Evaluation effort is a broad scale, comprehensive study involving several different analytical agencies including TRASANA. Data collected by TRASANA will be integrated with findings from the other participating agencies in the final report.

b. The objectives of the TRASANA study are to:

(1) Assess changes in soldier confidence to perform and to train MOS-specific tasks as a result of Phase I cadre training.

(2) Assess changes in soldier confidence to perform and to train MOS-specific tasks as a result of Phase II cadre training.

(3) Elicit soldier perceptions of the effectiveness of Phase I training.

(4) Provide cost comparisons of alternative approaches to cadre training.

VI. METHODOLOGY:

a. The cadre of selected test units and control units will be administered surveys to assess changes in their confidence to perform and to train MOS-specific tasks. For the test units, the surveys will be administered prior to the start of Phase I training, between the end of Phase I and the start of Phase II training, and at the completion of Phase II training. The control units will be given the same surveys prior to Phase I training and again prior to the formation of the COHORT unit. By comparing survey responses at different points in time, changes in confidence due to each phase of training may be compared.

b. In addition to the confidence survey, a second survey will be administered to all units following completion of Phase I to elicit cadre perceptions of Phase I training effectiveness. The survey will address such training issues as coverage, sequence, time allowed, training aids/equipment, and the extent to which training objectives were met.

c. For the cost analysis, resource data will be provided by each participating school (infantry, armor, and field artillery) for each of the

training alternatives. Costs will then be generated and analyzed on a comparative basis for these alternatives.

VII. SCOPE:

The comprehensive evaluation of cadre training being conducted by TRADOC involves the US Army Soldier Support Center (USASSC), the Walter Reed Army Institute of Research (WRAIR), the TRADOC Combined Arms Test Activity (TCATA), the Directorate of Evaluation and Standardization (DOES) of the Infantry, Armor, and Field Artillery schools, and TRASANA. Each agency has responsibility for collecting specific types of data and information at certain points in the life cycle of COHORT units. The focus of the TRASANA effort will be to assess the impact of cadre training on confidence in ability to perform and to train MOS-specific tasks, and to provide comparative resource analysis of training alternatives defined by the appropriate schools.

VIII. RESPONSIBILITIES:

a. The TRASANA TEA Division will:

(1) Appoint study team.

(2) Develop study plan.

(3) Develop data collection instruments.

(4) Conduct data reduction, analysis, and interpretation.

(5) Provide TDY funds for CONUS travel for TRASANA personnel.

(6) Prepare final TRASANA report.

(7) Brief results as requested by DCST.

(8) Serve in a consulting role to DCST, TRADOC in the preparation of the final, comprehensive report.

b. TRASANA Resource Analysis Branch will:

(1) Provide a study team member to do resource analysis.

(2) Provide inputs to PCS.

(3) Develop resource analysis methodology inputs for study plan.

(4) Task schools through TRADOC for inputs to be used in resource analysis.

(5) Conduct resource analysis through usage of appropriate analytical tools.

(6) Input results of resource analysis into final TRASANA report.

(7) Prepare briefing slides and/or brief results of resource analysis.

(8) Provide consulting support to DCST, TRADOC in the integration of the resource analysis into TRADOC's final, comprehensive report.

c. TRADOC will:

(1) Designate primary and secondary points-of-contact at TRADOC and other participating agencies for the duration of the project.

(2) Task TCATA contractor personnel and DOES of each training school to administer and return data collection instruments to the TEA Division in accordance with the study schedule and instructions provided by TRASANA.

(3) Coordinate TRASANA study team on-site visits to selected study units.

(4) Serve as the principle coordinator for the collection of resource data for the duration of the project.

(5) Designate a primary point-of-contact at participating schools for collection of resource data for the duration of the project.

(6) Task the participating schools to define, agree upon, and document in sufficient detail each training alternative.

(7) Task each school to define and document in sufficient detail the phases of COHORT cadre training as it pertains to their school and the alternatives defined in (6) above. This documentation must consist of a detailed list of required resources and a program of instruction for each phase.

(8) Coordinate with schools to ensure timely return of resource data to TRASANA, Resource Analysis Branch.

IX. SCHEDULE:

Activity	Milestone
TRADOC cost analysis tasking letter to schools	15 Sep 85
Approve project coordination sheet	30 Sep 85
Approve study plan	30 Sep 85
Definition of alternatives provided by schools to TRASANA	~~1~~ 10 ~~1~~ Oct 85
TRASANA provide to schools detailed resource data requirements	~~24~~ 15 Oct 85
Collection of TEA survey data	15 Aug 85-28 Mar 86
Collection of resource data by schools	~~28~~ 15 Oct-1 Jan 86
Analysis of resource data/collection and analysis of cost data	2 Jan-28 Feb 86
Analysis of TEA survey data	28 Mar-15 Apr 86
Provide DCST with draft TRASANA report	30 May 86
Complete final TRASANA report	30 Jul 86

X. RESOURCES:

a. TRASANA TEA Division will provide:

(1) Technical man-months 24.0 TMM

(2) Computer SUP hours 10 hours

(3) CONUS TDY funds $8.5K

b. TRASANA Special Studies Division will provide:

(1) Technical man-months 6.0 TMM

(2) Computer SUP hours 5 hours

(3) CONUS TDY funds $5.0K

XI. DEPENDENCE ON EXTERNAL/INTERNAL EVENTS:

The successful completion of the proposed TEA is entirely dependent on the proper and timely administration and return of the TRASANA surveys by the TCATA contractor personnel and training school DOES personnel, as well as complete and timely return of required resource inputs by the training schools to TRASANA Resource Analysis Branch. Failure to provide these inputs to TRASANA, in accordance with the study schedule and directions provided by TRASANA, will delay the TRASANA report, or worse, render the results unreliable.

EDWARD S. BRODERICK
COL, GS
Director, Training Concepts Analysis
Headquarters, TRADOC

THOMAS L. PARIS
Chief, Training Effectiveness
Analysis Division
USATRASANA

FERNANDO PAYAN
Chief, Special Studies Division
USATRASANA

APPENDIX B

TASK CONFIDENCE SOLDIER SURVEYS (SC)

Task Confidence Soldier Surveys (SC)

Using task lists provided by the Armor, Infantry and Artillery Schools, a two-part survey, Task Confidence Soldier Survey (SC) was developed for each type of COHORT unit. Part One of the SC Survey was used to assess confidence in ability to perform each task, and Part Two was used to assess confidence in ability to train others to perform each task. Copies of the surveys that were given to each participant are included in the following order:

Armor (M1, M60A1)
Infantry
Artillery

TRAINING EFFECTIVENESS

ANALYSIS

SOLDIER SURVEY

TRAC

TRAINING EFFECTIVENESS ANALYSIS (TEA)

SOLDIER SURVEY - ARMOR - M1

FORM A1

INTRODUCTION

The TRADOC Analysis Center (TRAC), White Sands Missile Range, New Mexico, is conducting a survey of Army training in your job area. We need your input to the survey since you are the subject matter expert in your job. The results of the survey will be used to decide future Army training programs. For that reason, your honest answer to each survey question is critical. Remember, we are reviewing Army training, not you as an individual. If you lack confidence in some aspect of your job, then Army training is inadequate, not you.

One thing we will be looking at is change in your response to the survey items. To do that, we will need for you to complete the survey at three different times. To ensure we can follow changes over time, we have to have your name and SSN so we can compare your responses at different times. However, you will never be personally identified with any of your answers to the survey. Instead, responses from many soldiers in your job area will be pooled together and statistically summarized.

The survey consists of two parts. One part asks you to rate how confident you are in your ability to perform the major tasks in your job. The other part asks you to rate how confident you are in your ability to train other soldiers to perform the same tasks. Please take the time to complete the survey giving your honest answer to each item. It won't take you very long and it is important. Thank you for your cooperation.

TEA SOLDIER SURVEY

M1

TODAY'S DATE_____

BACKGROUND

1. Name _____ 2. Soc. Sec. No. _____

3. Rank _____ 4. PMOS _____ 5. Duty MOS _____

6. How long have you been in your duty MOS? _____ yrs. _____ mos.

7. How long have you been in the Army? _____ yrs. _____ mos.

PART I. Using the scale provided, show how much **CONFIDENCE** you have in your ability to **PERFORM** each task listed. Circle the scale number that corresponds to your level of confidence.

HOW MUCH CONFIDENCE DO YOU HAVE IN YOUR ABILITY TO PERFORM THESE TASKS?

TASK	LEVEL OF CONFIDENCE						DO NOT PERFORM THIS TASK
	None	Very Low	Low	High	Very High	Absolute	
1. Troubleshoot the Fire Control System on an M1 Tank	1	2	3	4	5	6	7
2. Prepare Gunner's Station for operation on an M1 Tank	1	2	3	4	5	6	7
3. Secure Gunner's Station on an M1 Tank	1	2	3	4	5	6	7
4. Boresight and System Calibrate an M1 Tank	1	2	3	4	5	6	7
5. Install/Remove an M240 Loader's Machinegun on an M1 Tank	1	2	3	4	5	6	7
6. Perform Tank Commander's Preventive Maintenance Prepare-to-Fire checks	1	2	3	4	5	6	7

HOW MUCH CONFIDENCE DO YOU HAVE IN YOUR ABILITY TO PERFORM THESE TASKS?

TASK	LEVEL OF CONFIDENCE						DO NOT PERFORM THIS TASK
	None	Very Low	Low	High	Very High	Absolute	
7. Zero the Cal .50 M2 HB Machinegun on an M1 Tank	1	2	3	4	5	6	7
8. Clear a Cal .50 M2 HB Machinegun to Prevent Accidental Discharge	1	2	3	4	5	6	7
9. Perform Operator's Maintenance on a Cal .50 M2 HB Machinegun	1	2	3	4	5	6	7
10. Clear an M240 Machinegun to Prevent Accidental Discharge	1	2	3	4	5	6	7
11. Perform Operator's Maintenance on an M240 Machinegun	1	2	3	4	5	6	7
12. Apply Immediate Action on an M240 Machinegun	1	2	3	4	5	6	7
13. Load/Unload the 105mm Main Gun on an M1 Tank	1	2	3	4	5	6	7
14. Load/Unload the M250 Grenade Launcher on an M1 Tank	1	2	3	4	5	6	7
15. Perform Operator's Maintenance on the 105mm Breechblock Assembly on an M1 Tank	1	2	3	4	5	6	7
16. Load the M1 Tank According to the Standard Load Plan	1	2	3	4	5	6	7

HOW MUCH CONFIDENCE DO YOU HAVE IN YOUR ABILITY TO PERFORM THESE TASKS?

TASK	LEVEL OF CONFIDENCE						DO NOT PERFORM THIS TASK
	None	Very Low	Low	High	Very High	Absolute	
17. Prepare the Commander's Weapon Station for Operation on an M1 Tank	1	2	3	4	5	6	7
18. Secure the Commander's Weapons St-tion on an M1 Tank	1	2	3	4	5	6	7
19. Boresight the M2 HB Cal .50 Machinegun on an M1 Tank	1	2	3	4	5	6	7
20. Direct Machinegun Engagements on an M1 Tank	1	2	3	4	5	6	7
21. Direct Main Gun Engagements on an M1 Tank	1	2	3	4	5	6	7
22. Engage Targets with M2 HB Cal .50 Machinegun on an M1 Tank	1	2	3	4	5	6	7
23. Estimate Range	1	2	3	4	5	6	7
24. Prepare Driver's Station for Operation on an M1 Tank	1	2	3	4	5	6	7
25. Perform Before-Operations Checks and Services on an M1 Tank	1	2	3	4	5	6	7
26. Perform During-Operations Checks and Services on an M1 Tank	1	2	3	4	5	6	7
27. Perform After-Operations Checks and Services on an M1 Tank	1	2	3	4	5	6	7

HOW MUCH CONFIDENCE DO YOU HAVE IN YOUR ABILITY TO PERFORM THESE TASKS?

TASK	LEVEL OF CONFIDENCE						DO NOT PERFORM THIS TASK
	None	Very Low	Low	High	Very High	Absolute	
28. Extinguish a Fire on an M1 Tank	1	2	3	4	5	6	7
29. Operate the Gas Particulate Filter Unit on an M1 Tank	1	2	3	4	5	6	7
30. Secure the Driver's Station on an M1 Tank	1	2	3	4	5	6	7
31. Prepare the Loader's Station for Operation on an M1 Tank	1	2	3	4	5	6	7
32. Secure the Loader's Station on an M1/M1A1 Tank	1	2	3	4	5	6	7
33. Install/Remove an M240 Coax Machine-gun on an M1 Tank	1	2	3	4	5	6	7
34. Perform Gunner's and Loader's Pre-pare-to-Fire Checks and Services on an M1 Tank	1	2	3	4	5	6	7
35. Engage Targets with the Main Gun from the Gunner's Station on an M1 Tank	1	2	3	4	5	6	7
36. Engage Targets with the Coax Machinegun from the Gunner's Station on an M1 Tank	1	2	3	4	5	6	7
37. Engage Targets with the Main Gun from the Commander's Weapon Station on an M1 Tank	1	2	3	4	5	6	7

HOW MUCH CONFIDENCE DO YOU HAVE IN YOUR ABILITY TO PERFORM THESE TASKS?

TASK	LEVEL OF CONFIDENCE						DO NOT PERFORM THIS TASK
	None	Very Low	Low	High	Very High	Absolute	
38. Engage Targets with the Coax Machinegun from the Commander's Weapon Station on an M1 Tank	1	2	3	4	5	6	7
39. Ammo Identification	1	2	3	4	5	6	7
40. Inspect Ammo and Prepare it for Stowing	1	2	3	4	5	6	7
41. Armor Fighting Vehicle Identification	1	2	3	4	5	6	7

PART II. Using the scale provided, show how much CONFIDENCE you have in your ability to TRAIN other soldiers to perform each task listed. Circle the scale number that corresponds to your level of confidence.

HOW MUCH CONFIDENCE DO YOU HAVE IN YOUR ABILITY TO TRAIN THESE TASKS?

TASK	LEVEL OF CONFIDENCE None	Very Low	Low	High	Very High	Absolute	DO NOT TRAIN THIS TASK
1. Troubleshoot the Fire Control System on an M1 Tank	1	2	3	4	5	6	7
2. Prepare Gunner's Station for operation on an M1 Tank	1	2	3	4	5	6	7
3. Secure Gunner's Station on an M1 Tank	1	2	3	4	5	6	7
4. Boresight and System Calibrate an M1 Tank	1	2	3	4	5	6	7
5. Install/Remove an M240 Loader's Machinegun on an M1 Tank	1	2	3	4	5	6	7
6. Perform Tank Commander's Preventive Maintenance Prepare-to-Fire checks	1	2	3	4	5	6	7
7. Zero the Cal .50 M2 HB Machinegun on an M1 Tank	1	2	3	4	5	6	7
8. Clear a Cal .50 M2 HB Machinegun to Prevent Accidental Disc[illegible]	1	2	3	4	5	6	7
9. Perform Operator's Maintenance on a Cal .50 M2 HB Machinegun	1	2	3	4	5	6	7
10. Clear an M240 Machinegun to Prevent Accidental Discharge	1	2	3	4	5	6	7

HOW MUCH CONFIDENCE DO YOU HAVE IN YOUR ABILITY TO TRAIN THESE TASKS?

TASK	LEVEL OF CONFIDENCE None	Very Low	Low	High	Very High	Absolute	DO NOT TRAIN THIS TASK
11. Perform Operator's Maintenance on an M240 Machinegun	1	2	3	4	5	6	7
12. Apply Immediate Action on an M240 Machinegun	1	2	3	4	5	6	7
13. Load/Unload the 105mm Main Gun on an M1 Tank	1	2	3	4	5	6	7
14. Load/Unload the M250 Grenade Launcher on an M1 Tank	1	2	3	4	5	6	7
15. Perform Operator's Maintenance on the 105mm Breechblock Assembly on an M1 Tank	1	2	3	4	5	6	7
16. Load the M1 Tank According to the Standard Load Plan	1	2	3	4	5	6	7
17. Prepare the Commander's Weapon Station for Operation on an M1 Tank	1	2	3	4	5	6	7
18. Secure the Commander's Weapons Station on an M1 Tank	1	2	3	4	5	6	7
19. Boresight the M2 HB Cal .50 Machinegun on an M1 Tank	1	2	3	4	5	6	7
20. Direct Machinegun Engagements on an M1 Tank	1	2	3	4	5	6	7

HOW MUCH CONFIDENCE DO YOU HAVE IN YOUR ABILITY TO TRAIN THESE TASKS?

TASK	LEVEL OF CONFIDENCE						DO NOT TRAIN THIS TASK
	None	Very Low	Low	High	Very High	Absolute	
21. Direct Main Gun Engagements on an M1 Tank	1	2	3	4	5	6	7
22. Engage Targets with M2 HB Cal .50 Machinegun on an M1 Tank	1	2	3	4	5	6	7
23. Estimate Range	1	2	3	4	5	6	7
24. Prepare Driver's Station for Operation on an M1 Tank	1	2	3	4	5	6	7
25. Perform Before-Operations Checks and Services on an M1 Tank	1	2	3	4	5	6	7
26. Perform During-Operations Checks and Services on an M1 Tank	1	2	3	4	5	6	7
27. Perform After-Operations Checks and Services on an M1 Tank	1	2	3	4	5	6	7
28. Extinguish a Fire on an M1 Tank	1	2	3	4	5	6	7
29. Operate the Gas Particulate Filter Unit on an M1 Tank	1	2	3	4	5	6	7
30. Secure the Driver's Station on an M1 Tank	1	2	3	4	5	6	7
31. Prepare the Loader's Station for Operation on an M1 Tank	1	2	3	4	5	6	7

HOW MUCH CONFIDENCE DO YOU HAVE IN YOUR ABILITY TO TRAIN THESE TASKS?

TASK	LEVEL OF CONFIDENCE						DO NOT TRAIN THIS TASK
	None	Very Low	Low	High	Very High	Absolute	
32. Secure the Loader's Station on an M1/M1A1 Tank	1	2	3	4	5	6	7
33. Install/Remove an M240 Coax Machine-gun on an M1 Tank	1	2	3	4	5	6	7
34. Perform Gunner's and Loader's Pre-pare-to-Fire Checks and Services on an M1 Tank	1	2	3	4	5	6	7
35. Engage Targets with the Main Gun from the Gunner's Station on an M1 Tank	1	2	3	4	5	6	7
36. Engage Targets with the Coax Machinegun from the Gunner's Station on an M1 Tank	1	2	3	4	5	6	7
37. Engage Targets with the Main Gun from the Commander's Weapon Station on an M1 Tank	1	2	3	4	5	6	7
38. Engage Targets with the Coax Machinegun from the Commander's Weapon Station on an M1 Tank	1	2	3	4	5	6	7
39. Ammo Identification	1	2	3	4	5	6	7
40. Inspect Ammo and Prepare it for Stowing	1	2	3	4	5	6	7
41. Armor Fighting Vehicle Identi-fication	1	2	3	4	5	6	7

TASK CONFIDENCE

SOLDIER SURVEY

TRAC

TASK CONFIDENCE SURVEY

SOLDIER SURVEY - ARMOR - M60A1

FORM C1

INTRODUCTION

The TRADOC Analysis Center (TRAC), White Sands Missile Range, New Mexico, is conducting a survey of Army training in your job area. We need your input to the survey since you are the subject matter expert in your job. The results of the survey will be used to decide future Army training programs. For that reason, your honest answer to each survey question is critical. Remember, we are reviewing Army training, not you as an individual. If you lack confidence in some aspect of your job, then Army training is inadequate, not you.

One thing we will be looking at is change in your response to the survey items. To do that, we will need for you to complete the survey at three different times. To ensure we can follow changes over time, we have to have your name and SSN so we can compare your responses at different times. However, you will never be personally identified with any of your answers to the survey. Instead, responses from many soldiers in your job area will be pooled together and statistically summarized.

The survey consists of two parts. One part asks you to rate how confident you are in your ability to perform the major tasks in your job. The other part asks you to rate how confident you are in your ability to train other soldiers to perform the same tasks. Please take the time to complete the survey giving your honest answer to each item. It won't take you very long and it is important. Thank you for your cooperation.

TASK CONFIDENCE SOLDIER SURVEY

M60A1

TODAY'S DATE _____

BACKGROUND

1. Name _____ 2. Soc. Sec. No. _____

3. Rank _____ 4. PMOS _____ 5. Duty MOS _____

6. How long have you been in your duty MOS? _____ yrs. _____ mos.

7. How long have you been in the Army? _____ yrs. _____ mos.

PART I. Using the scale provided, show how much CONFIDENCE you have in your ability to PERFORM each task listed. Circle the scale number that corresponds to your level of confidence.

HOW MUCH CONFIDENCE DO YOU HAVE IN YOUR ABILITY TO PERFORM THESE TASKS?

TASK	LEVEL OF CONFIDENCE						DO NOT PERFORM THIS TASK
	None	Very Low	Low	High	Very High	Absolute	
1. Troubleshoot the Fire Control System on an M48A5/ M60 Series Tank (Less the M60A3)	1	2	3	4	5	6	7
2. Prepare Gunner's Station for Operation on an M48A5/ M60 Series Tank (Less the M60A3)	1	2	3	4	5	6	7
3. Secure Gunner's Station on an M48A5/ M60 Series Tank	1	2	3	4	5	6	7
4. Boresight and System Calibrate an M48A5/M60 Series Tank (Less the M60A3)	1	2	3	4	5	6	7

HOW MUCH CONFIDENCE DO YOU HAVE IN YOUR ABILITY TO PERFORM THESE TASKS?

TASK	LEVEL OF CONFIDENCE						DO NOT PERFORM THIS TASK
	None	Very Low	Low	High	Very High	Absolute	
5. Perform Tank Commander's Preventive Maintenance Prepare-to-Fire Checks and Services on an M48A5/M60 Series Tank (Less the M60A3)	1	2	3	4	5	6	7
6. Zero the Cal .50 M85 Machinegun on an M60 Series Tank	1	2	3	4	5	6	7
7. Clear a Cal .50 M85 Machinegun to Prevent Accidental Discharge	1	2	3	4	5	6	7
8. Perform Operator's Maintenance on a Cal .50 M85 Machinegun	1	2	3	4	5	6	7
9. Clear an M240 Machinegun to Prevent Accidental Discharge	1	2	3	4	5	6	7
10. Perform Operator's Maintenance on an M240 Machinegun	1	2	3	4	5	6	7
11. Apply Immediate Action on an M240 Machinegun	1	2	3	4	5	6	7
12. Load/Unload the 105mm Main Gun on the M48A5/M60 Series Tank	1	2	3	4	5	6	7

HOW MUCH CONFIDENCE DO YOU HAVE IN YOUR ABILITY TO PERFORM THESE TASKS?

TASK	LEVEL OF CONFIDENCE						DO NOT PERFORM THIS TASK
	None	Very Low	Low	High	Very High	Absolute	
13. Load/Unload the M239 Grenade Launcher on the M48A5/M60 Series Tank	1	2	3	4	5	6	7
14. Perform Operator's Maintenance on the 105mm Breechblock Assembly on an M48A5/ M60 Series Tank	1	2	3	4	5	6	7
15. Load the M60A1 Tank According to the Standard Load Plan	1	2	3	4	5	6	7
16. Prepare the Commander's Weapon Station (CWS) for Operation on an M48A5/M60 Series Tank (Less the M60A3)	1	2	3	4	5	6	7
17. Secure the Weapons Station	1	2	3	4	5	6	7
18. Boresight the M85 Cal .50 Machinegun on the M60 Series Tank	1	2	3	4	5	6	7
19. Direct Machinegun Engagements on an M48A5/M60 Series Tank	1	2	3	4	5	6	7
20. Direct Main Gun Engagements on an M48A5/M60 Series Tank	1	2	3	4	5	6	7
21. Engage Targets with M85 Cal .50 Machinegun on an M60 Series Tank	1	2	3	4	5	6	7
22. Estimate Range	1	2	3	4	5	6	7

HOW MUCH CONFIDENCE DO YOU HAVE IN YOUR ABILITY TO PERFORM THESE TASKS?

TASK	LEVEL OF CONFIDENCE						DO NOT PERFORM THIS TASK
	None	Very Low	Low	High	Very High	Absolute	
23. Prepare Driver's Station for Operation on an M48A5/M60 Series Tank	1	2	3	4	5	6	7
24. Perform Before-Operations Maintenance on an M60 Series Tank (Less the M60A3)	1	2	3	4	5	6	7
25. Perform During-Operations Maintenance on an M60 Series Tank (Less the M60A3)	1	2	3	4	5	6	7
26. Perform After-Operations Maintenance on an M60 Series Tank (Less the M60A3)	1	2	3	4	5	6	7
27. Extinguish a Fire on an M48A5/M60 Series Tank	1	2	3	4	5	6	7
28. Operate the Gas Particulate Filter Unit on an M60 Series Tank	1	2	3	4	5	6	7
29. Secure the Driver's Station on an M48A5/M60 Series Tank	1	2	3	4	5	6	7
30. Prepare the Loader's Station for Operation on an M48A5/M60 Series Tank	1	2	3	4	5	6	7
31. Secure the Loader's Station on an M60 Series Tank	1	2	3	4	5	6	7

HOW MUCH CONFIDENCE DO YOU HAVE IN YOUR ABILITY TO PERFORM THESE TASKS?

TASK	LEVEL OF CONFIDENCE						DO NOT PERFORM THIS TASK
	None	Very Low	Low	High	Very High	Absolute	
32. Install/Remove an M240 Coax Machine-gun on an M48A5/ M60 Series Tank	1	2	3	4	5	6	7
33. Perform Gunner's and Loader's Pre-ventive Maintenance Prepare-to-Fire Checks and Services on an M48A5/M60 Series Tank (Less the M60A3)	1	2	3	4	5	6	7
34. Engage Targets with the Main Gun from the Gunner's Station on an M48A5/M60 Series Tank (Less the M60A3)	1	2	3	4	5	6	7
35. Engage Targets with the Coax Machinegun from the Gunner's Station on an M48A5/ M60 Series Tank (Less the M60A3)	1	2	3	4	5	6	7
36. Engage Targets with the Main Gun from the Commander's Weapon Station on an M48A5/M60 Series Tank (Less the M60A3)	1	2	3	4	5	6	7
37. Engage Targets with the Coax Machinegun from the Commander's Weapon Station (CWS) on an M48A5/M60 Series Tank (Less the M60A3)	1	2	3	4	5	6	7

HOW MUCH CONFIDENCE DO YOU HAVE IN YOUR ABILITY TO PERFORM THESE TASKS?

TASK	LEVEL OF CONFIDENCE						DO NOT PERFORM THIS TASK
	None	Very Low	Low	High	Very High	Absolute	
38. Prepare Range Card for an M60A1 Tank	1	2	3	4	5	6	7
39. Engage Targets from Range Card Data on an M60A1 Tank	1	2	3	4	5	6	7
40. Ammo Identification	1	2	3	4	5	6	7
41. Inspect Ammo and Prepare it for Stowing	1	2	3	4	5	6	7
42. Armor Fighting Vehicle Identification	1	2	3	4	5	6	7

PART II. Using the scale provided, show how much **CONFIDENCE** you have in your ability to **TRAIN** each task listed. Circle the scale number that corresponds to your level of confidence.

HOW MUCH CONFIDENCE DO YOU HAVE IN YOUR ABILITY TO TRAIN THESE TASKS?

TASK	LEVEL OF CONFIDENCE						DO NOT TRAIN THIS TASK
	None	Very Low	Low	High	Very High	Absolute	
1. Troubleshoot the Fire Control System on an M48A5/ M60 Series Tank (Less the M60A3)	1	2	3	4	5	6	7
2. Prepare Gunner's Station for Operation on an M48A5/ M60 Series Tank (Less the M60A3)	1	2	3	4	5	6	7
3. Secure Gunner's Station on an M48A5/ M60 Series Tank	1	2	3	4	5	6	7
4. Boresight and System Calibrate an M48A5/M60 Series Tank (Less the M60A3)	1	2	3	4	5	6	7
5. Perform Tank Commander's Preventive Maintenance Prepare-to-Fire Checks and Services on an M48A5/M60 Series Tank (Less the M60A3)	1	2	3	4	5	6	7
6. Zero the Cal .50 M85 Machinegun on an M60 Series Tank	1	2	3	4	5	6	7
7. Clear a Cal .50 M85 Machinegun to Prevent Accidental Discharge	1	2	3	4	5	6	7

HOW MUCH CONFIDENCE DO YOU HAVE IN YOUR ABILITY TO TRAIN THESE TASKS

TASK	LEVEL OF CONFIDENCE						DO NOT TRAIN THIS TASK
	None	Very Low	Low	High	Very High	Absolute	
8. Perform Operator's Maintenance on a Cal .50 M85 Machinegun	1	2	3	4	5	6	7
9. Clear an M240 Machinegun to Prevent Accidental Discharge	1	2	3	4	5	6	7
10. Perform Operator's Maintenance on an M240 Machinegun	1	2	3	4	5	6	7
11. Apply Immediate Action on an M240 Machinegun	1	2	3	4	5	6	7
12. Load/Unload the 105mm Main Gun on the M48A5/M60 Series Tank	1	2	3	4	5	6	7
13. Load/Unload the M239 Grenade Launcher on the M48A5/M60 Series Tank	1	2	3	4	5	6	7
14. Perform Operator's Maintenance on the 105mm Breechblock Assembly on an M48A5/M60 Series Tank	1	2	3	4	5	6	7
15. Load the M60A1 Tank According to the Standard Load Plan	1	2	3	4	5	6	7
16. Prepare the Commander's Weapon Station (CWS) for Operation on an M48A5/M60 Series Tank (Less the M60A3)	1	2	3	4	5	6	7

HOW MUCH CONFIDENCE DO YOU HAVE IN YOUR ABILITY TO TRAIN THESE TASKS?

TASK	LEVEL OF CONFIDENCE						DO NOT TRAIN THIS TASK
	None	Very Low	Low	High	Very High	Absolute	
17. Secure the Weapons Station	1	2	3	4	5	6	7
18. Boresight the M85 Cal .50 Machinegun on the M60 Series Tank	1	2	3	4	5	6	7
19. Direct Machinegun Engagements on an M48A5/M60 Series Tank	1	2	3	4	5	6	7
20. Direct Main Gun Engagements on an M48A5/M60 Series Tank	1	2	3	4	5	6	7
21. Engage Targets with M85 Cal .50 Machinegun on an M60 Series Tank	1	2	3	4	5	6	7
22. Estimate Range	1	2	3	4	5	6	7
23. Prepare Driver's Station for Operation on an M48A5/M60 Series Tank	1	2	3	4	5	6	7
24. Perform Before-Operations Maintenance on an M60 Series Tank (Less the M60A3)	1	2	3	4	5	6	7
25. Perform During-Operations Maintenance on an M60 Series Tank (Less the M60A3)	1	2	3	4	5	6	7
26. Perform After-Operations Maintenance on an M60 Series Tank (Less the M60A3)	1	2	3	4	5	6	7

HOW MUCH CONFIDENCE DO YOU HAVE IN YOUR ABILITY TO TRAIN THESE TASKS?

TASK	LEVEL OF CONFIDENCE						DO NOT TRAIN THIS TASK
	None	Very Low	Low	High	Very High	Absolute	
27. Extinguish a Fire on an M48A5/M60 Series Tank	1	2	3	4	5	6	7
28. Operate the Gas Particulate Filter Unit on an M60 Series Tank	1	2	3	4	5	6	7
29. Secure the Driver's Station on an M48A5/M60 Series Tank	1	2	3	4	5	6	7
30. Prepare the Loader's Station for Operation on an M48A5/M60 Series Tank	1	2	3	4	5	6	7
31. Secure the Loader's Station on an M60 Series Tank	1	2	3	4	5	6	7
32. Install/Remove an M240 Coax Machine-gun on an M48A5/ M60 Series Tank	1	2	3	4	5	6	7
33. Perform Gunner's and Loader's Pre-ventive Maintenance Prepare-to-Fire Checks and Services on an M48A5/M60 Series Tank (Less the M60A3)	1	2	3	4	5	6	7
34. Engage Targets with the Main Gun from the Gunner's Station on an M48A5/M60 Series Tank (Less the M60A3)	1	2	3	4	5	6	7

HOW MUCH CONFIDENCE DO YOU HAVE IN YOUR ABILITY TO TRAIN THESE TASKS?

TASK	LEVEL OF CONFIDENCE						DO NOT TRAIN THIS TASK
	None	Very Low	Low	High	Very High	Absolute	
35. Engage Targets with the Coax Machinegun from the Gunner's Station on an M48A5/ M60 Series Tank (Less the M60A3)	1	2	3	4	5	6	7
36. Engage Targets with the Main Gun from the Commander's Weapon Station on an M48A5/M60 Series Tank (Less the M60A3)	1	2	3	4	5	6	7
37. Engage Targets with the Coax Machinegun from the Commander's Weapon Station (CWS) on an M48A5/M60 Series Tank (Less the M60A3)	1	2	3	4	5	6	7
38. Prepare Range Card for an M60A1 Tank	1	2	3	4	5	6	7
39. Engage Targets from Range Card Data on an M60A1 Tank	1	2	3	4	5	6	7
40. Ammo Identification	1	2	3	4	5	6	7
41. Inspect Ammo and Prepare it for Stowing	1	2	3	4	5	6	7
42. Armor Fighting Vehicle Identification	1	2	3	4	5	6	7

TASK CONFIDENCE

SOLDIER SURVEY

TRAC

TASK CONFIDENCE SURVEY

SOLDIER SURVEY - INFANTRY

NEW MANNING SYSTEM CADRE TRAINING

FORM E1

INTRODUCTION

The TRADOC Analysis Center (TRAC), White Sands Missile Range, New Mexico, is conducting a survey of Army training in your job area. We need your input to the survey since you are the subject matter expert in your job. The results of the survey will be used to decide future Army training programs. For that reason, your honest answer to each survey question is critical. Remember, we are reviewing Army training, not you as an individual. If you lack confidence in some aspect of your job, then Army training is inadequate, not you.

One thing we will be looking at is change in your response to the survey items. To do that, we will need for you to complete the survey at three different times. To ensure we can follow changes over time, we have to have your name and SSN so we can compare your responses at different times. However, you will never be personally identified with any of your answers to the survey. Instead, responses from many soldiers in your job area will be pooled together and statistically summarized.

The survey consists of two parts. One part asks you to rate how confident you are in your ability to perform the major tasks in your job. The other part asks you to rate how confident you are in your ability to train other soldiers to perform the same tasks. Please take the time to complete the survey giving your honest answer to each item. It won't take you very long and it is important. Thank you for your cooperation.

TASK CONFIDENCE SOLDIER SURVEY

INFANTRY

TODAY'S DATE_____

BACKGROUND

1. Name _____ 2. Soc. Sec. No. _____

3. Rank _____ 4. PMOS _____ 5. Duty MOS _____

6. How long have you been in your duty MOS? _____ yrs. _____ mos.

7. How long have you been in the Army? _____ yrs. _____ mos.

PART I. Using the scale provided, show how much **CONFIDENCE** you have in your ability to **PERFORM** each task listed. Circle the scale number that corresponds to your level of confidence.

HOW MUCH CONFIDENCE DO YOU HAVE IN YOUR ABILITY TO PERFORM THESE TASKS?

TASK	LEVEL OF CONFIDENCE						DO NOT PERFORM THIS TASK
	None	Very Low	Low	High	Very High	Absolute	
1. Demonstrate how to Attack and Clear Buildings (Entry and Room Clearing Techniques)	1	2	3	4	5	6	7
2. Demonstrate Techniques for Subterranean Route Reconnaissance	1	2	3	4	5	6	7
3. Develop a Defensive Plan	1	2	3	4	5	6	7
4. Develop a Platoon Offensive Plan	1	2	3	4	5	6	7
5. Conduct a Deliberate Attack on Urban Terrain	1	2	3	4	5	6	7

HOW MUCH CONFIDENCE DO YOU HAVE IN YOUR ABILITY TO PERFORM THESE TASKS?

TASK	LEVEL OF CONFIDENCE						DO NOT PERFORM THIS TASK
	None	Very Low	Low	High	Very High	Absolute	
6. Conduct a Hasty Defense on Urban Terrain	1	2	3	4	5	6	7
7. React to Enemy Contact	1	2	3	4	5	6	7
8. Conduct a Stream Crossing	1	2	3	4	5	6	7
9. Target Acquisition/Fire Distribution	1	2	3	4	5	6	7
10. Conduct Anti-armor Ambush	1	2	3	4	5	6	7
11. Break Contact	1	2	3	4	5	6	7
12. Employ/Recover a Hasty Protective Minefield	1	2	3	4	5	6	7
13. Prepare for/ React to Chemical Attack	1	2	3	4	5	6	7
14. Conduct a Hasty Ambush	1	2	3	4	5	6	7
15. Knock out Bunkers	1	2	3	4	5	6	7
16. Breach a Wire Obstacle	1	2	3	4	5	6	7
17. Clear a Trenchline	1	2	3	4	5	6	7
18. Move to/Defend from Supplementary/ Alternate Positions	1	2	3	4	5	6	7
19. Establish a Hasty Defensive Position	1	2	3	4	5	6	7
20. React to Ambush	1	2	3	4	5	6	7

HOW MUCH CONFIDENCE DO YOU HAVE IN YOUR ABILITY TO PERFORM THESE TASKS?

TASK	LEVEL OF CONFIDENCE						DO NOT PERFORM THIS TASK
	None	Very Low	Low	High	Very High	Absolute	
21. Reconnoiter a Designated Area (Woodline)	1	2	3	4	5	6	7
22. Reconnoiter a Designated Objective	1	2	3	4	5	6	7
23. Cross a Danger Area	1	2	3	4	5	6	7
24. Breach a Minefield	1	2	3	4	5	6	7
25. Conduct Passage of Friendly Lines	1	2	3	4	5	6	7
26. Prepare for/ React to a Nuclear Attack	1	2	3	4	5	6	7
27. Determine the Elevation of a Point on the Ground Using a Map	1	2	3	4	5	6	7
28. Orient a Map to the Ground by Map-Terrain Association	1	2	3	4	5	6	7
29. Determine a Magnetic Azimuth Using a Compass	1	2	3	4	5	6	7
30. Navigate from One Position on the Ground to Another Point	1	2	3	4	5	6	7
31. Determine Distance While Moving Between Two Points on the Ground	1	2	3	4	5	6	7

HOW MUCH CONFIDENCE DO YOU HAVE IN YOUR ABILITY TO PERFORM THESE TASKS?

TASK	LEVEL OF CONFIDENCE						DO NOT PERFORM THIS TASK
	None	Very Low	Low	High	Very High	Absolute	
32. Convert Azimuths from Grid to Magnetic and Magnetic to Grid	1	2	3	4	5	6	7
33. Locate an Unknown Point Using Resection	1	2	3	4	5	6	7
34. Locate an Unknown Point on a Map or on the Ground by Intersection	1	2	3	4	5	6	7
35. Navigate from One Point on the Ground to Another, Utilizing Dead Reckoning	1	2	3	4	5	6	7
36. Determine the Elevation of a Point on the Ground Using a Map	1	2	3	4	5	6	7
37. Orient a Map to the Ground by Map-Association	1	2	3	4	5	6	7
38. Determine a Magnetic Azimuth Using a Compass	1	2	3	4	5	6	7
39. Navigate from One Position on the Ground to Another Point	1	2	3	4	5	6	7
40. Operate a Small Arms Range	1	2	3	4	5	6	7
41. Perform Range Set-Up Preplanning	1	2	3	4	5	6	7
42. Perform Before-Operations Range Checks	1	2	3	4	5	6	7

HOW MUCH CONFIDENCE DO YOU HAVE IN YOUR ABILITY TO PERFORM THESE TASKS?

TASK	LEVEL OF CONFIDENCE						DO NOT PERFORM THIS TASK
	None	Very Low	Low	High	Very High	Absolute	
43. Perform During-Operations Checks	1	2	3	4	5	6	7
44. Perform After-Operations Range Checks	1	2	3	4	5	6	7
45. State the Four Fundamentals of Rifle Marksmanship	1	2	3	4	5	6	7
46. Battlesight Zero an M16A1 Rifle	1	2	3	4	5	6	7
47. Perform as a Coach for a Rifleman During Battlesight Zero of an M16A1 Rifle	1	2	3	4	5	6	7
48. Apply the Four Fundamentals of Rifle Marksmanship	1	2	3	4	5	6	7
49. Engage Targets During Periods of Limited Visibility	1	2	3	4	5	6	7
50. Operate the AN/PVS-5 Night Vision Goggles	1	2	3	4	5	6	7
51. Qualify with an M16A1 Rifle	1	2	3	4	5	6	7
52. Discuss the Army System of Maintenance	1	2	3	4	5	6	7
53. List the Three Categories of Maintenance and Explain Their Roles in the Army System of Maintenance	1	2	3	4	5	6	7

HOW MUCH CONFIDENCE DO YOU HAVE IN YOUR ABILITY TO PERFORM THESE TASKS?

TASK	LEVEL OF CONFIDENCE						DO NOT PERFORM THIS TASK
	None	Very Low	Low	High	Very High	Absolute	
54. List the Types of Maintenance Inspections, State the Nature and Scope of Each, and Determine the Type of Maintenance Inspection to Conduct	1	2	3	4	5	6	7
55. List the Types of Assistance Teams Available to Improve the Unit's Maintenance Posture	1	2	3	4	5	6	7
56. Describe the Procedure for Obtaining Publications	1	2	3	4	5	6	7
57. Determine Tabulated Data, Issue Items, and Maintenance Actions Accomplished at Each Level of Maintenance	1	2	3	4	5	6	7
58. Prepare a DA Form 2404 (Daily)	1	2	3	4	5	6	7
59. Perform Preventive Maintenance Checks and Services	1	2	3	4	5	6	7
60. Discuss the Dispatch Loop	1	2	3	4	5	6	7
61. Extract Data from the Equipment Identification Card	1	2	3	4	5	6	7

HOW MUCH CONFIDENCE DO YOU HAVE IN YOUR ABILITY TO PERFORM THESE TASKS?

TASK	LEVEL OF CONFIDENCE						DO NOT PERFORM THIS TASK
	None	Very Low	Low	High	Very High	Absolute	
62. Identify the Forms Required to be Present in an Equipment Record Folder	1	2	3	4	5	6	7
63. Inspect DD Form 1970	1	2	3	4	5	6	7
64. Extract Data from the DA Form 2401	1	2	3	4	5	6	7
65. Extract Data from the -20P Manual	1	2	3	4	5	6	7
66. Extract Data from a Prescribed Load List Computer Printout	1	2	3	4	5	6	7
67. List the Five Sources of Supply and How a Part is Obtained through Each Source in Accordance with FC 7-174 without Error	1	2	3	4	5	6	7
68. Extract Data from the Army Master Data File	1	2	3	4	5	6	7
69. Extract Data from a DA Form 2765, a 2765-1 or a 2765 Pre-punched/ Pre-printed	1	2	3	4	5	6	7
70. Extract Data from a DA Form 2064, Document Register for Supply Actions	1	2	3	4	5	6	7

HOW MUCH CONFIDENCE DO YOU HAVE IN YOUR ABILITY TO PERFORM THESE TASKS?

TASK	LEVEL OF CONFIDENCE						DO NOT PERFORM THIS TASK
	None	Very Low	Low	High	Very High	Absolute	
71. Extract Data from a DA Form 2404, Deferred Maintenance Sheet	1	2	3	4	5	6	7
72. Extract Data from Maintenance Allocation Chart	1	2	3	4	5	6	7
73. Extract Data from DA Form 2407	1	2	3	4	5	6	7
74. Determine Non-Mission Capable Days on DD Form 314	1	2	3	4	5	6	7
75. Extract Data from DA Form 2406, Materiel Condition Status Report	1	2	3	4	5	6	7
76. Determine When a Service is Due	1	2	3	4	5	6	7
77. Extract Data from the -20 Manual	1	2	3	4	5	6	7
78. Extract Data from a Lube Order	1	2	3	4	5	6	7
79. Determine Tools and Special Tools Utilized When Performing a Service	1	2	3	4	5	6	7
80. Utilize the STE/ICE	1	2	3	4	5	6	7
81. Determine Historical Record for a Piece of Equipment	1	2	3	4	5	6	7

PART II. Using the same scale, show how much **CONFIDENCE** you have in your ability to **TRAIN** other soldiers to perform each task listed. Circle the scale number that corresponds to your level of confidence.

HOW MUCH CONFIDENCE DO YOU HAVE IN YOUR ABILITY TO TRAIN THESE TASKS?

TASK	LEVEL OF CONFIDENCE						DO NOT TRAIN THIS TASK
	None	Very Low	Low	High	Very High	Absolute	
1. Demonstrate how to Attack and Clear Buildings (Entry and Room Clearing Techniques)	1	2	3	4	5	6	7
2. Demonstrate Techniques for Subterranean Route Reconnaissance	1	2	3	4	5	6	7
3. Develop a Defensive Plan	1	2	3	4	5	6	7
4. Develop a Platoon Offensive Plan	1	2	3	4	5	6	7
5. Conduct a Deliberate Attack on Urban Terrain	1	2	3	4	5	6	7
6. Conduct a Hasty Defense on Urban Terrain	1	2	3	4	5	6	7
7. React to Enemy Contact	1	2	3	4	5	6	7
8. Conduct a Stream Crossing	1	2	3	4	5	6	7
9. Target Acquisition/Fire Distribution	1	2	3	4	5	6	7
10. Conduct Anti-armor Ambush	1	2	3	4	5	6	7
11. Break Contact	1	2	3	4	5	6	7

HOW MUCH CONFIDENCE DO YOU HAVE IN YOUR ABILITY TO TRAIN THESE TASKS?

TASK	LEVEL OF CONFIDENCE None	Very Low	Low	High	Very High	Absolute	DO NOT TRAIN THIS TASK
12. Employ/Recover a Hasty Protective Minefield	1	2	3	4	5	6	7
13. Prepare for/ React to Chemical Attack	1	2	3	4	5	6	7
14. Conduct a Hasty Ambush	1	2	3	4	5	6	7
15. Knock out Bunkers	1	2	3	4	5	6	7
16. Breach a Wire Obstacle	1	2	3	4	5	6	7
17. Clear a Trenchline	1	2	3	4	5	6	7
18. Move to/Defend from Supplementary/ Alternate Positions	1	2	3	4	5	6	7
19. Establish a Hasty Defensive Position	1	2	3	4	5	6	7
20. React to Ambush	1	2	3	4	5	6	7
21. Reconnoiter a Designated Area (Woodline)	1	2	3	4	5	6	7
22. Reconnoiter a Designated Objective	1	2	3	4	5	6	7
23. Cross a Danger Area	1	2	3	4	5	6	7
24. Breach a Minefield	1	2	3	4	5	6	7
25. Conduct Passage of Friendly Lines	1	2	3	4	5	6	7

HOW MUCH CONFIDENCE DO YOU HAVE IN YOUR ABILITY TO TRAIN THESE TASKS?

TASK	LEVEL OF CONFIDENCE						DO NOT TRAIN THIS TASK
	None	Very Low	Low	High	Very High	Absolute	
26. Prepare for/ React to a Nuclear Attack	1	2	3	4	5	6	7
27. Determine the Elevation of a Point on the Ground Using a Map	1	2	3	4	5	6	7
28. Orient a Map to the Ground by Map-Terrain Association	1	2	3	4	5	6	7
29. Determine a Magnetic Azimuth Using a Compass	1	2	3	4	5	6	7
30. Navigate from One Position on the Ground to Another Point	1	2	3	4	5	6	7
31. Determine Distance While Moving Between Two Points on the Ground	1	2	3	4	5	6	7
32. Convert Azimuths from Grid to Magnetic and Magnetic to Grid	1	2	3	4	5	6	7
33. Locate an Unknown Point Using Resection	1	2	3	4	5	6	7
34. Locate an Unknown Point on a Map or on the Ground by Intersection	1	2	3	4	5	6	7
35. Navigate from One Point on the Ground to Another, Utilizing Dead Reckoning	1	2	3	4	5	6	7

HOW MUCH CONFIDENCE DO YOU HAVE IN YOUR ABILITY TO TRAIN THESE TASKS?

TASK	LEVEL OF CONFIDENCE						DO NOT TRAIN THIS TASK
	None	Very Low	Low	High	Very High	Absolute	
36. Determine the Elevation of a Point on the Ground Using a Map	1	2	3	4	5	6	7
37. Orient a Map to the Ground by Map-Association	1	2	3	4	5	6	7
38. Determine a Magnetic Azimuth Using a Compass	1	2	3	4	5	6	7
39. Navigate from One Position on the Ground to Another Point	1	2	3	4	5	6	7
40. Operate a Small Arms Range	1	2	3	4	5	6	7
41. Perform Range Set-Up Preplanning	1	2	3	4	5	6	7
42. Perform Before-Operations Range Checks	1	2	3	4	5	6	7
43. Perform During-Operations Checks	1	2	3	4	5	6	7
44. Perform After-Operations Range Checks	1	2	3	4	5	6	7
45. State the Four Fundamentals of Rifle Marksmanship	1	2	3	4	5	6	7
46. Battlesight Zero an M16A1 Rifle	1	2	3	4	5	6	7
47. Perform as a Coach for a Rifleman During Battlesight Zero of an M16A1 Rifle	1	2	3	4	5	6	7

HOW MUCH CONFIDENCE DO YOU HAVE IN YOUR ABILITY TO TRAIN THESE TASKS?

TASK	LEVEL OF CONFIDENCE						DO NOT TRAIN THIS TASK
	None	Very Low	Low	High	Very High	Absolute	
48. Apply the Four Fundamentals of Rifle Marksmanship	1	2	3	4	5	6	7
49. Engage Targets During Periods of Limited Visibility	1	2	3	4	5	6	7
50. Operate the AN/ PVS-5 Night Vision Goggles	1	2	3	4	5	6	7
51. Qualify with an M16A1 Rifle	1	2	3	4	5	6	7
52. Discuss the Army System of Maintenance	1	2	3	4	5	6	7
53. List the Three Categories of Maintenance and Explain Their Roles in the Army System of Maintenance	1	2	3	4	5	6	7
54. List the Types of Maintenance Inspections, State the Nature and Scope of Each, and Determine the Type of Maintenance Inspection to Conduct	1	2	3	4	5	6	7
55. List the Types of Assistance Teams Available to Improve the Unit's Maintenance Posture	1	2	3	4	5	6	7

HOW MUCH CONFIDENCE DO YOU HAVE IN YOUR ABILITY TO TRAIN THESE TASKS?

TASK	LEVEL OF CONFIDENCE None	Very Low	Low	High	Very High	Absolute	DO NOT TRAIN THIS TASK
56. Describe the Procedure for Obtaining Publications	1	2	3	4	5	6	7
57. Determine Tabulated Data, Issue Items, and Maintenance Actions Accomplished at Each Level of Maintenance	1	2	3	4	5	6	7
58. Prepare a DA Form 2404 (Daily)	1	2	3	4	5	6	7
59. Perform Preventive Maintenance Checks and Services	1	2	3	4	5	6	7
60. Discuss the Dispatch Loop	1	2	3	4	5	6	7
61. Extract Data from the Equipment Identification Card	1	2	3	4	5	6	7
62. Identify the Forms Required to be Present in an Equipment Record Folder	1	2	3	4	5	6	7
63. Inspect DD Form 1970	1	2	3	4	5	6	7
64. Extract Data from the DA Form 2401	1	2	3	4	5	6	7
65. Extract Data from the -20P Manual	1	2	3	4	5	6	7

HOW MUCH CONFIDENCE DO YOU HAVE IN YOUR ABILITY TO TRAIN THESE TASKS?

TASK	LEVEL OF CONFIDENCE						DO NOT TRAIN THIS TASK
	None	Very Low	Low	High	Very High	Absolute	
66. Extract Data from a Prescribed Load List Computer Printout	1	2	3	4	5	6	7
67. List the Five Sources of Supply and How a Part is Obtained through Each Source in Accordance with FC 7-174 without Error	1	2	3	4	5	6	7
68. Extract Data from the Army Master Data File	1	2	3	4	5	6	7
69. Extract Data from a DA Form 2765, a 2765-1 or a 2765 Pre-punched/ Pre-printed	1	2	3	4	5	6	7
70. Extract Data from a DA Form 2064, Document Register for Supply Actions	1	2	3	4	5	6	7
71. Extract Data from a DA Form 2404, Deferred Maintenance Sheet	1	2	3	4	5	6	7
72. Extract Data from Maintenance Allocation Chart	1	2	3	4	5	6	7
73. Extract Data from DA Form 2407	1	2	3	4	5	6	7
74. Determine Non-Mission Capable Days on DD Form 314	1	2	3	4	5	6	7

HOW MUCH CONFIDENCE DO YOU HAVE IN YOUR ABILITY TO TRAIN THESE TASKS?

TASK	Level of Confidence						DO NOT TRAIN THIS TASK
	None	Very Low	Low	High	Very High	Absolute	
75. Extract Data from DA Form 2406, Materiel Condition Status Report	1	2	3	4	5	6	7
76. Determine When a Service is Due	1	2	3	4	5	6	7
77. Extract Data from the -20 Manual	1	2	3	4	5	6	7
78. Extract Data from a Lube Order	1	2	3	4	5	6	7
79. Determine Tools and Special Tools Utilized When Performing a Service	1	2	3	4	5	6	7
80. Utilize the STE/ICE	1	2	3	4	5	6	7
81. Determine Historical Record for a Piece of Equipment	1	2	3	4	5	6	7

TASX CONFIDENCE

SOLDIER SURVEY

TRAC

TASK CONFIDENCE SURVEY

SOLDIER SURVEY - ARTILLERY

NEW MANNING SYSTEM CADRE TRAINING

FORM 01

INTRODUCTION

The TRADOC Analysis Center (TRAC), White Sands Missile Range, New Mexico, is conducting a survey of Army training in your job area. We need your input to the survey since you are the subject matter expert in your job. The results of the survey will be used to decide future Army training programs. For that reason, your honest answer to each survey question is critical. Remember, we are reviewing Army training, not you as an individual. If you lack confidence in some aspect of your job, then Army training is inadequate, not you.

One thing we will be looking at is change in your response to the survey items. To do that, we will need for you to complete the survey at three different times. To ensure we can follow changes over time, we have to have your name and SSN so we can compare your responses at different times. However, you will never be personally identified with any of your answers to the survey. Instead, responses from many soldiers in your job area will be pooled together and statistically summarized.

The survey consists of two parts. One part asks you to rate how confident you are in your ability to perform the major tasks in your job. The other part asks you to rate how confident you are in your ability to train other soldiers to perform the same tasks. Please take the time to complete the survey giving your honest answer to each item. It won't take you very long and it is important. Thank you for your cooperation.

TASK CONFIDENCE SOLDIER SURVEY

ARTILLERY

TODAY'S DATE_____

BACKGROUND

1. Name _____ 2. Soc. Sec. No. _____

3. Rank _____ 4. PMOS _____ 5. Duty MOS _____

6. How long have you been in your duty MOS? _____ yrs. _____ mos.

7. How long have you been in the Army? _____ yrs. _____ mos.

PART I. Using the scale provided, show how much **CONFIDENCE** you have in your ability to **PERFORM** each task listed. Circle the scale number that corresponds to your level of confidence.

HOW MUCH CONFIDENCE DO YOU HAVE IN YOUR ABILITY TO PERFORM THESE TASKS?

TASK	LEVEL OF CONFIDENCE						DO NOT PERFORM THIS TASK
	None	Very Low	Low	High	Very High	Absolute	
1. Purge and Charge Fire Control Equipment (M198)	1	2	3	4	5	6	7
2. Maintain DA Form 2408-4	1	2	3	4	5	6	7
3. Boresignt the Direct Fire Telescope Using Distant Aiming Point (DAP) (M102)	1	2	3	4	5	6	7
4. Boresight the Direct Fire Telescope Using a Testing Target (M102)	1	2	3	4	5	6	7
5. Measure the Quadrant with the Range Quadrant (M102)	1	2	3	4	5	6	7

HOW MUCH CONFIDENCE DO YOU HAVE IN YOUR ABILITY TO PERFORM THESE TASKS?

TASK	LEVEL OF CONFIDENCE						DO NOT PERFORM THIS TASK
	None	Very Low	Low	High	Very High	Absolute	
6. Disassemble/ Assemble Breech and Firing Mechanism (M102)	1	2	3	4	5	6	7
7. Perform Preventive Maintenance Checks and Services (PMCS) M102	1	2	3	4	5	6	7
8. Boresight the Panoramic Telescope the M140 Alignment Device	1	2	3	4	5	6	7
9. Perform Prefire Checks (M102)	1	2	3	4	5	6	7
10. Perform Fire Control Alignment Tests (M102)	1	2	3	4	5	6	7
11. Disassemble/ Assemble Breech and Firing Mechanism	1	2	3	4	5	6	7
12. Perform Maintenance on Brake Assemblies (M198)	1	2	3	4	5	6	7
13. Perform Maintenance on the Recoil Mechanism (M198)	1	2	3	4	5	6	7

HOW MUCH CONFIDENCE DO YOU HAVE IN YOUR ABILITY TO PERFORM THESE TASKS?

TASK	LEVEL OF CONFIDENCE						DO NOT PERFORM THIS TASK
	None	Very Low	Low	High	Very High	Absolute	
14. Perform Maintenance on Cannon Breech Mechanism and Counter-balance (M198)	1	2	3	4	5	6	7
15. Perform Maintenance on the Equilibrator Cylinders (M198)	1	2	3	4	5	6	7
16. Perform PMCS on an M198	1	2	3	4	5	6	7
17. Disassemble/ Assemble Breech and Firing Mechanism (M110 Series)	1	2	3	4	5	6	7
18. Adjust/Time the Loader/Rammer (M110 Series)	1	2	3	4	5	6	7
19. Adjust the Equilibrators (M198)	1	2	3	4	5	6	7
20. Locate an unknown point on a map or on the ground by intersection	1	2	3	4	5	6	7
21. Locate an un-known point on a map or on the ground by re-section	1	2	3	4	5	6	7
22. Convert Azimuths(Magnetic or Grid)	1	2	3	4	5	6	7

HOW MUCH CONFIDENCE DO YOU HAVE IN YOUR ABILITY TO PERFORM THESE TASKS?

TASK	None	Very Low	Low	High	Very High	Absolute	DO NOT PERFORM THIS TASK
23. Determine elevations of a point on the ground using a map	1	2	3	4	5	6	7
24. Determine a location on the ground by Terrain Association	1	2	3	4	5	6	7
25. Navigate from one position on the ground to another point	1	2	3	4	5	6	7
26. Determine distance while moving between two points on the ground	1	2	3	4	5	6	7
27. Measure distance on a map	1	2	3	4	5	6	7
28. Orient a map to the ground by map-terrain association	1	2	3	4	5	6	7
29. Repair Cab Slip Ring Contact Arm Assembly	1	2	3	4	5	6	7
30. Inspect Variable Recoil Mechanism	1	2	3	4	5	6	7
31. Troubleshoot Cab Power Pack Circuit	1	2	3	4	5	6	7
32. Service Cab Hydraulic Power Pack	1	2	3	4	5		7
33. Inspect Torque Key	1	2	3	4	5	6	7
34. Repair Breech Carrier Assembly	1	2	3	4	5	6	7

HOW MUCH CONFIDENCE DO YOU HAVE IN YOUR ABILITY TO PERFORM THESE TASKS?

TASK	LEVEL OF CONFIDENCE						DO NOT PERFORM THIS TASK
	None	Very Low	Low	High	Very High	Absolute	
35. Synchronize Panoramic Telescope Mount (M145)	1	2	3	4	5	6	7
36. Purge Panoramic Telescope Mount (M145)	1	2	3	4	5	6	7
37. Troubleshoot Turret Hydraulic System (M110)	1	2	3	4	5	6	7
38. Troubleshoot Spade Hydraulic System (M110)	1	2	3	4	5	6	7
39. Service the Equilibrator (M110)	1	2	3	4	5	6	7
40. Prepare DA Form 2404	1	2	3	4	5	6	7
41. Encode/Decode Message Using a KTC-600E Tactical Operations Code	1	2	3	4	5	6	7
42. Operate TSEC/KY-57 in Cipher Text Mode	1	2	3	4	5	6	7
43. Operate Radio Set Control Group AN/GRA-39	1	2	3	4	5	6	7
44. Mount Radio Set AN/VRC-12 Series	1	2	3	4	5	6	7
45. Prepare/Submit Operation's MIJI Report	1	2	3	4	5	6	7
46. Perform Operator PMCS on Radio Set AN/VRC-12 Series	1	2	3	4	5	6	7

HOW MUCH CONFIDENCE DO YOU HAVE IN YOUR ABILITY TO PERFORM THESE TASKS?

TASK	LEVEL OF CONFIDENCE						DO NOT PERFORM THIS TASK
	None	Very Low	Low	High	Very High	Absolute	
47. Perform Operator PMCS on Radio Set Control Group AN/GRA-39	1	2	3	4	5	6	7
48. Use KTC-1400E Numeral Cipher/ Authentication System	1	2	3	4	5	6	7
49. Operate Radio Set AN/GRA-160	1	2	3	4	5	6	7
50. Mount Radio Set AN/GRC-160	1	2	3	4	5	6	7

PART II. Using the scale provided, show how much **CONFIDENCE** you have in your ability to **TRAIN** other soldiers to perform each task listed. Circle the scale number that corresponds to your level of confidence.

HOW MUCH CONFIDENCE DO YOU HAVE IN YOUR ABILITY TO TRAIN THESE TASKS?

TASK	LEVEL OF CONFIDENCE						DO NOT TRAIN THIS TASK
	None	Very Low	Low	High	Very High	Absolute	
1. Purge and Charge Fire Control Equipment (M198)	1	2	3	4	5	6	7
2. Maintain DA Form 2408-4	1	2	3	4	5	6	7
3. Boresignt the Direct Fire Telescope Using Distant Aiming Point (DAP) (M102)	1	2	3	4	5	6	7
4. Boresight the Direct Fire Telescope Using a Testing Target (M102)	1	2	3	4	5	6	7
5. Measure the Quadrant with the Range Quadrant (M102)	1	2	3	4	5	6	7
6. Disassemble/ Assemble Breech and Firing Mechanism (M102)	1	2	3	4	5	6	7
7. Perform Preventive Maintenance Checks and Services (PMCS) M102	1	2	3	4	5	6	7
8. Boresight the Panoramic Telescope the M140 Alignment Device	1	2	3	4	5	6	7

HOW MUCH CONFIDENCE DO YOU HAVE IN YOUR ABILITY TO TRAIN THESE TASKS?

TASK	LEVEL OF CONFIDENCE None	Very Low	Low	High	Very High	Absolute	DO NOT TRAIN THIS TASK
9. Perform Prefire Checks (M102)	1	2	3	4	5	6	7
10. Perform Fire Control Alignment Tests (M102)	1	2	3	4	5	6	7
11. Disassemble/ Assemble Breech and Firing Mechanism	1	2	3	4	5	6	7
12. Perform Maintenance on Brake Assemblies (M198)	1	2	3	4	5	6	7
13. Perform Maintenance on the Recoil Mechanism (M198)	1	2	3	4	5	6	7
14. Perform Maintenance on Cannon Breech Mechanism and Counterbalance (M198)	1	2	3	4	5	6	7
15. Perform Maintenance on the Equilibrator Cylinders (M198)	1	2	3	4	5	6	7
16. Perform PMCS on an M198	1	2	3	4	5	6	7
17. Disassemble/ Assemble Breech and Firing Mechanism (M110 Series)	1	2	3	4	5	6	7

HOW MUCH CONFIDENCE DO YOU HAVE IN YOUR ABILITY TO TRAIN THESE TASKS?

TASK	LEVEL OF CONFIDENCE						DO NOT TRAIN THIS TASK
	None	Very Low	Low	High	Very High	Absolute	
18. Adjust/Time the Loader/Rammer (M110 Series)	1	2	3	4	5	6	7
19. Adjust the Equilibrators (M198)	1	2	3	4	5	6	7
20. Locate an unknown point on a map or on the ground by intersection	1	2	3	4	5	6	7
21. Locate an unknown point on a map or on the ground by resection	1	2	3	4	5	6	7
22. Convert Azimuths(Magnetic or Grid)	1	2	3	4	5	6	7
23. Determine elevations of a point on the ground using a map	1	2	3	4	5	6	7
24. Determine a location on the ground by Terrain Association	1	2	3	4	5	6	7
25. Navigate from one position on the ground to another point	1	2	3	4	5	6	7
26. Determine distance while moving between two points on the ground	1	2	3	4	5	6	7

HOW MUCH CONFIDENCE DO YOU HAVE IN YOUR ABILITY TO TRAIN THESE TASKS?

TASK	LEVEL OF CONFIDENCE None	Very Low	Low	High	Very High	Absolute	DO NOT TRAIN THIS TASK
27. Measure distance on a map	1	2	3	4	5	6	7
28. Orient a map to the ground by map-terrain association	1	2	3	4	5	6	7
29. Repair Cab Slip Ring Contact Arm Assembly	1	2	3	4	5	6	7
30. Inspect Variable Recoil Mechanism	1	2	3	4	5	6	7
31. Troubleshoot Cab Power Pack Circuit	1	2	3	4	5	6	7
32. Service Cab Hydraulic Power Pack	1	2	3	4	5		7
33. Inspect Torque Key	1	2	3	4	5	6	7
34. Repair Breech Carrier Assembly	1	2	3	4	5	6	7
35. Synchronize Panoramic Telescope Mount (M145)	1	2	3	4	5	6	7
36. Purge Panoramic Telescope Mount (M145)	1	2	3	4	5	6	7
37. Troubleshoot Turret Hydraulic System (M110)	1	2	3	4	5	6	7
38. Troubleshoot Spade Hydraulic System (M110)	1	2	3	4	5	6	7

HOW MUCH CONFIDENCE DO YOU HAVE IN YOUR ABILITY TO TRAIN THESE TASKS?

TASK	LEVEL OF CONFIDENCE						DO NOT TRAIN THIS TASK
	None	Very Low	Low	High	Very High	Absolute	
39. Service the Equilibrator (M110)	1	2	3	4	5	6	7
40. Prepare DA Form 2404	1	2	3	4	5	6	7
41. Encode/Decode Message Using a KTC-600E Tactical Operations Code	1	2	3	4	5	6	7
42. Operate TSEC/KY-57 in Cipher Text Mode	1	2	3	4	5	6	7
43. Operate Radio Set Control Group AN/GRA-39	1	2	3	4	5	6	7
44. Mount Radio Set AN/VRC-12 Series	1	2	3	4	5	6	7
45. Prepare/Submit Operation's MIJI Report	1	2	3	4	5	6	7
46. Perform Operator PMCS on Radio Set AN/VRC-12 Series	1	2	3	4	5	6	7
47. Perform Operator PMCS on Radio Set Control Group AN/GRA-39	1	2	3	4	5	6	7
48. Use KTC-1400E Numeral Cipher/ Authentication System	1	2	3	4	5	6	7
49. Operate Radio Set AN/GRA-160	1	2	3	4	5	6	7
50. Mount Radio Set AN/GRC-160	1	2	3	4	5	6	7

APPENDIX C

CADRE TRAINING EFFECTIVENESS ANALYSIS SURVEY (PIT)

CADRE TRAINING EFFECTIVENESS ANALYSIS

(PIT) Survey

Cadre Training Effectiveness Analysis (PIT) Survey was designed to elicit perceptions of the cadre related to the overall effectiveness of the Phase I training program. It was administered by DOES personnel immediately following Phase I training.

CADRE TRAINING FFFECTIVENESS ANALYSIS

Instructions

This survey contains a number of statements describing the Cadre training you should have recently completed in your unit. Using the scale provided, indicate the extent to which you agree or disagree with each statement. At the end of the survey, under the heading of "Free Comment," you are encouraged to comment on any aspect of training you feel was particularly weak or strong, and give any suggestions you have to improve Cadre training.

* If you did not receive any preliminary Phase I training materials prior to reporting to the training base, check here ( ) and indicate when you actually were assigned to your COHORT unit.

_____
Date - Day/Mo/Yr

If you did not receive the preliminary Phase I materials, turn in your survey now.

** If you received the preliminary Phase I training materials but did not have time to study them before reporting to the training base, check here ( ) and indicate when you actually were assigned to your COHORT unit.

_____
Date - Day/Mo/Yr

If you did not have time to study the preliminary Phase I materials, turn in your survey now.

Part 1. PRELIMINARY TRAINING MATERIALS

	STRONGLY DISAGREE	DISAGREE	SOMEWHAT DISAGREE	SOMEWHAT AGREE	AGREE	STRONGLY AGREE
	A	B	C	D	E	F
1. The preliminary training materials prepared me for resident Cadre training.	___	___	___	___	___	___
2. The preliminary training materials took up too much of my time.	___	___	___	___	___	___

	STRONGLY DISAGREE	DISAGREE	SOMEWHAT DISAGREE	SOMEWHAT AGREE	AGREE	STRONGLY AGREE
	A	B	C	D	E	F
3. The preliminary training materials were well written.	___	___	___	___	___	___
4. The preliminary training materials were well organized.	___	___	___	___	___	___
5. The preliminary training materials made the objectives of Cadre training clear to me.	___	___	___	___	___	___

Part 2. ORGANIZATION OF CADRE TRAINING

6. Cadre training covered all major aspects of my job.	___	___	___	___	___	___
7. Training was conducted in a logical sequence of topics.	___	___	___	___	___	___
8. Cadre training time can be reduced without any negative impact on my ability to train COHORT soldiers.	___	___	___	___	___	___
9. The material was presented in a way that made it easy to understand.	___	___	___	___	___	___
10. The cadre training I have received so far has been exactly what I need to prepare me for COHORT assignment.	___	___	___	___	___	___

	STRONGLY DISAGREE	DISAGREE	SOMEWHAT DISAGREE	SOMEWHAT AGREE	AGREE	STRONGLY AGREE
	A	B	C	D	E	F
11. I need additional leadership training.	___	___	___	___	___	___
12. I need additional MOS-specific refresher training.	___	___	___	___	___	___

Part 3. TRAINING AIDS (AUDIOVISUAL AIDS, SLIDES, HANDOUTS, ETC) AND TESTS (FORMAL/DIAGNOSTIC INSTRUMENTS)

13. The training aids used helped me understand the material.	___	___	___	___	___	___
14. Training aids were well prepared (easy to see/hear and understand).	___	___	___	___	___	___
15. The program needs more training aids.	___	___	___	___	___	___
16. Too many tests were given.	___	___	___	___	___	___
17. Tests were well written.		___	___	___	___	-
18. Tests adequately covered the material presented.	___	___	___	___	___	___
19. My test scores accurately reflect my understanding of the material.	___	___	___	___	___	___
20. The tests given actually helped me understand the material better.		___	___	___	___	___

	STRONGLY DISAGREE	DISAGREE	SOMEWHAT DISAGREE	SOMEWHAT AGREE	AGREE	STRONGLY AGREE
	A	B	C	D	E	F
Part 4. EQUIPMENT						
21. There was enough equipment available for adequate training.	___	___	___	___	___	___
22. Training was often interrupted by equipment malfunctions.	___	___	___	___	___	___
23. There was not enough time allowed for training on the equipment.	___	___	___	___	___	___
24. Actual hands-on training with equipment is not necesary for cadre training.	___	___	___	___	___	___
Part 5. TRAINING OBJECTIVES						
25. Cadre training improved my tactical proficiency.	___	___	___	___	___	___
26. Cadre training improved my technical training.	___	___	___	___	___	___
27. Cadre training improved my physical condition.	___	___	___	___	___	___
28. As a result of cadre training, I will be a better trainer in my unit.	___	___	___	___	___	___
29. I learned how to conduct effective marksmanship training.	___	___	___	___	___	___

	STRONGLY DISAGREE	DISAGREE	SOMEWHAT DISAGREE	SOMEWHAT AGREE	AGREE	STRONGLY AGREE
	A	B	C	D	E	F
30. I learned how to conduct effective navigation training.	___	___	___	___	___	___
31. I learned how to conduct effective physical training.	___	___	___	___	___	___
32. I learned how to conduct effective drill and ceremony training.	___	___	___	___	___	___
33. As a result of cadre training, I am better able to develop and manage a training program.	___	___	___	___	___	___

COMMENTS

APPENDIX D

SUMMARY STATISTICAL TABLES

SUMMARY INFORMATION FOR TASK CONFIDENCE SURVEY RESULTS

Tables D-1, D-2, D-3, and D-4 present the results of the surveys administered to assess changes in soldier confidence to perform and to train MOS-specific tasks. SC1 indicates the survey administered prior to the start of Phase I training; SC2 the survey administered between the end of Phase I and the start of Phase II training; and SC3 the survey administered at the completion of Phase II training.

The rating scale for the level of confidence to perform or train these MOS-specific tasks was as follows:

None	= 1
Very Low	= 2
Low	= 3
High	= 4
Very High	= 5
Absolute	= 6
Do Not Perform This Task	= 7*

NOTE: Tasks whose means are significantly different as determined by the sign test at the .05 level of significance are highlighted in **Bold** type.

*Not included when computing means

TABLE D-1

TASK CONFIDENCE SOLDIER SURVEY
ARMOR N = 34

TASK	ABILITY TO PERFORM		
	SC1	SC2	SC3
1. Troubleshoot the Fire Control System.	4.3	4.3	5.0
2. Prepare Gunner's Station for operation.	4.8	4.7	5.3
3. Secure Gunner's Station.	4.9	4.9	5.2
4. Boresight and System Calibrate.	4.7	4.5	5.3
5. Perform Tank Commander's Preventive Maintenance Prepare-to-Fire checks.	4.6	4.6	5.2
6. Zero the Cal .50 M2 HB Machinegun.	4.7	4.8	5.4
7. Clear a Cal .50 M2 HB Machinegun to Prevent Accidental Discharge.	5.2	4.9	5.4
8. Perform Operator's Maintenance on a Cal .50 M2 HB Machinegun.	5.2	4.9	5.4
9. Clear an M240 Machinegun to Prevent Accidental Discharge.	5.3	5.1	5.5
10. Perform Operator's Maintenance on an M240 Machinegun.	5.3	5.0	5.4
11. Apply Immediate Action on an M240 Machinegun.	5.2	4.9	5.4
12. Load/Unload the 105mm Main Gun.	5.3	5.3	5.5

TASK	ABILITY TO PERFORM		
	SC1	SC2	SC3
13. Load/Unload the M250 Grenade Launcher.	4.4	4.4	4.9
14. Perform Operator's Maintenance on the 105mm Breechblock Assembly.	4.6	4.6	5.4
15. Load Tank According to the Standard Load Plan.	4.8	5.1	5.3
16. Prepare the Commander's Weapon Station for Operation.	4.7	4.7	5.2
17. Secure the Commander's Weapons Station.	4.9	4.7	5.3
18. Boresight the M2 HB Cal .50 Machinegun.	4.9	4.7	5.5
19. Direct Machinegun Engagements.	5.1	4.9	5.4
20. Direct Main Gun Engagements.	5.1	5.0	5.4
21. Engage Targets with M2 HB Cal .50 Machinegun.	5.0	4.7	5.3
22. Estimate Range.	4.4	4.2	4.8
23. Prepare Driver's Station for Operation.	4.8	4.8	5.3
24. Perform Before-Operations Checks and Services.	5.2	5.0	5.4
25. Perform During-Operations Checks and Services.	5.1	5.0	5.3
26. Perform After-Operations Checks and Services.	5.2	5.1	5.3

TASK	ABILITY TO PERFORM		
	SC1	SC2	SC3
27. Extinguish a Fire.	5.1	5.1	5.2
28. Operate the Gas Particulate Filter Unit.	5.2	5.0	5.3
29. **Secure the Driver's Station.**	**4.9**	4.8	**5.2**
30. Prepare the Loader's Station for Operation on an M1 Tank.	4.9	5.0	5.3
31. **Secure the Loader's Station.**	**4.9**	5.0	**5.4**
32. Install/Remove an M240 Coax Machinegun.	5.4	5.3	5.5
33. Perform Gunner's and Loader's Prepare-to-Fire Checks and Services.	4.9	4.8	5.3
34. Engage Targets with the Main Gun from the Gunner's Station.	5.0	4.9	5.3
35. Engage Targets with the Coax Machinegun from the Gunner's Station.	5.1	5.0	5.4
36. **Engage Targets with the Main Gun from the Commander's Weapon Station.**	**5.0**	4.7	**5.2**
37. **Engage Targets with the Coax Machinegun from the Commander's Weapon Station.**	**4.9**	4.7	**5.4**
38. Ammo Identification	5.1	5.0	5.4
39. Inspect Ammo and Prepare it for Stowing.	5.2	5.1	5.4
40. **Armor Fighting Vehicle Identification**	**4.8**	**4.4**	5.1

TASK	ABILITY TO TRAIN		
	SC1	SC2	SC3
1. Troubleshoot the Fire Control System.	4.2	4.2	4.6
2. Prepare Gunner's Station for operation.	4.8	4.5	5.1
3. Secure Gunner's Station.	4.9	4.6	5.2
4. Boresight and System Calibrate.	4.8	4.6	5.1
5. **Perform Tank Commander's Preventive Maintenance Prepare-to-Fire checks.**	**4.9**	**4.6**	**5.1**
6. Zero the Cal .50 M2 HB Machinegun.	4.8	4.6	5.3
7. Clear a Cal .50 M2 HB Machinegun to Prevent Accidental Discharge.	5.2	4.9	5.3
8. Perform Operator's Maintenance on a Cal .50 M2 HB Machinegun.	5.1	4.8	5.3
9. Clear an M240 Machinegun to Prevent Accidental Discharge.	5.3	5.1	5.4
10. Perform Operator's Maintenance on an M240 Machinegun.	5.3	5.0	5.2
11. **Apply Immediate Action on an M240 Machinegun.**	**5.2**	**4.9**	**5.3**
12. **Load/Unload the 105mm Main Gun.**	**5.3**	**5.2**	**5.4**
13. Load/Unload the M250 Grenade Launcher.	4.3	4.3	4.6

	TASK	ABILITY TO TRAIN		
		SC1	SC2	SC3
14.	Perform Operator's Maintenance on the 105mm Breechblock Assembly.	4.7	4.4	5.3
15.	Load M1 Tank According to the Standard Load Plan.	4.9	5.0	5.1
16.	Prepare the Commander's Weapon Station for Operation.	4.8	4.6	5.1
17.	**Secure the Commander's Weapons Station.**	**4.9**	4.7	**5.2**
18.	Boresight the M2 HB Cal .50 Machinegun on an M1 Tank.	5.0	4.7	5.3
19.	Direct Machinegun Engagements.	4.9	4.6	5.2
20.	**Direct Main Gun Engagements.**	**5.0**	4.8	**5.3**
21.	**Engage Targets with M2 HB Cal .50 Machinegun.**	**4.9**	4.7	**5.2**
22.	**Estimate Range.**	**4.4**	4.2	**4.9**
23.	**Prepare Driver's Station for Operation.**	**4.7**	4.7	**5.2**
24.	Perform Before-Operations Checks and Services.	5.1	4.9	5.2
25.	Perform During-Operations Checks and Services.	5.1	4.9	5.3
26.	Perform After-Operations Checks and Services.	5.1	4.9	5.2
27.	Extinguish a Fire.	5.0	4.8	5.2
28.	Operate the Gas Particulate Filter Unit.	5.0	5.0	5.2

	TASK	ABILITY TO TRAIN		
		SC1	SC2	SC3
29.	Secure the Driver's Station.	4.9	4.8	5.2
30.	Prepare the Loader's Station for Operation.	5.0	4.7	5.2
31.	Secure the Loader's Station.	4.9	4.8	5.2
32.	Install/Remove an M240 Coax Machinegun.	5.3	5.2	5.4
33.	Perform Gunner's and Loader's Prepare-to-Fire Checks and Services.	4.8	4.6	5.1
34.	Engage Targets with the Main Gun from the Gunner's Station.	4.9	4.7	5.3
35.	Engage Targets with the Coax Machinegun from the Gunner's Station.	4.9	4.8	5.3
36.	Engage Targets with the Main Gun from the Commander's Weapon Station.	4.8	4.7	5.1
37.	Engage Targets with the Coax Machinegun from the Commander's Weapon Station.	4.7	4.6	5.2
38.	Ammo Identification	5.0	4.7	5.3
39.	Inspect Ammo and Prepare it for Stowing.	5.1	4.9	5.3
40.	Armor Fighting Vehicle Identification	4.7	4.6	5.1

TABLE D-2

TASK CONFIDENCE SOLDIER SURVEY
INFANTRY N = 46

TASK	ABILITY TO PERFORM		
	SC1	SC2	SC3
1. Demonstrate How to Attack and Clear Buildings (Entry and Room Clearing Techniques).	4.2	4.3	4.2
2. Demonstrate Techniques for Subterranean Route Reconnaissance	3.7	3.7	3.8
3. Develop a Defensive Plan	4.3	4.2	4.3
4. Develop a Platoon Offensive Plan	4.1	4.2	4.2
5. Conduct a Deliberate Attack on Urban Terrain	4.0	4.1	4.2
6. Conduct a Hasty Defense on Urban Terrain	4.2	4.2	4.2
7. React to Enemy Contact	4.6	4.7	4.5
8. **Conduct a Stream Crossing**	**4.0**	4.0	**4.4**
9. Target Acquisition/Fire Distribution	4.3	4.2	4.3
10. Conduct Anti-armor Ambush	4.5	4.5	4.5

	TASK	ABILITY TO PERFORM		
		SC1	SC2	SC3
11.	Break Contact	4.3	4.3	4.4
12.	**Employ/Recover a Hasty Protective Minefield**	**3.9**	4.1	**4.2**
13.	Prepare for/React to Chemical Attack	4.5	4.4	4.3
14.	Conduct a Hasty Ambush	4.6	4.5	4.4
15.	Knock out Bunkers	4.3	4.3	4.2
16.	Breach a Wire Obstacle	4.4	4.3	4.3
17.	Clear a Trenchline	4.0	4.0	4.0
18.	**Move to/Defend from Supplementary/ Alternate Positions**	**4.3**	4.4	**4.5**
19.	Establish a Hasty Defensive Position	4.7	4.5	4.5
20.	React to Ambush	4.6	4.5	4.6
21.	Reconnoiter a Designated Area (Woodline)	4.4	4.5	4.4
22.	Reconnoiter a Designated Objective	4.3	4.5	4.4
23.	Cross a Danger Area	4.6	4.6	4.5
24.	**Breach a Minefield**	**4.2**	4.3	**4.4**
25.	Conduct Passage of Friendly Lines	4.4	4.4	4.4

	TASK	ABILITY TO PERFORM		
		SC1	SC2	SC3
26.	Prepare for/React to a Nuclear Attack	4.5	4.5	4.4
27.	Determine the Elevation of a Point on the Ground Using a Map	4.7	4.6	4.7
28.	**Orient a Map to the Ground by Map-Terrain Association**	**5.0**	**4.7**	4.8
29.	**Determine a Magnetic Azimuth Using a Compass**	**5.3**	5.1	**4.9**
30.	Navigate from One Position on the Ground to Another Point	5.0	4.8	4.8
31.	Determine Distance While Moving Between Two Points on the Ground	4.9	4.8	4.6
32.	Convert Azimuths from Grid to Magnetic and Magnetic to Grid	5.1	5.1	4.9
33.	Locate an Unknown Point Using Resection	4.8	4.9	4.8
34.	Locate an Unknown Point on a Map or on the Ground by Intersection	4.8	4.9	4.8

	TASK	ABILITY TO PERFORM		
		SC1	SC2	SC3
35.	Navigate from One Point on the Ground to Another, Utilizing Dead Reckoning	4.4	4.3	4.5
36.	Determine the Elevation of a Point on the Ground using a Map	4.6	4.7	4.7
37.	Orient a Map to the Ground by Man-Association	4.8	4.8	4.8
38.	Determine a Magnetic Azimuth Using a Compass	5.2	5.2	5.0
39.	**Navigate from One Position on the Ground to Another Point**	**4.9**	4.8	**4.7**
40.	Operate a Small Arms Range	4.2	4.2	4.0
41.	Perform Range Set-Up Preplanning	4.1	**4.0**	3.9
42.	Perform Before-Operations Range Checks	4.0	4.1	3.9
43.	Perform During-Operations Checks	4.2	4.0	4.0
44.	**Perform After-Operations Range Checks**	**4.2**	4.1	**4.0**
45.	State the Four Fundamentals of Rifle Marksmanship	4.3	4.2	4.5

	TASK	ABILITY TO PERFORM		
		SC1	SC2	SC3
46.	Battlesight Zero an M16A1 Rifle	4.9	4.8	4.7
47.	Perform as a Coach for a Rifleman During Battlesight Zero of an M16A1 Rifle	4.7	4.7	4.8
48.	Apply the Four Fundamentals of Rifle Marksmanship	4.5	4.4	4.7
49.	Engage Targets During Periods of Limited Visibility	4.5	4.4	4.6
50.	Operate the AN/ PVS-5 Night Vision Goggles	4.9	4.7	4.7
51.	Qualify with an M16A1 Rifle	5.2	5.0	4.9
52.	Discuss the Army System of Maintenance	3.7	3.5	4.1
53.	**List the Three Categories of Maintenance and Explain Their Roles in the Army System of Maintenance**	**3.3**	3.3	**4.0**
54.	**List the Types of Maintenance Inspections, State the Nature and Scope of Each, and Determine the Type of Maintenance Inspection to Conduct**	**3.4**	3.4	**3.9**

TASK	ABILITY TO PERFORM		
	SC1	SC2	SC3
55. List the Types of Assistance Teams Available to Improve the Unit's Maintenance Posture	3.3	3.2	3.9
56. Describe the Procedure for Obtaining Publications	3.3	3.1	3.8
57. Determine Tabulated Data, Issue Items, and Maintenance Actions Accomplished at Each Level of Maintenance	3.1	3.1	4.0
58. Prepare a DA Form 2404 (Daily)	4.8	4.9	5.0
59. Perform Preventive Maintenance Checks and Services	4.7	4.7	4.9
60. Discuss the Dispatch Loop	3.5	3.7	4.3
61. Extract Data from the Equipment Identification Card	3.8	4.0	4.6
62. Identify the Forms Required to be Present in an Equipment Record Folder	3.6	3.6	4.6
63. Inspect DD Form 1970	3.6	3.7	4.5
64. Extract Data from the DA Form 2401	3.3	3.2	4.4

TASK	ABILITY TO PERFORM		
	SC1	SC2	SC3
65. Extract Data from the -20P Manual	3.8	3.7	4.5
66. Extract Data from a Prescribed Load List Computer Printout	3.4	3.1	4.1
67. List the Five Sources of Supply and How a Part is Obtained Through Each Source in Accordance with FC 7-174 without Error	3.0	2.8	3.8
68. Extract Data from the Army Master Data File	3.2	2.9	3.9
69. Extract Data from a DA Form 2765, a 2765-1 or a 2765 Pre-punched/ Pre-printed	3.0	2.7	3.6
70. Extract Data from a DA Form 2064, Document Register for Supply Actions	3.1	3.1	3.8
71. Extract Data from a DA Form 2404, Deferred Maintenance Sheet	4.0	4.3	4.7
72. Extract Data from Maintenance Allocation Chart	3.3	3.2	4.4
73. Extract Data from DA Form 2407	3.4	3.4	4.4

TASK	ABILITY TO PERFORM		
	SC1	SC2	SC3
74. Determine Non-Mission Capable Days on DD Form 314	3.3	3.2	4.5
75. Extract Data from DA Form 2406, Materiel Condition Status Report	3.3	3.3	4.2
76. Determine When a Service is Due	3.8	3.9	4.6
77. Extract Data from the -20 Manual	3.7	3.7	4.6
78. Extract Data from a Lube Order	4.1	4.2	4.6
79. Determine Tools and Special Tools Utilized When Performing a Service	4.0	4.0	4.4
80. Utilize the STE/ICE	2.9	2.6	3.3
81. Determine Historical Record for a Piece of Equipment	3.3	3.5	4.0

TASK	ABILITY TO TRAIN		
	SC1	SC2	SC3
1. Demonstrate How to Attack and Clear Buildings (Entry and Room Clearing Techniques).	4.0	4.1	4.1
2. Demonstrate Techniques for Subterranean Route Reconnaissance	3.4	3.6	3.7
3. Develop a Defensive Plan	4.2	4.0	4.2
4. Develop a Platoon Offensive Plan	4.0	4.0	4.1
5. Conduct a Deliberate Attack on Urban Terrain	4.0	4.0	4.1
6. Conduct a Hasty Defense on Urban Terrain	4.1	4.0	4.1
7. React to Enemy Contact	4.5	4.3	4.5
8. **Conduct a Stream Crossing**	**3.7**	3.9	**4.3**
9. Target Acquisition/Fire Distribution	4.0	4.0	4.3
10. Conduct [illegible] armor Ambush	4.4	4.3	4.5

TASK	ABILITY TO TRAIN		
	SC1	SC2	SC3
11. **Break Contact**	**4.2**	4.3	**4.5**
12. **Employ/Recover a Hasty Protective Minefield**	**3.8**	3.8	**4.2**
13. Prepare for/React to Chemical Attack	4.3	4.3	4.3
14. Conduct a Hasty Ambush	4.5	4.4	4.2
15. Knock out Bunkers	4.2	4.1	4.1
16. Breach a Wire Obstacle	4.2	4.2	4.3
17. Clear a Trenchline	3.9	4.0	4.1
18. Move to/Defend from Supplementary/ Alternate Positions	4.2	4.2	4.5
19. Establish a Hasty Defensive Position	4.5	4.4	4.5
20. React to Ambush	4.5	4.5	4.4
21. Reconnoiter a Designated Area (Woodline)	4.2	4.2	4.4
22. Reconnoiter a Designated Objective	4.2	4.2	4.3
23. Cross a Danger Area	4.5	4.5	4.5
24. **Breach a Minefield**	**4.0**	4.0	**4.5**
25. Conduct Passage of Friendly Lines	4.3	4.2	4.5

TASK	ABILITY TO TRAIN		
	SC1	SC2	SC3
26. Prepare for/React to a Nuclear Attack	4.3	4.3	4.4
27. Determine the Elevation of a Point on the Ground Using a Map	4.8	4.5	4.7
28. Orient a Map to the Ground by Map-Terrain Association	5.0	4.8	4.7
29. Determine a Magnetic Azimuth Using a Compass	5.2	5.0	5.0
30. **Navigate from One Position on the Ground to Another Point**	**5.1**	**4.7**	4.9
31. Determine Distance While Moving Between Two Points on the Ground	4.8	4.7	4.7
32. Convert Azimuths from Grid to Magnetic and Magnetic to Grid	5.0	4.9	5.0
33. Locate an Unknown Point Using Resection	4.7	4.8	4.9
34. Locate an Unknown Point on a Map or on the Ground by Intersection	4.8	4.8	4.8

TASK	ABILITY TO TRAIN		
	SC1	SC2	SC3
35. Navigate from One Point on the Ground to Another, Utilizing Dead Reckoning	4.3	4.2	4.6
36. Determine the Elevation of a Point on the Ground using a Map	4.6	4.6	4.7
37. Orient a Map to the Ground by Man-Association	4.9	4.8	4.8
38. Determine a Magnetic Azimuth Using a Compass	5.1	5.0	5.0
39. **Navigate from One Position on the Ground to Another Point**	**5.0**	**4.7**	4.8
40. Operate a Small Arms Range	4.1	4.0	4.0
41. Perform Range Set-Up Preplanning	4.0	4.0	4.0
42. Perform Before-Operations Range Checks	4.0	4.0	4.0
43. Perform During-Operations Checks	4.1	4.0	4.0
44. Perform After-Operations Range Checks	4.1	4.0	4.0
45. **State the Four Fundamentals of Rifle Marksmanship**	4.2	4.3	4.5

TASK	ABILITY TO TRAIN		
	SC1	SC2	SC3
46. Battlesight Zero an M16A1 Rifle	4.8	4.6	4.7
47. Perform as a Coach for a Rifleman During Battlesight Zero of an M16A1 Rifle	4.5	4.7	4.7
48. Apply the Four Fundamentals of Rifle Marksmanship	4.4	4.5	4.6
49. Engage Targets During Periods of Limited Visibility	4.3	4.2	4.6
50. Operate the AN/ PVS-5 Night Vision Goggles	4.6	4.7	4.7
51. Qualify with an M16A1 Rifle	4.9	4.7	4.8
52. Discuss the Army System of Maintenance	3.6	3.4	3.9
53. **List the Three Categories of Maintenance and Explain Their Roles in the Army System of Maintenance**	**3.2**	3.1	**4.1**
54. **List the Types of Maintenance Inspections, State the Nature and Scope of Each, and Determine the Type of Maintenance Inspection to Conduct**	**3.2**	3.3	**3.9**

TASK	ABILITY TO TRAIN		
	SC1	SC2	SC3
55. List the Types of Assistance Teams Available to Improve the Unit's Maintenance Posture	3.3	3.2	3.9
56. Describe the Procedure for Obtaining Publications	3.3	3.2	3.9
57. Determine Tabulated Data, Issue Items, and Maintenance Actions Accomplished at Each Level of Maintenance	3.1	3.1	4.0
58. Prepare a DA Form 2404 (Daily)	4.6	4.6	4.8
59. Perform Preventive Maintenance Checks and Services	4.6	4.4	4.7
60. Discuss the Dispatch Loop	3.5	3.6	4.4
61. Extract Data from the Equipment Identification Card	3.6	3.6	4.4
62. Identify the Forms Required to be Present in an Equipment Record Folder	3.5	4.0	4.6
63. Inspect DD Form 1970	3.3	3.5	4.3
64. Extract Data from the DA Form 2401	3.1	3.4	4.2

TASK	ABILITY TO TRAIN		
	SC1	SC2	SC3
65. Extract Data from the -20P Manual	3.7	3.6	4.3
66. Extract Data from a Prescribed Load List Computer Printout	3.3	3.3	4.0
67. List the Five Sources of Supply and How a Part is Obtained Through Each Source in Accordance with FC 7-174 without Error	2.8	3.3	4.1
68. Extract Data from the Army Master Data File	3.0	3.4	4.0
69. Extract Data from a DA Form 2765, a 2765-1 or a 2765 Pre-punched/ Pre-printed	3.0	3.5	4.1
70. Extract Data from a DA Form 2064, Document Register for Supply Actions	2.9	3.3	4.0
71. Extract Data from a DA Form 2404, Deferred Maintenance Sheet	4.0	3.5	4.0
72. Extract Data from Maintenance Allocation Chart	3.3	3.2	4.1
73. Extract Data from DA Form 2407	3.3	3.4	4.3

TASK	ABILITY TO TRAIN		
	SC1	SC2	SC3
74. **Determine Non-Mission Capable Days on DD Form 314**	**3.3**	3.5	**4.4**
75. **Extract Data from DA Form 2406, Materiel Condition Status Report**	**3.3**	3.1	**4.0**
76. **Determine When a Service is Due**	**3.7**	3.9	**4.5**
77. Extract Data from the -20 Manual	3.7	3.5	4.2
78. **Extract Data from a Lube Order**	**4.1**	**3.5**	4.0
79. Determine Tools and Special Tools Utilized When Performing a Service	4.1	3.6	4.0
80. **Utilize the STE/ICE**	**2.9**	2.7	**3.4**
81. Determine Historical Record for a Piece of Equipment	3.4	3.3	3.8

TABLE D-3

TASK CONFIDENCE SOLDIER SURVEY
ARTILLERY N = 37

TASK	ABILITY TO PERFORM		
	SC1	SC2	SC3
1. Purge and Charge Fire Control Equipment (M198).	3.6	3.2	5.3
2. Maintain DA Form 2408-4.	5.3	5.0	5.4
3. Boresight the Direct Fire Telescope Using Distant Aiming Point (DAP) (M102).	5.1	4.7	4.7
4. Boresight the Direct Fire Telescope Using a Testing Target (M102).	5.0	4.7	4.6
5. Measure the Quadrant with the Range Quadrant (M102).	5.2	5.0	4.8
6. Disassemble/Assemble Breech and Firing Mechanism (M102).	4.7	4.6	4.6
7. Perform Preventive Maintenance Checks and Services (PMCS) M102.	4.8	4.8	4.6
8. Boresight the Panoramic Telescope the M140 Alignment Device.	5.3	5.0	5.3
9. Perform Prefire Checks (M102).	5.1	4.8	4.6
10. Perform Fire Control Alignment Tests (M102).	4.6	4.4	4.7
11. Disassemble/Assemble Breech and Firing Mechanism.	4.9	4.8	5.3
12. **Perform Maintenance on Brake Assemblies (M198).**	**3.3**	3.9	**5.3**
13. Perform Maintenance on the Recoil Mechanism (M198).	3.3	3.5	5.4

	TASK	ABILITY TO PERFORM		
		SC1	SC2	SC3
14.	Perform Maintenance on Cannon Breech Mechanism and Counter-balance (M198).	3.8	4.1	5.5
15.	Perform Maintenance on the Equilibrator Cylinders (M198).	3.9	4.1	5.5
16.	Perform PMCS on an M198.	4.4	4.7	5.4
17.	Disassemble/Assemble Breech and Firing Mechanism (M110 Series).	4.8	4.4	4.4
18.	Adjust/Time the Loader/ Rammer (M110 Series).	4.3	4.3	4.2
19.	Adjust the Equilibrators (M198).	3.8	4.2	5.4
20.	Locate an unknown point on a map or on the ground by intersection.	5.5	5.0	5.3
21.	Locate an unknown point on a map or on the ground by resection	5.5	5.0	5.2
22.	Convert Azimuths (Magnetic or Grid).	5.6	5.0	5.3
23.	Determine elevations of a point on the ground using a map.	5.5	4.9	5.1
24.	Determine a location on the ground by Terrain Association.	5.3	4.8	5.1
25.	Navigate from one position on the ground to another point.	5.3	4.9	5.1
26.	Determine distance while moving between two points on the ground.	5.2	4.8	5.0

	TASK	ABILITY TO PERFORM		
		SC1	SC2	SC3
27.	**Measure distance on a map.**	**5.5**	**5.0**	5.2
28.	**Orient a map to the ground by map-terrain association.**	**5.4**	**4.8**	5.1
29.	Repair Cab Slip Ring Contact Arm Assembly.	3.7	3.4	4.8
30.	**Inspect Variable Recoil Mechanism.**	**4.0**	3.9	**5.2**
31.	**Troubleshoot Cab Power Power Pack Circuit.**	**3.5**	2.9	**4.8**
32.	**Service Cab Hydraulic Power Pack.**	**3.4**	3.5	**4.8**
33.	Inspect Torque Key.	4.0	4.0	5.1
34.	**Repair Breech Carrier Assembly.**	**3.5**	3.4	**4.7**
35.	Synchronize Panoramic Telescope Mount (M145).	3.8	3.7	5.0
36.	Purge Panoramic Telescope Mount (M145).	3.7	3.8	5.2
37.	Troubleshoot Turret Hydraulic System (M110).	4.3	4.0	4.8
38.	Troubleshoot Spade Hydraulic System (M110).	4.3	4.0	4.6
39.	Service the Equilibrator (M110).	4.5	4.0	4.5
40.	**Prepare DA Form 2404.**	**5.6**	**5.1**	5.3
41.	Encode/Decode Message Using a KTC-600E Tactical Operations Code.	4.0	3.6	4.9
42.	**Operate TSEC/KY-57 in Cipher Text Mode.**	**3.4**	3.2	**4.9**

TASK	ABILITY TO PERFORM		
	SC1	SC2	SC3
43. Operate Radio Set Control Control Group AN/GRA-39.	4.9	4.1	4.9
44. Mount Radio Set AN/VRC-12 Series.	4.4	3.6	4.5
45. Prepare/Submit Operation's MIJI Report.	3.4	3.0	4.5
46. Perform Operator PMCS on Radio Set AN/VRC-12 Series.	4.5	3.6	4.5
47. Perform Operator PMCS on Radio Set Control Group AN/GRA-39.	4.6	4.0	4.9
48. Use KTC-1400E Numeral Cipher/Authentication System.	3.9	3.5	4.8
49. Operate Radio Set AN/GRA-160.	4.3	3.7	4.8
50. Mount Radio Set AN/GRC-160.	4.1	3.7	4.9

TASK	ABILITY TO TRAIN		
	SC1	SC2	SC3
1. Purge and Charge Fire Control Equipment (M198).	3.1	2.7	5.3
2. Maintain DA Form 2408-4.	5.1	4.9	5.3
3. Boresight the Direct Fire Telescope Using Distant Aiming Point (DAP) (M102).	5.1	4.9	4.4
4. Boresight the Direct Fire Telescope Using a Testing Target (M102).	5.0	4.9	4.4
5. Measure the Quadrant with the Range Quadrant (M102).	5.0	4.9	4.4
6. Disassemble/Assemble Breech and Firing Mechanism (M102).	4.6	4.7	4.2
7. Perform Preventive Maintenance Checks and Services (PMCS) M102.	4.9	4.7	4.3
8. Boresight the Panoramic Telescope the M140 Alignment Device.	5.3	5.1	5.2
9. Perform Prefire Checks (M102).	5.0	4.7	4.3
10. Perform Fire Control Alignment Tests (M102).	4.6	4.6	4.6
11. Disassemble/Assemble Breech and Firing Mechanism.	5.0	4.8	5.0
12. **Perform Maintenance on Brake Assemblies (M198).**	**3.7**	3.5	**5.5**
13. Perform Maintenance on the Recoil Mechanism (M198).	3.5	3.6	5.4
14. Perform Maintenance on Cannon Breech Mechanism and Counterbalance (M198).	3.8	4.1	5.4
15. Perform Maintenance on the Equilibrator Cylinders (M198).	3.8	3.9	5.4

	TASK	ABILITY TO TRAIN		
		SC1	SC2	SC3
16.	Perform PMCS on an M198.	4.7	4.6	5.4
17.	Disassemble/Assemble Breech and Firing Mechanism (M110 Series).	4.5	5.1	4.0
18.	Adjust/Time the Loader/ Rammer (M110 Series).	4.2	4.9	4.2
19.	Adjust the Equilibrators (M198).	4.2	4.5	5.4
20.	Locate an unknown point on a map or on the ground by intersection.	5.4	4.9	5.1
21.	Locate an unknown point on a map or on the ground by resection	5.4	4.9	5.1
22.	Convert Azimuths (Magnetic or Grid).	5.4	4.8	5.2
23.	Determine elevations of a point on the ground using a map.	5.3	4.8	5.1
24.	Determine a location on the ground by Terrain Association.	5.3	4.7	5.0
25.	Navigate from one position on the ground to another point.	5.2	4.7	5.0
26.	Determine distance while moving between two points on the ground.	5.2	4.7	5.1
27.	Measure distance on a map.	5.5	4.9	5.2
28.	Orient a map to the ground by map-terrain association.	5.3	4.7	5.1
29.	Repair Cab Slip Ring Contact Arm Assembly.	3.5	3.2	4.7

	TASK	ABILITY TO TRAIN		
		SC1	SC2	SC3
30.	**Inspect Variable Recoil Mechanism.**	**4.0**	3.9	**5.1**
31.	Troubleshoot Cab Power Power Pack Circuit.	3.5	3.0	4.5
32.	Service Cab Hydraulic Power Pack.	3.5	3.3	4.5
33.	Inspect Torque Key.	4.0	4.0	4.9
34.	Repair Breech Carrier Assembly.	3.7	3.8	4.6
35.	**Synchronize Panoramic Telescope Mount (M145).**	**3.4**	3.5	**5.0**
36.	**Purge Panoramic Telescope Mount (M145).**	**3.3**	3.8	**5.2**
37.	Troubleshoot Turret Hydraulic System (M110).	4.1	4.0	4.3
38.	Troubleshoot Spade Hydraulic System (M110).	4.2	4.0	4.3
39.	Service the Equilibrator (M110).	4.5	3.4	4.3
40.	**Prepare DA Form 2404.**	**5.5**	**5.1**	5.3
41.	Encode/Decode Message Using a KTC-600E Tactical Operations Code.	4.0	3.7	4.7
42.	Operate TSEC/KY-57 in Cipher Text Mode.	3.6	3.3	4.6
43.	**Operate Radio Set Control Control Group AN/GRA-39.**	**4.7**	**4.1**	4.8
44.	Mount Radio Set AN/VRC-12 Series.	4.1	3.7	4.8

	TASK	ABILITY TO TRAIN		
		SC1	SC2	SC3
45.	Prepare/Submit Operation's MIJI Report.	3.6	3.3	4.2
46.	Perform Operator PMCS on Radio Set AN/VRC-12 Series.	4.4	3.8	4.5
47.	Perform Operator PMCS on Radio Set Control Group AN/GRA-39.	4.9	4.1	4.8
48.	Use KTC-1400E Numeral Cipher/Authentication System.	3.6	3.2	4.7
49.	Operate Radio Set AN/GRA-160.	4.0	3.5	4.7
50.	Mount Radio Set AN/GRC-160.	3.9	3.5	4.8

TABLE D-4

CONTROL UNITS

TASK CONFIDENCE SOLDIER SURVEY
INFANTRY N = 21

TASK		ABILITY TO PERFORM	
		SC1	SC3
1.	Demonstrate How to Attack and Clear Buildings (Entry and Room Clearing Techniques)	4.6	4.7
2.	Demonstrate Techniques for Subterranean Route Reconnaissance	4.0	4.0
3.	Develop a Defensive Plan	4.7	4.5
4.	Develop a Platoon Defensive Plan	4.6	4.5
5.	Conduct a Deliberate Attack on Urban Terrain	4.4	4.4
6.	Conduct a Hasty Defense on Urban Terrain	4.6	4.5
7.	React to Enemy Contact	5.0	5.0
8.	Conduct a Stream Crossing	4.7	4.8
9.	Target Acquisition/Fire Distribution	4.8	4.8
10.	Conduct Antiarmor Ambush	5.0	5.2
11.	Break Contact	4.8	5.0
12.	Employ/Recover a Hasty Protective Minefield	4.6	4.8
13.	Prepare for/React to Chemical Attack	4.9	4.9
14.	Conduct a Hasty Ambush	5.0	5.1
15.	Knock out Bunkers	4.5	4.8
16.	Breach a Wire Obstacle	4.7	4.9

TASK	ABILITY TO PERFORM	
	SC1	SC3
17. Clear a Trenchline	4.3	4.8
18. Move to/Defend from Supplementary/ Alternate Positions	4.9	4.9
19. Establish a Hasty Defensive Position	5.0	5.0
20. React to Ambush	5.1	5.1
21. Reconnoiter a Designated Area (Woodline)	4.9	5.0
22. Reconnoiter a Designated Objective	5.0	5.0
23. Cross a Danger Area	5.1	5.1
24. Breach a Minefield	4.8	5.0
25. Conduct Passage of Friendly Lines	4.9	5.0
26. Prepare for/React to a Nuclear Attack	4.7	4.9
27. Determine the Elevation of a a Point on the Ground Using a Map	5.4	5.1
28. Orient a Map to the Ground by Map-Terrain Association	5.4	5.2
29. Determine a Magnetic Azimuth Using a Compass	5.5	5.4
30. Navigate from One Position on the Ground to Another Point	5.3	5.3
31. Determine Distance While Moving Between Two Points on the Ground	5.0	5.0
32. Convert Azimuths from Grid to to Magnetic and Magnetic to Grid	5.5	5.4
33. Locate an Unknown Point Using Resection	5.5	5.4
34. Locate an Unknown Point on a Map or on the Ground by Intersection	5.5	5.4

TASK		ABILITY TO PERFORM	
		SC1	SC3
35.	Navigate from One Point on the Ground to Another, Utilizing Dead Reckoning	4.6	4.8
36.	Determine the Elevation of a Point on the Ground Using a Map	5.4	5.3
37.	Orient a Map to the Ground by Map-Association	5.4	5.2
38.	Determine a Magnetic Azimuth Using a Compass	5.5	5.4
39.	Navigate from One Position on the Ground to Another Point	5.3	5.3
40.	Operate a Small Arms Range	4.1	4.6
41.	Perform Range Set-Up Preplanning	4.1	4.4
42.	Perform Before-Operations Range Checks	4.1	4.4
43.	Perform During-Operations Checks	4.2	4.6
44.	Perform After-Operations Range Checks	4.2	4.6
45.	State the Four Fundamentals of Rifle Marksmanship	4.6	4.7
46.	Battlesight Zero an M16A1 Rifle	5.3	5.1
47.	Perform as a Coach for a Rifleman During Battlesight Zero of an M16A1 Rifle	5.0	5.0
48.	Apply the Four Fundamentals of Rifle Marksmanship	5.1	4.9
49.	Engage Targets During Periods of Limited Visibility	5.1	5.0
50.	Operate the AN/PVS-5 Night Vision Goggles	4.7	4.8

TASK		ABILITY TO PERFORM	
		SC1	SC3
51.	Qualify with an M16A1 Rifle	4.5	5.4
52.	Discuss the Army System of Maintenance	4.0	3.9
53.	List the Three Categories of Maintenance and Explain Their Roles in the Army System of Maintenance	3.3	3.3
54.	List the Types of Maintenance, Inspections, State the Nature and Scope of Each, and Determine the Type of Maintenance Inspection to Conduct	3.2	3.8
55.	List the Types of Assistance Teams Available to Improve the Unit's Maintenance Posture	3.1	3.8
56.	Describe the Procedure for Obtaining Publications	3.5	3.6
57.	Determine Tabulated Data, Issue Items, and Maintenance Actions Accomplished at Each Level of Maintenance	3.3	3.5
58.	Prepare a DA Form 2404 (Daily)	4.9	4.9
59.	Perform Preventive Maintenance Checks and Services	4.7	5.0
60.	Discuss the Dispatch Loop	3.9	3.8
61.	Extract Data from the Equipment Identification Card	4.1	4.2
62.	Identify the Forms Required to be Present in an Equipment Record Folder	4.1	3.9
63.	Inspect DD Form 1970	4.1	4.3
64.	Extract Data from the DA form 2401	3.3	3.9
65.	Extract Data from the -20P Manual	3.4	3.9

TASK		ABILITY TO PERFORM	
		SC1	SC3
66.	Extract Data from A Prescribed Load List Computer Printout	3.6	3.7
67.	List the Five Sources of Supply and How a Part is Obtained through Each Source in Accordance with FC 7-174 without Error	2.9	3.3
68.	Extract Data from the Army Master Data File	3.6	3.0
69.	Extract Data from a DA Form 2765, a 2765-1 or a 2765 Pre-punched/ Pre-printed	3.1	3.2
70.	Extract Data from a DA Form 2064, Document Register for Supply Actions	3.5	3.2
71.	Extract Data from a DA Form 2404, Deferred Maintenance Sheet	3.9	4.5
72.	Extract Data from Maintenance Allocation Chart	3.3	3.6
73.	Extract Data from DA Form 2407	3.6	3.6
74.	Determine Non-Mission Capable Days on DD Form 314	3.8	3.7
75.	Extract Data from DA Form 2406, Materiel Condition Status Report	3.6	3.7
76.	Determine When a Service is Due	3.8	4.1
77.	Extract Data from the -20 Manual	3.8	4.1
78.	Extract Data from a Lube Order	4.1	4.4
79.	Determine Tools and Special Tools Utilized When Performing a Service	3.9	4.0
80.	Utilize the STE/ICE	2.6	2.9
81.	Determine Historical Record for a Piece of Equipment	3.4	3.8

TASK	ABILITY TO TRAIN	
	SC1	SC3
1. Demonstrate How to Attack and Clear Buildings (Entry and Room Clearing Techniques)	4.7	4.6
2. Demonstrate Techniques for Subterranean Route Reconnaissance	4.1	3.7
3. Develop a Defensive Plan	5.0	4.8
4. Develop a Platoon Defensive Plan	4.9	4.4
5. Conduct a Deliberate Attack on Urban Terrain	4.7	4.4
6. Conduct a Hasty Defense on Urban Terrain	4.7	4.5
7. React to Enemy Contact	5.1	5.0
8. Conduct a Stream Crossing	4.8	4.8
9. Target Acquisition/Fire Distribution	4.8	4.8
10. Conduct Antiarmor Ambush	5.3	5.2
11. Break Contact	5.0	5.0
12. Employ/Recover a Hasty Protective Minefield	4.7	4.8
13. Prepare for/React to Chemical Attack	5.0	5.0
14. Conduct a Hasty Ambush	5.2	5.2
15. Knock out Bunkers	4.7	4.9
16. Breach a Wire Obstacle	5.0	4.8
17. Clear a Trenchline	4.4	4.7
18. Move to/Defend from Supplementary/ Alternate Positions	5.0	5.0
19. Establish a Hasty Defensive Position	5.1	5.1

TASK		ABILITY TO TRAIN	
		SC1	SC3
20.	React to Ambush	5.0	5.2
21.	Reconnoiter a Designated Area (Woodline)	5.0	5.0
22.	Reconnoiter a Designated Objective	5.0	5.0
23.	Cross a Danger Area	5.2	5.2
24.	Breach a Minefield	4.9	5.0
25.	Conduct Passage of Friendly Lines	5.0	5.2
26.	Prepare for/React to a Nuclear Attack	4.9	5.0
27.	Determine the Elevation of a a Point on the Ground Using a Map	5.4	5.3
28.	Orient a Map to the Ground by Map-Terrain Association	5.4	5.2
29.	Determine a Magnetic Azimuth Using a Compass	5.4	5.3
30.	Navigate from One Position on the Ground to Another Point	5.3	5.2
31.	Determine Distance While Moving Between Two Points on the Ground	5.0	4.9
32.	Convert Azimuths from Grid to to Magnetic and Magnetic to Grid	5.3	5.4
33.	Locate an Unknown Point Using Resection	5.4	5.3
34.	Locate an Unknown Point on a Map or on the Ground by Intersection	5.4	5.2
35.	**Navigate from One Point on the Ground to Another, Utilizing Dead Reckoning**	**4.5**	**4.9**
36.	Determine the Elevation of a Point on the Ground Using a Map	5.3	5.2

TASK		ABILITY TO TRAIN	
		SC1	SC3
37.	Orient a Map to the Ground by Map-Association	5.3	5.3
38.	Determine a Magnetic Azimuth Using a Compass	5.4	5.5
39.	Navigate from One Position on the Ground to Another Point	5.3	5.3
40.	Operate a Small Arms Range	3.9	4.5
41.	Perform Range Set-Up Preplanning	3.9	4.5
42.	Perform Before-Operations Range Checks	3.9	4.4
43.	Perform During-Operations Checks	4.1	4.5
44.	Perform After-Operations Range Checks	4.1	4.4
45.	State the Four Fundamentals of Rifle Marksmanship	4.6	4.6
46.	Battlesight Zero an M16A1 Rifle	5.1	5.2
47.	Perform as a Coach for a Rifleman During Battlesight Zero of an M16A1 Rifle	4.9	5.1
48.	Apply the Four Fundamentals of Rifle Marksmanship	4.9	5.1
49.	Engage Targets During Periods of Limited Visibility	4.9	5.1
50.	Operate the AN/PVS-5 Night Vision Goggles	4.6	4.6
51.	Qualify with an M16A1 Rifle	5.4	5.5
52.	Discuss the Army System of Maintenance	3.8	3.9

TASK		ABILITY TO TRAIN	
		SC1	SC3
53.	List the Three Categories of Maintenance and Explain Their Roles in the Army System of Maintenance	3.5	3.7
54.	List the Types of Maintenance, Inspections, State the Nature and Scope of Each, and Determine the Type of Maintenance Inspection to Conduct	3.8	3.7
55.	List the Types of Assistance Teams Available to Improve the Unit's Maintenance Posture	3.4	3.5
56.	Describe the Procedure for Obtaining Publications	3.8	3.8
57.	Determine Tabulated Data, Issue Items, and Maintenance Actions Accomplished at Each Level of Maintenance	3.3	3.4
58.	Prepare a DA Form 2404 (Daily)	4.7	5.0
59.	Perform Preventive Maintenance Checks and Services	4.7	4.9
60.	Discuss the Dispatch Loop	3.9	3.9
61.	Extract Data from the Equipment Identification Card	4.1	4.2
62.	Identify the Forms Required to be Present in an Equipment Record Folder	4.1	3.6
63.	Inspect DD Form 1970	3.9	3.9
64.	Extract Data from the DA form 2401	3.5	3.7
65.	Extract Data from the -20P Manual	3.9	4.3
66.	Extract Data from A Prescribed Load List Computer Printout	3.7	4.2

TASK		ABILITY TO TRAIN	
		SC1	SC3
67.	List the Five Sources of Supply and How a Part is Obtained through Each Source in Accordance with FC 7-174 without Error	3.8	3.6
68.	Extract Data from the Army Master Data File	3.8	4.1
69.	Extract Data from a DA Form 2765, a 2765-1 or a 2765 Pre-punched/ Pre-printed	3.1	3.2
70.	Extract Data from a DA Form 2064, Document Register for Supply Actions	3.7	3.5
71.	Extract Data from a DA Form 2404, Deferred Maintenance Sheet	4.3	4.2
72.	Extract Data from Maintenance Allocation Chart	4.2	4.2
73.	Extract Data from DA Form 2407	3.9	3.8
74.	Determine Non-Mission Capable Days on DD Form 314	3.9	4.1
75.	Extract Data from DA Form 2406, Materiel Condition Status Report	3.6	3.9
76.	Determine When a Service is Due	3.6	4.1
77.	Extract Data from the -20 Manual	3.6	3.9
78.	Extract Data from a Lube Order	3.8	3.7
79.	Determine Tools and Special Tools Utilized When Performing a Service	3.8	3.6
80.	Utilize the STE/ICE	3.4	3.8
81.	Determine Historical Record for a Piece of Equipment	3.5	3.6

APPENDIX E

PROPONENT REVIEW
AND
TRAC-WSMR RESPONSES TO
PROPONENT'S COMMENTS

PROPONENT REVIEW

DEPARTMENT OF THE ARMY
HEADQUARTERS UNITED STATES ARMY TRAINING AND DOCTRINE COMMAND
FORT MONROE, VIRGINIA 23651-5000

1986 JUL 2[illegible] AM 8 [illegible]

REPLY TO ATTENTION OF

ATTG-C

S: 14 August 1986

23 July 1986

SUBJECT: COHORT Cadre Training Effectiveness Analysis (TEA)

Director
US Army TRADOC Analysis Center (TRAC)
ATTN: ATOR-THE (Dr. Claude Miller)
White Sands Missile Range, NM 88002-5502

1. Reference:

a. Letter, TRAC, ATOR-THE, 30 May 86, subject as above.

b. Telephone conversation between Dr. Stenson, this office, and Ms. Robinson, TRAC, 25 Jun 86, subject as above.

c. Telephone conversation between MAJ Tyson, this office, and Dr. Miller, TRAC, 14 Jul 86, subject as above.

d. Telephone conversation between Dr. Stenson, this office, and Ms. Robinson, TRAC, 21 Jul 86, subject as above.

2. We have provided you with the enclosed comments (references 1b - 1d).

3. In general, your report needs to address whether there was a statistically significant difference in cadre's confidence to perform and to train others to perform as a result of Phase I and Phase II Training, the level of statistical significance, and whether or not these results can be generalized.

4. Request receipt of the revised COHORT Cadre TEA by 14 Aug 86.

5. POC for this office is Dr. Stenson, AUTOVON 680-4265.

6. We appreciate your cooperation and support.

FOR THE DEPUTY CHIEF OF STAFF FOR TRAINING:

Encl

EDWARD S. BRODERICK
Colonel, GS
Director
Training Concepts Analysis

COHORT Cadre TEA Comments

Item No	Page No	Paragraph/ Figure No.	Recommended Changes
1	Report Documentation Page	Abstract	Include statement as to whether or not results are statistically significant and at what level of significance.
2	Report Documentation Page	Abstract	Add a statement that based upon the number of units and individuals, it is inadvisable to generalize the results.
3	Report Documentation Page	Abstract	Change first sentence to "training which suports the Army's New Manning System."
4	v	Principal Results	Include statement as to whether or not results are statistically significant and at what level of significance.
5	v	Major Restrictions	Add a statement to explain why cadres changed during the study.
6	v	Study Sponsor	Change sponsor to Training Concepts Analysis Directorate.
7	1	1	In the first sentence, change COHesion to "Cohesion."
8	1	1	In the first sentence, insert "and" between Readiness and Training.
9	2	1.2c	Delete this paragraph since this issue was not an objective of the TEA.
10	3	1.4	In the first sentence, delete the word "personnel."
11	3	1.4	In the third sentence, change "a cadre member" to "the cadre."
12	4	1.5	In the fourth sentence, add the objective "elicit soldiers perceptions of the effectiveness of Phase I Training."
13	5	Footnote 2	Add statement as to why surveys were administered at inappropriate times.
14	5	2.1	In the third sentence, delete "members."

Item No	Page No	Paragraph/ Figure No.	Recommended Changes
15	6	2.1	Add a statement noting that the t-test was used to determine that there was no significant difference between the two sample means--Infantry control and experimental units.
16	6	2.1	Add a sentence stating that the demographic sections were screened to delete MOSs for which surveys had not been designed.
17	7	2.2.1	Explain what happened to the Armor School's M60A3 tasks.
18	8	2.4	Provide a statement noting when the surveys were administered in relationship to the completion of Phase I training.
19	9	2.4	See Item 18.
20	10	2.5.2	In the last sentence, change "to further complete" to "to complete."
21	Chapter 3	All Pertinent Paragraphs	In this chapter, report results of tests of statistical significance.
22	12	3.1b	Change the first sentence to "Since comparison of control and experimental units were limited to Infantry units, it is inadvisable to generalize the results."
23	13	3.1d	State who was included in the sample and also the relationship of the sample size to the population.
24	13	3.1e	Explain the discrepancy between the first sentence and directions provided in Appendix C. According to Appendix C, blank forms would not indicate that "training material were not received" or that "individuals did not have time to study the training materials."
25	15	3.3b	Change the last sentence to "school training had as great a positive effect (even slightly greater) on confidence to perform as on confidence to train."

Item No	Page No	Paragraph/ Figure No.	Recommended Changes
26	17	Figure 3-3	Explain why there is no bar for A1 and B2.
27	18	3.4b	Change the first sentence to read "The Armor School administered 18 hands-on-tests (HOT). Each was scored on a GO, NO GO basis."
28	20	3.4c	In the second line, insert "increase" in front of "per task."
29	20	3.5	See comment 24.
30	21	3.6	Base "Summary and Discussion" upon results of tests of statistical significance.
31	22	4.2	Explain the basis upon which this statement is made: "There was no indication that increased confidence was related to an increase in actual performance." State whether or not results were statistically significant and at what level of significance.
32	23	4.2	In the last sentence, change "improved" to "affects."
33	24	5.1	Base "Conclusions" upon results of tests of statistical significance.
34	25	5.1	Add a statement that based upon the number of units and individuals, it is inadvisable to generalize these results.

TRAC-WSMR RESPONSE TO
PROPONENT'S COMMENTS

TRAC-WSMR RESPONSE TO PROPONENT'S COMMENTS

The current report incorporates the majority of changes suggested by the proponent. However, some recommended changes go beyond the information available to TRAC-WSMR or were made with reservations as stated below.

Items not changed as recommended:

Item #	Reason Item Was NOT Changed as Recommended
5	As directed by the proponent, TRAC did not have direct contact with the study units as explained in paragraphs 2-3 and 3-6. Therefore, we cannot state why the cadre of some units changed. We can only report that, in some instances, individuals who completed the first survey were not the same as those who completed subsequent surveys.
13	As stated in the response to Item #5, TRAC analysts did not have direct contact with the study units so cannot state why the surveys were administered at inappropriate times. This problem was discussed with the proponent and the proponent established the guidelines that surveys administered 2 weeks or more after the scheduled date would not be included in the analysis.
16	Surveys from all soldiers who underwent cadre training were included in the analysis. Specific tasks that were not appropriate for an individual were indicated by the response "DO NOT train this task" or "DO NOT perform this task".
23	Paragraph 2-1 addresses the sample of soldiers surveyed in this study. TRAC-WSMR does not have access to descriptive information concerning the current population of COHORT units.

Item changed with reservations:

Item #	Reasons why TRAC-WSMR had Reservations about Making the Change
21	The statistical tests requested by the proponent were run and the text of chapter 3 has been modified accordingly. It should be noted, however, that 846 statistical tests were required (sign tests using the $p < .05$ level of rejection) to assess confidence changes to perform/train by specific tasks.

All other items were changed as requested by the proponent.

DEPARTMENT OF THE ARMY
HEADQUARTERS UNITED STATES ARMY TRAINING AND DOCTRINE COMMAND
FORT MONROE, VIRGINIA 23651-5000

1986 SEP 15 AM 10 31

REPLY TO ATTENTION OF

ATTG-C

9 SEP 1986

SUBJECT: COHORT Cadre Training Effectiveness Analysis (TEA)

Director
US Army TRADOC Analysis Center (TRAC)
ATTN: ATOR-THE (Dr. Claude Miller)
White Sands Missile Range, NM 88002-5502

1. Reference:

a. Letter, TRAC, ATOR-THE, 19 Aug 86, SAB.

b. Letter, HQ TRADOC, ATTG-C, 23 Jul 86, SAB.

2. We concur with the revised report (reference 1a) provided the time for administering the SC3 to the control groups is changed (reference 1b, comment 19). The control groups were given the SC3 on formation day; the experimental groups were administered the SC3 when Phase II ended.

3. POC for this office is Dr. Stenson, AUTOVON 680-4265.

4. We appreciate your cooperation and support.

FOR THE DEPUTY CHIEF OF STAFF FOR TRAINING:

E. S. Broderick

EDWARD S. BRODERICK
Colonel, GS
Director
Training Concepts Analysis

ANNEX C

DEPARTMENT OF THE ARMY
US ARMY SOLDIER SUPPORT CENTER
FORT BENJAMIN HARRISON, INDIANA 46216-5060
Building 1

ATSG-DSN

08 MAR 1986

SUBJECT: COHORT Cadre Training Evaluation

Commander
U.S. Army Training and Doctrine Command
ATTN: ATTG-C (Dr. Stenson)
Fort Monroe, Virginia 23651-5000

1. Attached as enclosure is the Soldier Support Center input to the TRADOC COHORT Cadre Training Evaluation.

2. Nine of the units in the COHORT Cadre Training Evaluation are not currently in the NMS Field Evaluation. Due to this, specific strength figures are available for only eight units in the COHORT Cadre Training Evaluation, as noted on the enclosured charts. However, these strength profiles are considered representative of the general COHORT experience.

3. Due to limited use of the complete Phase I Cadre Training Support Package, no conclusions have been drawn as to suitability of this training. Rather, training distractors and other reasons for non-utilization have been documented. These must be overcome in order to provide a true test of the usefulness of this training.

Robert C Mitchell
ROBERT C. MITCHELL
Colonel, IN
Director, Directorate for Soldier Advocacy

Encl
as

DEPARTMENT OF THE ARMY
US ARMY SOLDIER SUPPORT INSTITUTE
FORT BENJAMIN HARRISON, INDIANA 46216

8 MAR 1986

ATSG-DSN

SUBJECT: COHORT Cadre Training Evaluation

Commander
U.S. Army Training and Doctrine Command
ATTN: ATTG-C (Dr Stenson)
Fort Monroe, Virginia 23651-5000

1. References:

a. Message, HQ TRADOC, ATTG-C, 230935Z Jul 85, Subject: COHORT Cadre Training.

b. Message, HQ TRADOC, ATTG-C, 051115Z Nov 85, Subject: COHORT Cadre Training Evaluation.

2. Background: The COHORT Cadre Training program consists of two phases. Phase I is conducted at the FORSCOM home station and consists of exportable training material from either the IN, AR or FA School, and an exportable COHORT Leader Orientation Training Support Package (SSC TSP) developed by USASSC. This package was developed to address problems identified in a front end analysis of COHORT companies and batteries, specifically the incomplete or inaccurate information many soldiers had on the New Manning System and the need for team building among the company leaders prior to receiving the first term soldiers. In order to maximize standard distribution and utilization of the training packages, USASSC recommended that the Phase I materials be provided to FORSCOM who would in turn issue them to new units by command letter thru the appropriate chain of command. Instead, a decision was made to have the branch schools deliver the Phase I materials.

3. Discussion: COHORT Leader Training is not being consistently implemented among all the units taking part in this evaluation. The several reasons for this are as follows:

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a. Distribution of the Phase I training materials is inconsistent. Specific information on time and method of delivery of the Phase I material, as well as utilization of the training package, is detailed on enclosures 1- 5. As noted, although the Branch Schools are responsible for providing the Phase I training materials, to include the SSC 'TSP' training, to COHORT units of their respective branches, actual distribution varied from delivery directly to the company/battery being formed, to the battalion headquarters, to 'somewhere' in the division headquarters, to not being delivered at all. Method of delivery ranged from being handcarried directly to the company by branch school personnel, to being picked up by FORSCOM (company or battalion) personnel visiting the school, to being mailed to the unit or division headquarters. In many cases, the training material finally reached the company late and with little or no instructions on how the company was supposed to utilize this training material.

b. Most units undergoing a COHORT formation felt that they were in an information vacuum.

(1) Many units felt that they were made to 'start-from-scratch' with not only developing their training program, but also in accomplishing the required coordination with both the One Station Unit Training (OSUT) training base and the installation support activities to get the Initial Entry Training (IET) package soldiers transported to the FORSCOM installation and inprocessed. Although all the unit commanders noted the necessity to specifically tailor the training program to their unit's needs, many desired a more standardized package which they could then modify, rather than a stack of reference/training manuals which they had to put together into a program. Several companies stated that it was difficult to locate local personnel with expertise in the NMS and recommended that a TDY team (out of DA or TRADOC) be available to introduce the common module of COHORT Cadre Training to a forming unit. One notable exception to this lack of assistance was the favorable comments from the artillery batteries concerning the diagnostic tests conducted by the mobile training teams from the Artillery School.

(2) Similiar comments were made concerning the need for a specific POC at TRADOC branch schools and pre-distributed procedures to coordinate both Phase II training and the IET package handoff. Unit commanders often had to track down their own coordination points for training/travel schedule, transportation, billeting, and overlap with the IET unit cadre. Some units felt they had to fight to get any coordination/overlap time with the TRADOC cadre of the IET package, and did not have sufficient information sharing to get a good feel for the level of training the IET package received. There were also circumstances where the coordination between TRADOC and FORSCOM cadre was outstanding. However, as this varied widely, there seems to be no standard format outlining the types of information the FORSCOM leaders can expect from the TRADOC cadre.

(3) It should also be noted here that while some divisions do not have an LOI for COHORT company formation, where such standard guidelines do exist they are not well publicized nor followed. Most units did not know of a division POC for COHORT training. It appeared that the G-3 tracked COHORT training only to the extent of controlling training funds. All guidance was from battalion level, which was involved, to a great degree, in some cases and not at all in others.

c. The command emphasis at battalion level ranges from strong committment to non-existent.

(1) Some units are 'fenced' from all additional duties while they are supposed to be preparing for unit formation, while others are not. For example, the leaders for some newly forming COHORT units who were assigned 30 to 60 days in advance of unit formation were used as support for the deploying company's training, or were otherwise so occupied with additional duties to significantly reduce the training time available prior to unit formation. This seems to be a function of the battalion's policy/emphasis.

(2) In some cases, the battalion gave no recognition of any need for a newly forming COHORT unit to maintain a separate training schedule from the rest of the battalion. This included requiring the COHORT unit to participate in company and battalion level exercises soon after formation. These forecast training requirements, which require the soldiers to display MOS proficiency, give the unit commander strong incentive to focus on branch skill training to the exclusion of the 'SSC TSP' common module.

d. The COHORT cadre personnel fill is usually short of the required formation strength 60 days prior to unit formation. The specific strength levels of eight of the companies in the training evaluation are detailed on Encl 6 - 13 It has not been unusual for cadre to continue to arrive after the unit has officially formed with its first term soldiers. Obtaining timely fill of cadre is further complicated on certain occasions by inadequate assignment screening, which has resulted in some soldiers being assigned to a COHORT company who were not medically qualified, or who had just returned from a COHORT overseas tour and had insufficient time-in-service remaining to take another COHORT assignment. One company's cadre fill prior to formation was so poor that Phase II training for that company had to be cancelled.

e. There was a wide variance in what company/battery level commanders considered necessary training for their NCOs.

(1) In some instances, the unit commander decided the block of instruction on the NMS policy was unnecessary because he felt that most of his NCOs were already familiar with COHORT policies. This is becoming a more common perception among COHORT units. The leaders that have had experiences with a previous COHORT unit will informally counsel the incoming cadre. The danger is that often the 'experienced' cadre misunderstood the policy, or, the policies have changed since their last COHORT formation. In either case, misinformation exists but is not immediately recognized because the leaders think that they understand the NMS policies. This situation will continue to exist until the block of instruction on NMS policy information is made mandatory. It should be noted here that the IN School includes an introduction/orientation to the NMS in its Phase II training. This has the advantage of insuring that the cadre are provided with an overview of the NMS policy including seeing the tape on the NMS by General Thurman. The disadvantage is that questions/misunderstanding of NMS policy should be cleared up as soon as possible, and not wait for Phase II training. Obviously, the same block of instruction should not be included in both Phases.

(2) Some company commanders felt that they did not need the teambuilding exercises, as the majority of their cadre were formed from other companies/batteries in the same battalion, or from a previously disestablished unit. This seems to be appropriate tailoring of the training package at unit level. In every case where the blocks of instruction on teambuilding, leadership, and listening techniques were actually used, the training was well received.

4. Recommendations.

a. Procedures for distribution need to be standardized, preferably with HQ FORSCOM actually sending the Phase I materials to the unit via a command letter. This letter should also outline the total cadre training program to include an explanation of the Phase II programs. This procedure also provides a perception of command emphasis that is sorely needed as commanders often do not perceive the cadre training program as a priority issue.

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SUBJECT: COHORT Cadre Training Evaluation

b. Establish standard procedures for coordination of Phase II and the IET package handoff. This should be included in the Phase I material to preclude each COHORT company having to 'reinvent the wheel'.

13 Encls

Robert C Mitchell
ROBERT C. MITCHELL
Colonel, IN
Director, Directorate for Soldier Advocacy

FORT RILEY (1ID)

COHORT POC: G-3 Mr. Lucus
Note: No one on 1ID staff directly tracks COHORT cadre training, however, the G-3 POC assists units in coordinating COHORT training at the units' request.

UNIT DESIGNATION	DATE OF FORMATION	PHASE I MATERIAL DELIVERED WHEN	HOW	PHASE I UTILIZED	REMARKS
D/1- 5 FA	20 Oct 85	Not Received		No	Phase II was accomplished.
B/4-37 AR	12 Oct 85	Nov 85	Mailed	No	Phase I material was received late (after formatio 100% of cadre arrived late. Phase II was accomplished.
B/2-16 IN	19 Oct 85	14 Aug 85	Handcarried by IN School	Partial	Unit focused on branch skills
A/2-16 IN	25 Nov 85	14 Aug 85	Handcarried by IN School	Partial	Unit focused on branch skills 94% of cadre arrived late.
A/4-37 AR	7 Feb 86	Nov 85	Mailed	YES	3 officers & 22 NCOs participated in full Phase I training. Unit scheduled for Phase I on
D/2-16 IN	7 Feb 86	7 Nov 85	Handcarried by IN School	YES	5 officers & 22 NCOs participated in full Phase I training. There was strong Bn support. Unit scheduled for Phase I or
D/5-16 I..	7 Mar 86	Not Received	Handcarried *	NO	Unit was scheduled for Phase I only.

*Although the IN School has record of delivering the Phase I material, the unit has no record of receiving it.

Fort Carson (4ID)

COHORT POC: G-3 CPT Gibson
Note: No one on 4ID staff coordinates or tracks COHORT cadre training. The extent of their involvement was control of TDY funds, (as required for Phase II training).

UNIT DESIGNATION	DATE OF FORMATION	PHASE I MATERIAL DELIVERED WHEN	HOW	PHASE I UTILIZED	REMARKS
A/3-68 AR	8 Jul 85	Jun 85	Picked up by 1SG at Ft Knox	Partial	Unit focused on branch skills. Material was picked up late. SSC TSP was not in material picked up by 1SG. 70% of cadre arrived late.
B/1-29 FA	19 Jul 85	Apr 85	Handcarried by Arty School	Partial	Unit focused on branch skills SSC TSP was reviewed by BC & 1SG, but not used. Unit cadre received a local briefing on NMS policy. 45% of cadre arrived late.
D/1-12 IN	19 Oct 85	Not Received	Mailed	No	Phase II cancelled due to late arrival of cadre. Local command gave total emphasis to MOS training due to NTC scheduled four weeks after unit formation. 63% of cadre arrived late.
D/1- 8 IN	7 Feb 86	Dec 85	Handcarried	Partial	Unit not scheduled for Phase 32 NCOs attended local Leadership & Mgmt Dev Cse in lieu of using SSC TSP

FORT HOOD (2AD)

COHORT POC: G-3 Maj Smith
Note: No one on 2AD staff coordinates or tracks COHORT cadre training.

UNIT DESIGNATION	DATE OF FORMATION	PHASE I MATERIAL DELIVERED WHEN	HOW	PHASE I UTILIZED	REMARKS
D/1-66 AR	25 Sep 85	1 Aug 85	Thru Bn Hq	Partial	TLO# 1 was torn out and missing from the SSC TSP. Remaining portions of the 'mind set' package were reviewed by the CO, 1SG, & 2 PSGs, but was not formally used.
A/3- 3 FA	27 Sep 85	Not Received	Mailed	No	Phase II was accomplished.

FORT ORD (7ID)

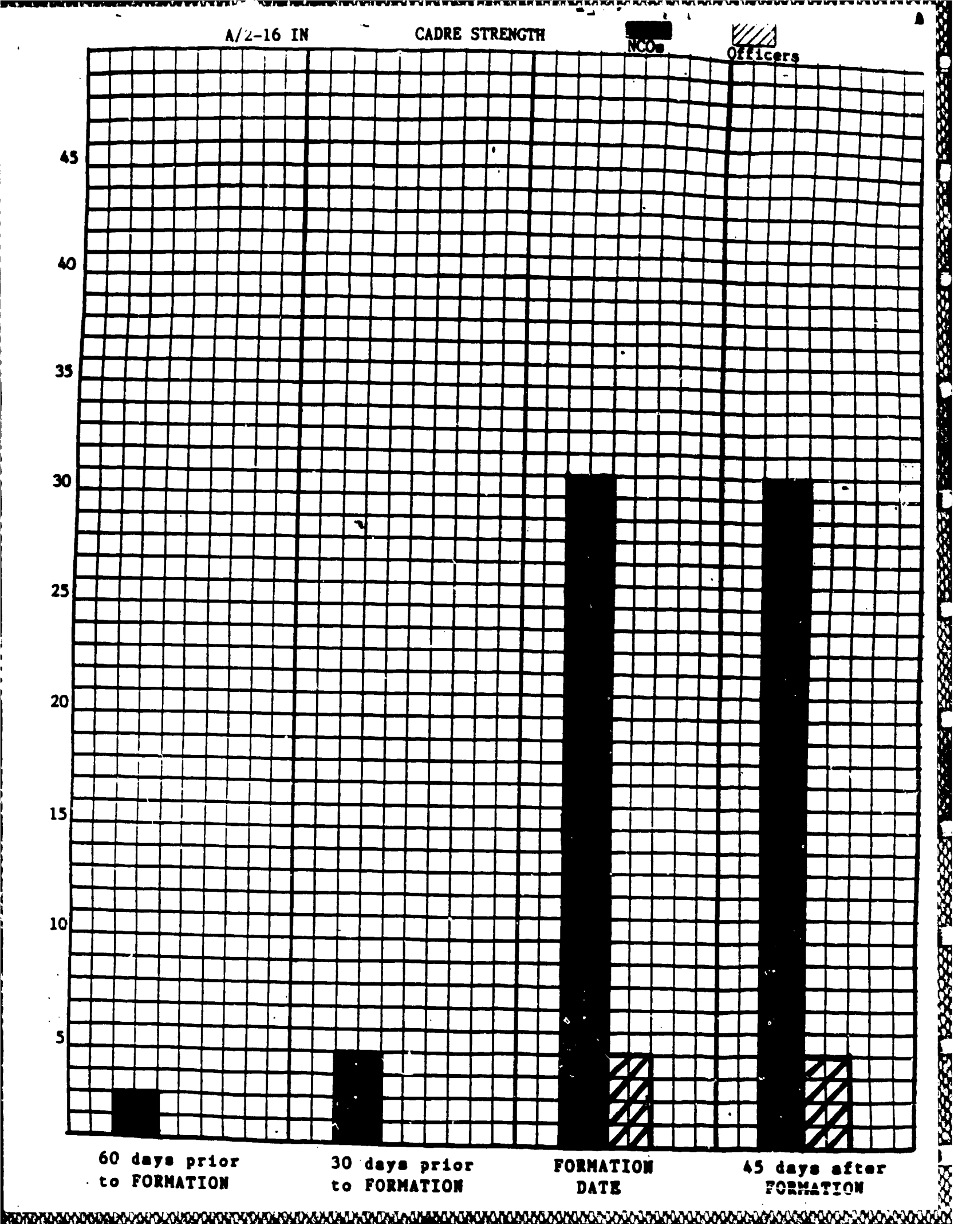
COHORT POC: G-3 CPT Nichols
Note: No one on 7ID staff coordinates or tracks COHORT cadre training.

UNIT DESIGNATION	DATE OF FORMATION	PHASE I MATERIAL DELIVERED WHEN	HOW	PHASE I UTILIZED	REMARKS
C/5-15 FA	3 Jan 86	18 Nov 85	Handcarried by Arty School	Partial	16 NCOs participated in branch skill training only.
B/6- 8 FA	27 Mar 86	16 Jan 86	Handcarried by SSC	Pending	Unit is conducting local training based on SSC TSP and experience of previously existing COHORT batteries in 7ID. Unit was scheduled for Phase I only. No material has yet been received from Arty School.

FORT LEWIS (9ID)

COHORT POC: G-1 CPT Collins
Note: No POC in G-3 could be identified. No one on 9ID staff coordinates or tracks COHORT cadre training.

UNIT DESIGNATION	DATE OF FORMATION	PHASE I MATERIAL DELIVERED WHEN	HOW	PHASE I UTILIZED	REMARKS
A/4-23 IN	16 Sep 85	3 Jul 85	Handcarried by IN School	Partial	SSC TSP was not included in Phase I material received.
C/2-23 IN	17 Jan 86	Not received		No	Unit was scheduled for Phase I only. No material was received from IN School. Local training was conducted based on previous experience of COHORT units in 9ID.


A/2-16 IN
CADRE STRENGTH
NCOs
Officers
45
40
35
30
25
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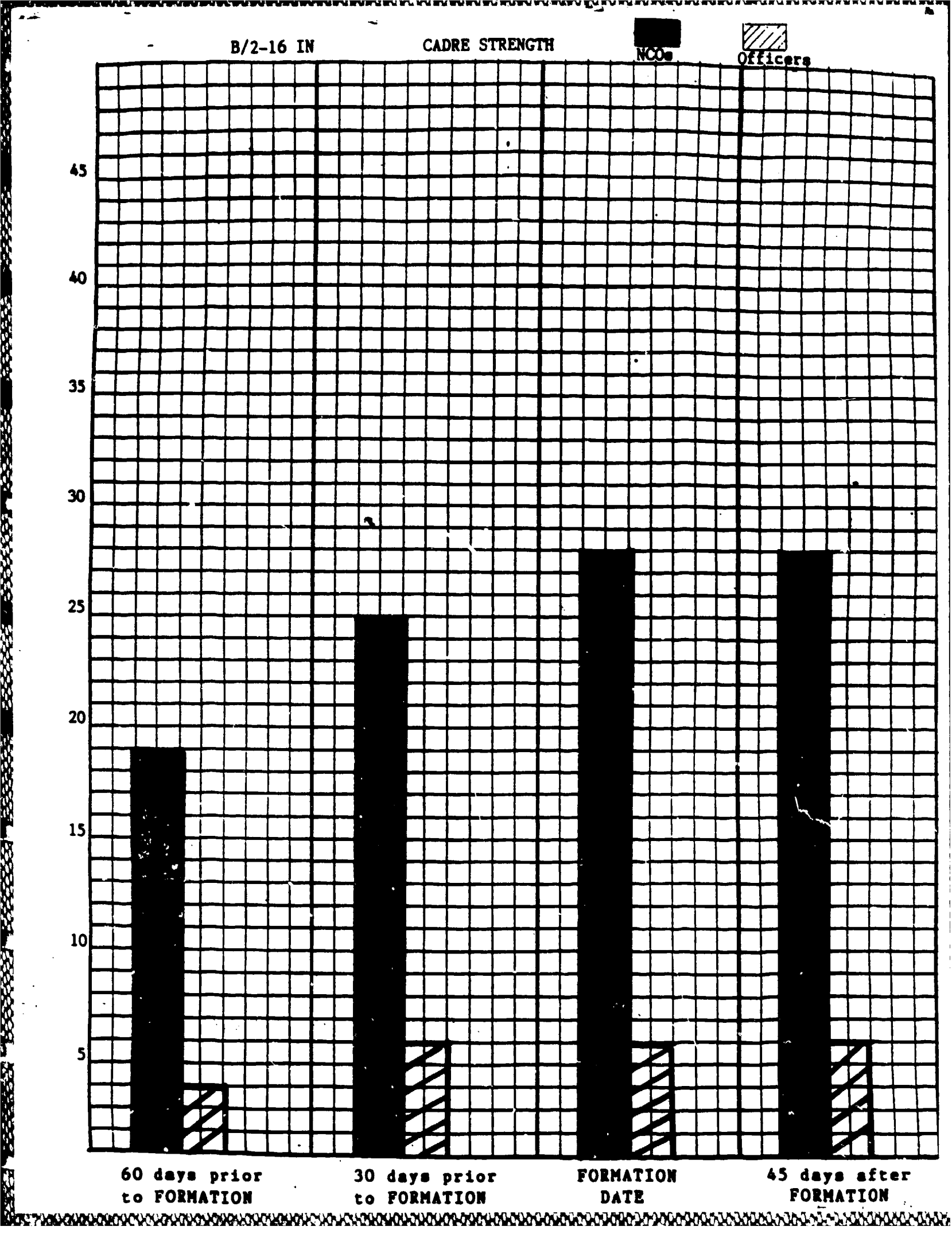
15
10
5
60 days prior to FORMATION
30 days prior to FORMATION
FORMATION DATE
45 days after FORMATION


B/2-16 IN
CADRE STRENGTH
NCOs
Officers
45
40
35
30
25
20
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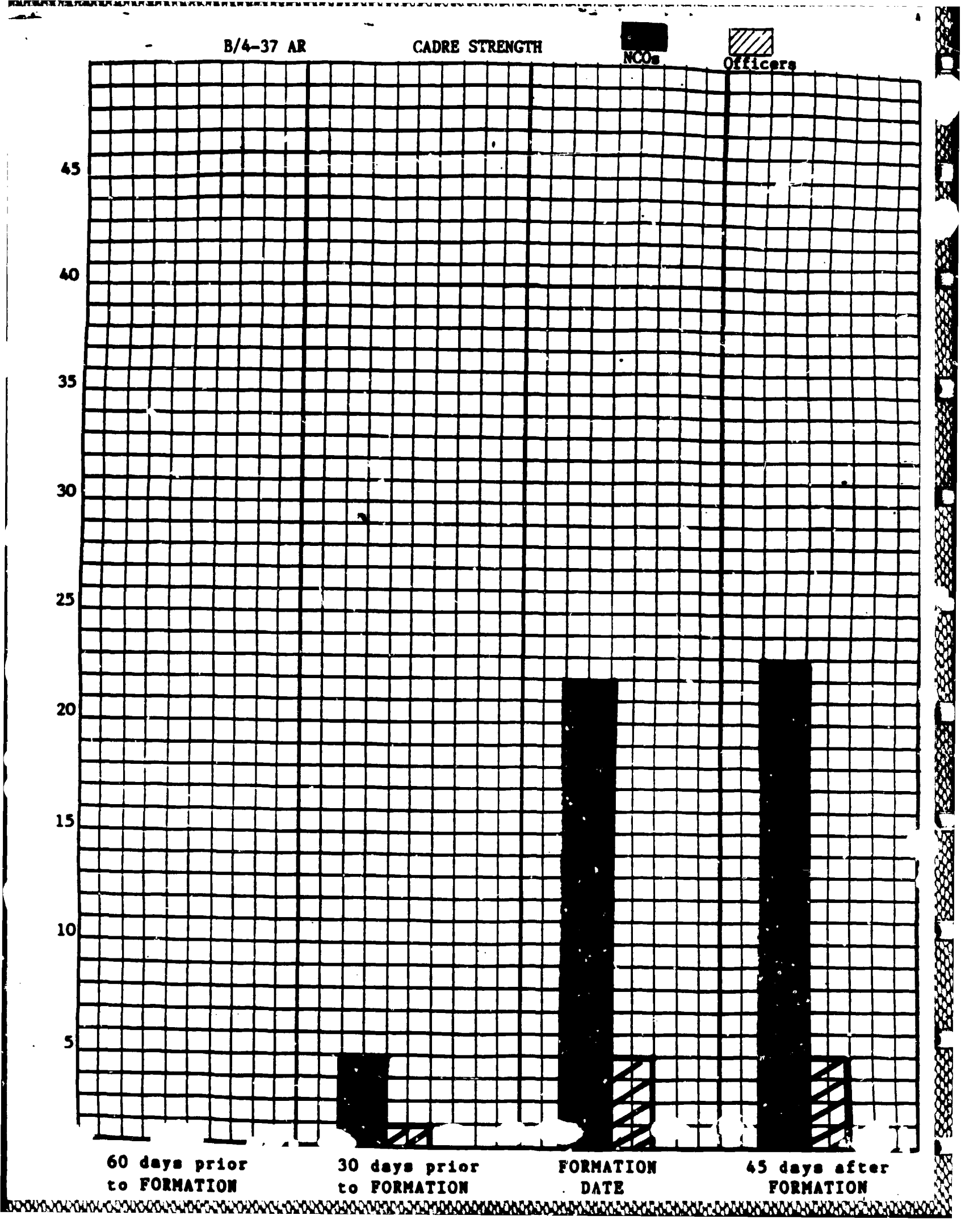
60 days prior to FORMATION
30 days prior to FORMATION
FORMATION DATE
45 days after FORMATION


B/4-37 AR
CADRE STRENGTH
NCOs
Officers
45
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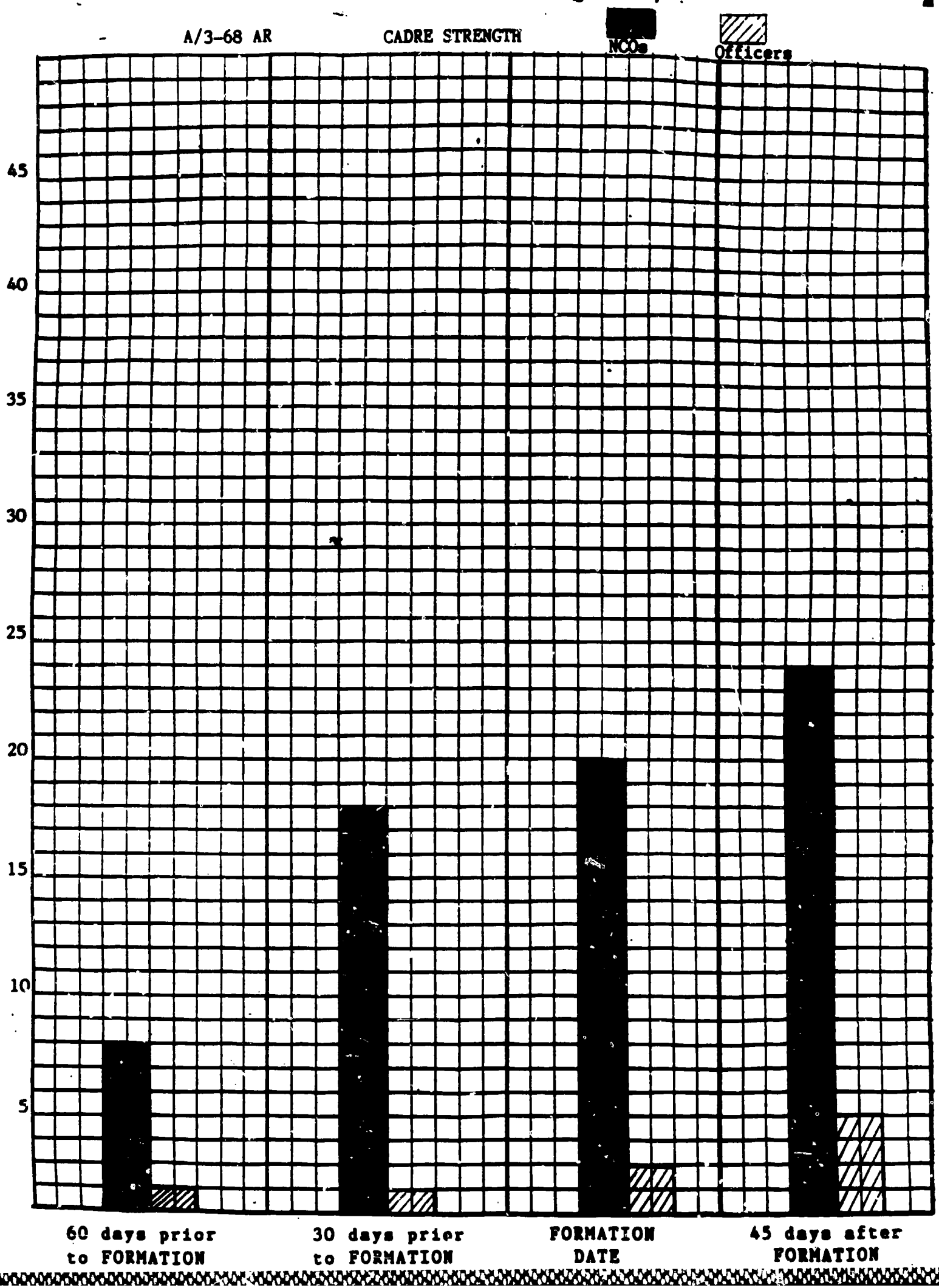
60 days prior to FORMATION
30 days prior to FORMATION
FORMATION DATE
45 days after FORMATION

A/3-68 AR


CADRE STRENGTH
NCOs
Officers
45
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35
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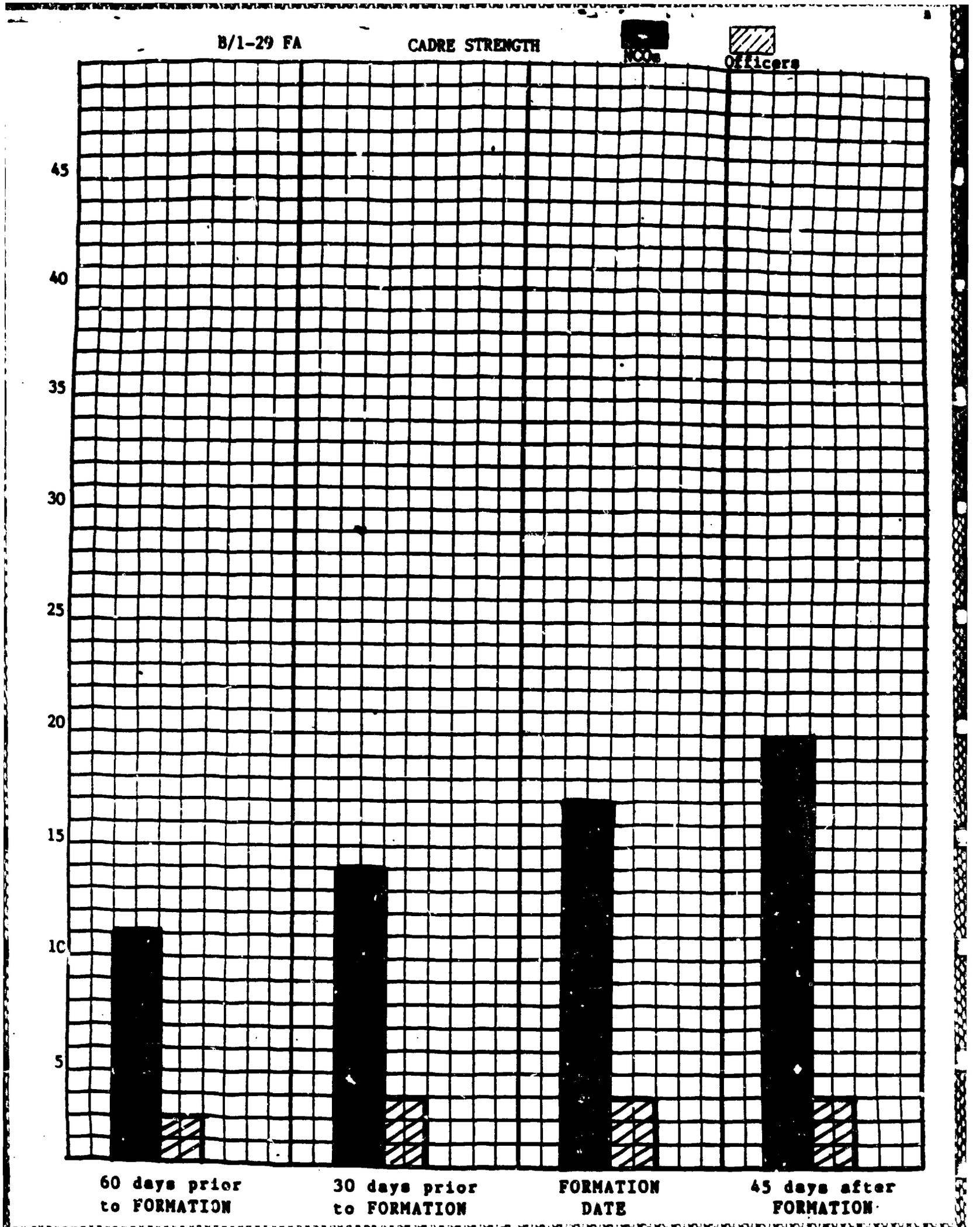
60 days prior to FORMATION
30 days prior to FORMATION
FORMATION DATE
45 days after FORMATION


B/1-29 FA
CADRE STRENGTH
NCOs
Officers
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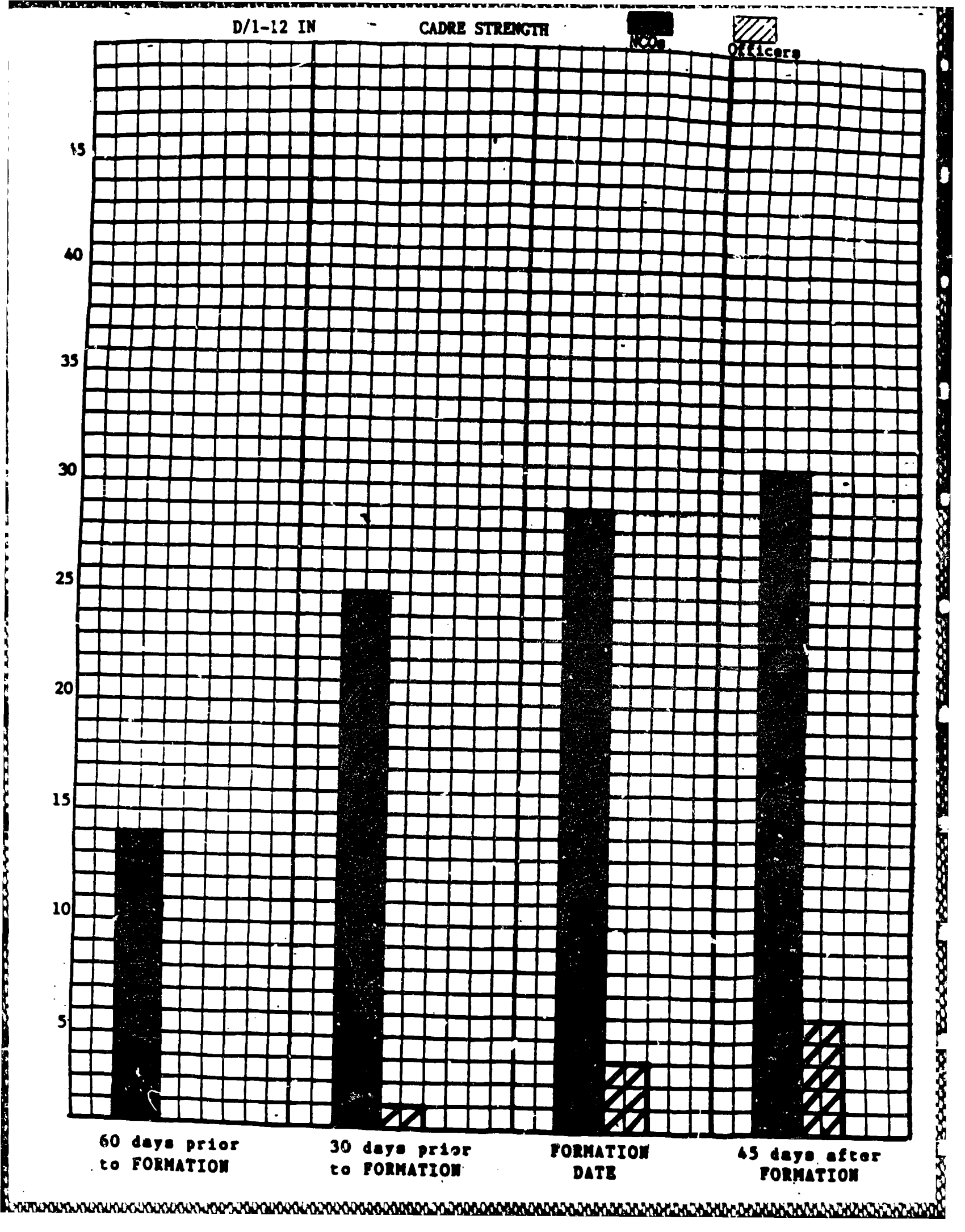
60 days prior to FORMATION
30 days prior to FORMATION
FORMATION DATE
45 days after FORMATION


D/1-12 IN
CADRE STRENGTH
NCOs
Officers
15
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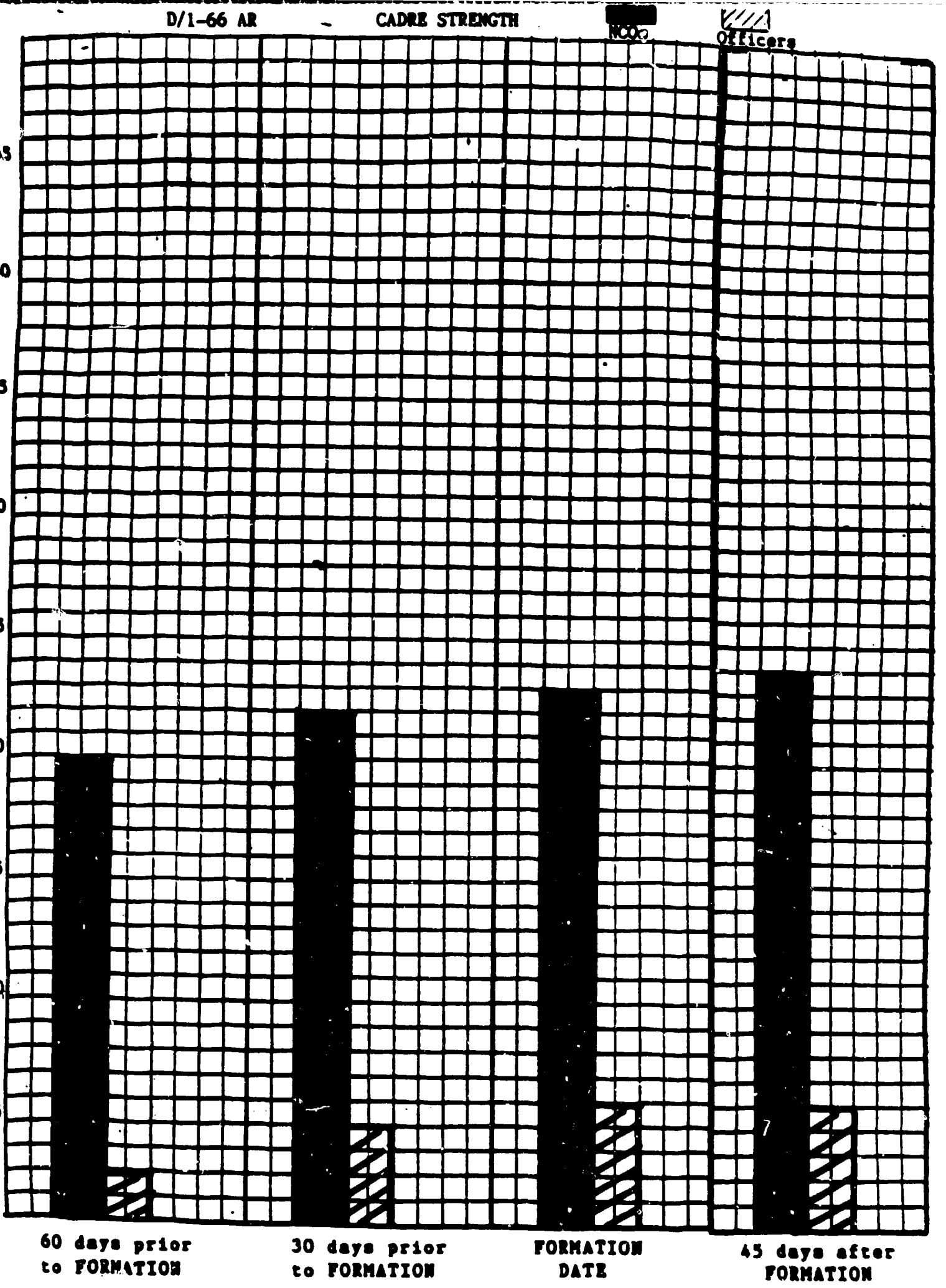
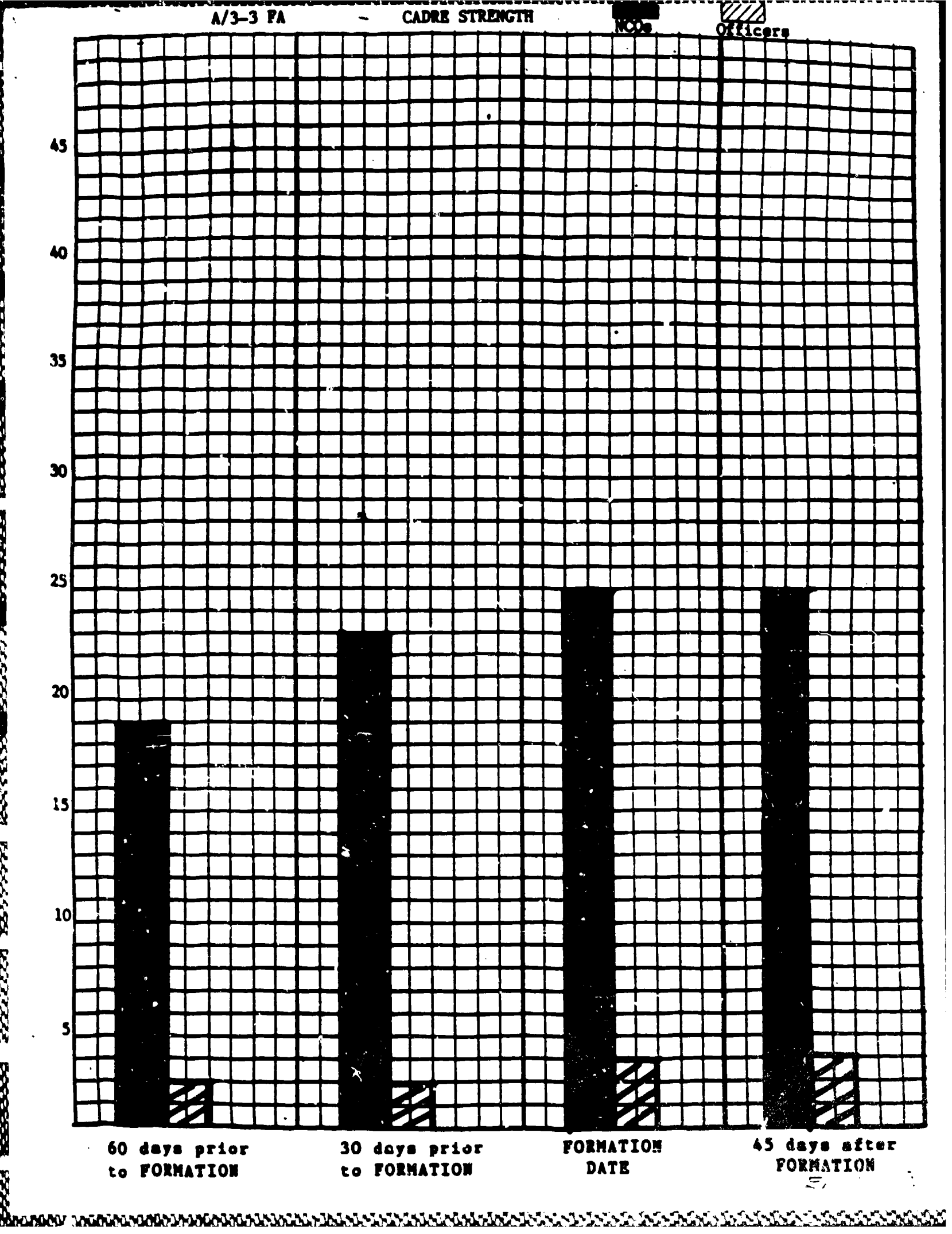
10
5
60 days prior to FORMATION
30 days prior to FORMATION
FORMATION DATE
45 days after FORMATION

D/1-66 AR - CADRE STRENGTH




A/3-3 FA - CADRE STRENGTH
NCOs
Officers
45
40
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60 days prior to FORMATION
30 days prior to FORMATION
FORMATION DATE
45 days after FORMATION

DEPARTMENT OF THE ARMY
HEADQUARTERS TRADOC COMBINED ARMS TEST ACTIVITY
FORT HOOD TEXAS 76544

REPLY TO
ATTENTION OF:

ATCT-TSS-NMS

23 September 1986

SUBJECT: MILPERCEN Fill of Cadre in Newly Formed COHORT Units

HQDA, ODCSPER
Manning Task Force Division
ATTN: DAPE-MPU (MAJ Gehlhausen)
RM BF-758 Pentagon
Washington, DC 20310-0300

1. References.
   a. Phonecon between MAJ Tozzi, TCATA and MAJ Gehlhausen, DA, 5 Sep 86.
   b. DA MSG, Subject: SAB, DTG 091310Z Sep 86.

2. Enclosed are the cadre assignment/departure data for 12 company sized units formed at Forts Carson, Hood and Riley between 27 Jan 84 and 7 Mar 86 and four battalions formed at Fort Ord between 11 Jan 85 and 3 Jun 85. Five of the companies are non-deploying units, 5 have already deployed and two will deploy next year. All four battalions are non-deploying units.

3. Within the scope of the current TCATA NMS Evaluation, it is not possible to determine the cause or causes of late cadre arrival. The data provided here suggests that the Army has been more successful in filling cadre positions in the later company units. The same appears to be true with the Fort Ord battalions. However, about the time the Fort Ord battalions were being organized as COHORT battalions, the 7th Inf Div converted to the Light Infantry configuration. Because of the changes in organization and the differences in authorized strengths between Infantry and Light Infantry, Fort Ord had an unusually high number of excess personnel and reassignments, which may not be representative of other COHORT unit formations.

4. Per agreement with MAJ Gehlhausen, the authorized column on the charts has been provided but left blank.

5. POC this activity is Mr Brady, (AV) 738-9146.

Encl

FRANCISCO TREVINO, JR.
COL, AV
Director

CF:
Cdr, SSC
Cdr, TRADOC

COHORT CADRE TURBULENCE

1. The attached charts show the cadre turbulence for selected COHORT units.

2. The chart heading includes the following: NMS Evaluation Unit ID Number, the date of formation, unit designation and installation at the time of formation, the date of deployment (if applicable), unit designation and location after deployment (if applicable).

3. The column headed with "F" represents the period of time beginning one month before formation date and ending on formation date. All other columns represent months in relation to the formation month. The only exception is the column headed "-2". This column includes turbulence activity that occurred 60 days or more prior to formation date.

4. Assigned cadre grade, Primary Military Occupational Specialty (PMOS), and authorized strength are displayed down the left side of the chart while across the top, the months in relation to the unit's formation date are shown.

5. Each cell of the chart contains the turbulence activity for that month. A number preceded by a plus sign indicates a gain resulting from an assignment. If there is a letter "P" or "D" before the number then the gain was not due to a new assignment but was the result of a promotion(P) or demotion(D) in the same unit. Conversely if the prefix is a minus sign the number following represents a loss for that month. In the following example an E5 11B was promoted during month +1 and an E6 11B was assigned. During month +3 an E6 was demoted to E5 and another E5 was reassigned.

		-2	-1	F	+1	+2	+3
GRADE	PMOS	AUTH					
E6	11B				+1+P1		-D1
E5	11B				-P1		+D1 -1

6. Several charts may cover a single unit. They are arranged so that the first chart includes the months -2 through +11 across the top and the highest grades. The next chart depicts the same grades through month +25. Where necessary the next chart covers months +26 through +36. Where applicable the following chart picks up the next lower grades at month -2 through +11 and continues as with the previous charts.

UNIT 60

F - 840127 B/3-68AR CARSON

B - 850315 A/2-68AR BID (BALLHOLDER)

GRADE	PMOS	AUTH	-2	-1	F	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+11
OFF						+1						+2				
E8	19Z															
E7	19B															
	19E				+3											
E6	19E		+1	+4		+1										+1 -1
E5	19E			+2	+4	+1								+1		
	54E														+1	
	76Y															+1

UNIT 60

F - 840127 B/3-6BAR CARSON

D - 850315 A/2-6BAR BDE (BAUMHOLDER)

GRADE	PMOS	AUTH	+12	+13	+14	+15	+16	+17	+18	+19	+20	+21	+22	+23	+24	+25
OFF					+1						+1		-2	+2	+1 -1	
E6	19Z												+1			
E7	19D															+2 -2
	19E														+1	
E6	19E						-1									
E5	19E		+1													
	54E															+1 -1
	76Y		+1													

UNIT 60

F - 840127 B/3-68AR CARSON

D - 850315 A/2-68AR BID (BAUMHOLDER)

GRADE	PMOS	AUTH	+26	+27	+28	+29	+30	+31
OFF								
E8	19Z			+1				
E7	19D		-1					
	19E				-1			
E6	19E							
E5	19E							
	54E				-1			
	76Y							

UNIT 02

F - 840815 A/4-37AR RILEY

DEPLOY 860219 C/2-37AR 11D(F) (BOEBLINGEN)

GRADE	PMOS	AUTH	-2	-1	F	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+11
OFF					+2					+3						-2
E8	19Z				+1											
E7	19E		+1	+1										-1	+P1	
E6	19E		+1	+2	+3	+1					+1	-1		-1	-P1	
	76Y												+P1			
E5	19E		+3	+1	+7 -1	+1	+P1							+1 -1	+P1	
	54E		+1													
	76Y		+1										-P1			
E4	76Y									+1						

UNIT 82

F = 840815 A/4-37AR RILEY

DEPLOY 860219 C/2-37AR IID(F) (BOEBLINGEN)

GRADE	PMOS	AUTH	+1	+13	+14	+15	+16	+17	+18	+19	+20	+21	+22	+23	+24	+25
OFF			+1	+1			+1	-1					+1	-1		
E8	19Z						+1 -1									
E7	19E				+1					+1 -2				+P1		
E6	19E			-1		+1				+1				+P1 -P1		
	76Y															
E5	19E		+2			-1				+2 -4				-P1		
	54E															
	76Y															
E4	76Y															

UNIT 83

F - 840815 C/3-37AR RILEY

GRADE	PMOS	AUTH	-2	-1	F	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+11
OFF					+1	+2		+1	+1	-1	+1 -1	+1				
E8	19Z					+1										
E7	19D															
	19E				+1	+2				-1						
E6	19E		+1	+3	+2	+4										
	75Y					+1										
E5	19E				+4	+3				+1				+1		
E4	54E				+1											

UNIT 83

F = 840815 C/3-37AR RILEY

GRADE	PMOS	AUTH	+12	+13	+14	+15	+16	+17	+18	+19	+20	+21	+22	+23	+24	+25
OFF			+2 -2							+1 -1	-2		-1			
E8	19Z		-1													
E7	19D							+1								
	19E		+1 -1				+1									
E6	19E		+4	-1	-2		-1		-1	-1	-2					
	76Y															
E5	19E		+2 -2	+1 -1	-2								+1			
E4	54E															

UNIT 84

F = 840809 D/2-16INF RILEY

DEPLOY 860217 A/4-16INF IID(F) (GOEPPINGEN)

GRADE	PMOS	AUTH	-2	-1	F	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+11
OFF			+1	+3	+1										+1 -1	
E8	11B			+1												
E7	11B					+1		+P1	-1	+P1						
E6	11B			+6	+1			-P1	+1 +P1	+P1 -P1				+1		
	11H			+1												
	31V															
	76Y			+1										-1		
E5	11C		+3	+8	+4			+P1	-3-P1	-P1						
	36K				+1									-1		
	76Y			+1												
E4	54E				+1											

UNIT 84

F = 840809 D/2-1[illegible]MM RILEY

DEPLOY 860217 A/4-16INM IID(F) (GOEPPINGEN)

GRADE	PMOS	AUTH	+12	+13	+14	+15	+16	+17	+18	+19	+20	+21	+22	+23	+24
OFF				+1 -1		+1 -1					+1	+1 -1	+1 -1		+1 -2
E8	11B														
E7	11B			-1	+P2			-1		+1					
E6	11B				+2 -P2	-1	+1	+P1 -1							+P1
	11H														
	31V									+1		+1			
	76Y														
E5	11B			+1		-2	+P1	-P1			+P1				-P1
	36K														
	76Y														
E4	54E														

UNIT 85

F - 840818 D/1-81MM CARSON

DEPLOY 860218 A/1-81MM BID (SANDHOFFEN)

GRADE	MOS	AUTH	-2	-1	F	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+11
OFF			+1	+1		+2	+1						-2			+2 -1
E8	11B				+1										-1	+1
E7	11B		+1	+1	+1											-1
	31V														+P1	+P1
E6	11B		+2	+4	+1											
	11M			+1												
	31V			+1												
	54E														+1	
	76Y															
E5	11B		+4	+5	+6	+6		+2				+1 -3		+P2	-P1	-P1
	11M								+1							
	54E				+1											-2
E4	54E														+1	
	76Y						+1									

UNIT 85

F - 840818 D/1-8INN CARSON

DEPLOY 860218 A/1-8INN 8ID (SANDHOFFEN)

GRADE	PHOS	AUTH	+12	+13	+14	+15	+16	+17	+18	+19	+20	+21	+22	+23	+24	+25
OFF				+1	-2	+1			+1				+2	-2		
E8	11B															
E7	11B						+P1 -1		+1		+1	+P1	-1		-1	
	31V												+P1		-1	
E6	11B				+1	+1	+1 -2-P1					-P1		-1		
	11H				-1											
	31V												-P1		+1	
	54E															
	76Y															
E5	11B		-1			-3	-1	+1 -2	+5	+1				-1		
	11H						+1									
	54E															
E4	54C								+1							
	76Y						-1									

UNIT 91

F = 840917 D/5-16 INM RILEY
Deploy 860322 A/1-16 INM 11D(F) (30EBLINMGEN)

GRADE	PMOS	AUTH	-2	-1	F	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+11
OFF				+1	+3					-1	+1		+1		-2	
E8	11B			+2												
E7	11B			+1			+1									
E6	11B			+6							+P1			+1	-1	
	11H			+1												
	31V															
E5	11B		+1	+4	+1			+P1 -1		+1	+P2 -P1	-1	+1		+P1 -1	+1
	11H									+1						
	31M			+1												
	31V															
	54E											+P1				
	76Y			+1												
E4	54E															
	76Y			+1								-P1				

UNIT 91

F - 840917 D/5-16 INM RILEY
Deploy 860322 A/C 16 INM IID(F) (SOESLINGEN)

GRADE	PROS	AUTH	+12	+13	+14	+15	+16	+17	+18	+19	+20	+21	+22
OFF									-1	+3			-1
E8	11B		+1 -1										
E7	11B								-1	+1 -1		+P1	
E6	11B			+1	+1	+1 -1		-2				-P1	
	11H												+P1
	31V												
E5	11B		+P1	+P2 -3		+P1 -1					+1	+1	
	11H												
	31M			-1									
	31V				+1								-P1
	54E												
	76Y												
E4	54E												
	76Y												

UNIT 105

F = 850925 D/1-66 AR HOOD (2AD)

GRADE	PMOS	ACTH	-2	-1	F	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+11
OFF			+2	+2	+1				-1							
E8	19Z					+1										
E7	19K		+3													
E6	19K		+6			+P1						-1				
	76Y				+1											
E5	19K		+9	+1		-P1			-2				-1			
	54E			+1												
	76Y		+1													
E4	19E															

UNIT 106

F - 850927 A/3-3 FA HQDD (2AD)

GRADE	PMOS	AUTH	-2	-1	F	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+11
OFF			+2		+1					+1	-1					
E8	13Y		+1													
E7	13B		+1		+1						-1	+P1				
	63D		+1													-1
E6	13B		+4					+P1			+1	-P1		-1		
	13E		+1				+P1									
	31V			+1												
	76Y			+1												
	94B		+1													
E5	13B		+6		+1			-P1				-1	+P1			
	13E		+1				-P1									
	56E			+1												
	63S						+P1				-01					
	64C		+1									-1				
	94B			+1											-1	

UNIT 106

F = 850927 A/3-3 FA HQCO (2AD)

GRADE	PMOS	AUTH	-2	-1	F	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+11
E4	31K		+2													
	45B		+1		+1											-2
	63B		+2			+1										-3
	63S		+1				-P1				+01	-1				
	64C		+2			+1						-1				
	64L		+1													
	76C				+1			+1					-1			-1
	76Y		+2				-1									

UNIT 107

F - 851012 B/A-37AR RILEY

GRADE	PROS	AUTH	-2	-1	F	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+11
OFF					+5					+2 -2						
E8	19Z				+1							+P1				
E7	19E				+2		+1									
E6	19E			+1	+2	-1			+1	-1		-P1				
	76Y				+1						+P1					
E5	19E		+1	+2	+10					+1						
	54E				+1											
	76Y				+1						-P1					

UNIT 108

F - 851019 B/2-161MM RILEY

GRADE	PMOS	AUTH	-2	-1	F	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+11
OFF			+3	+2						+2 -1						
E8	11B		+1													
E7	11B		+2	+1						-1						
E6	11B		+4	+2	+2						+1					
	31V		+1													
E5	11B		+6	+2	+P2					+1						
	11H		+1													
	19D		+1													
	54E								+P1							
	76Y			+1	+1						-D1					
E4	54E		+1						-P1							
	76Y										+D1					

UNIT 110

F - 851116 A/2-16 INN RILEY

GRADE	PMOS	AUTH	-2	-1	F	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+11
OFF					+4											
E8	11B			+1					-1							
E7	11B				+3				+1							
E6	11B				+9											
	31V				+1											
	76Y				+1											
E5	11B		+1	+2	+11	+P2			-1							
	54E			+1					-01							
	76Y				+2											
E4	54E								+01							

UNIT 135

F = 860307 A/4-37 AR RILEY

GRADE	PMOS	AUTH	-2	-1	F	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+11
OFF			+3	+1	+1	+1										
E8	19Z		+1													
E7	19E		+2	+1												
E6	19E		+4	+3												
	76Y		+1													
E5	19E		+5	+5	+1		+1									
	19K		+1													
	54E		+1													
	76Y		+1													

UNIT 521

F = 841016 H/7-15FAT ORD

GRADE	PMOS	AUTH	-2	-1	F	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+11
OFF						+10	+1 -1	+2		+4	+3	+1		+2	+1	-1
WO									+2					+1		
E9	13Z					+1										
E8	13W					+1										
	13Y					+1	+1	-1				-1				
E7	13B					+1		+1								
	13C					+1	-1				+1			-1	+1	
	13F					+3										
	17C								+1							
	31V					+1										
	63B					+1										
	75Z						+1									

UNIT 521

F = 841016 H/7-15FAT ORD

GRADE	PMOS	AUTH	+12	+13	+14	+15	+16	+17	+18	+19	+20	+21	+22	+23
OFF			+3 -4	+1	+1 -3	+1 -1		+1 -2	+1	+2	+4	+2 -2	-1	
WO														
E9	13Z													
E8	13W			+P1									-1	
	13Y													
E7	13B		+1 -1	-P1								-1		
	13C											+1		
	13F													
	17C													
	31V													
	63B		+1	-1										
	75Z													

UNIT 521

F = 841016 H/7-15FAT ORD

GRADE	PMOS	AUTH	-2	-1	F	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+11
E7	76Y					+1										
	82C					+1								+1		
	93F															
	94B		+1													
E6	13B					+1										
	13E					+1		+1		+1	-1					-1
	13F					+9	-2									
	13R					+1										
	17B															
	17C						+P1									
	31V									+1		-1				
	54E					+1										
	63B															

UNIT 521

F = 841016 M/7-15FAT ORD

GRADE	PMOS	AUTH	+12	+13	+14	+15	+16	+17	+18	+19	+20	+21	+22	+23
E7	76Y													
	92C													
	93F						-1							
	94B									-1				
E6	13B			+1			-1							
	13E													
	13F						-1						+P2	
	13R													
	17B											+1		
	17C													
	31V													
	54E													
	63B										+P1			

UNIT 521

F = 841016 H/7-15FAT ORD

GRADE	PMOS	AUTH	-2	-1	F	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+11
E6	76Y					+1										
	91B					+1										
	94B					+1										
	96B								+1							
E5	13E					+2			+1 -1							
	13F					+11	+1		+P1	+1	+1	-1		-1		
	13R					+1										
	17C					+1	-P1									
	31C									+1						
	31K															
	52D															
	54E					+1										
	63B					+1										
	71D						+1			-1						
	75B						+1									

UNIT 521

F = 841016 M/7-15FAT ORD

GRADE	PMOS	AUTH	+12	+13	+14	+15	+16	+17	+18	+19	+20	+21	+22	+23
E6	76Y													
	91B			-1										
	94B					+P1								
	96B							-1						
E5	13E													
	13F		-1	+2			+2	+1 -1	+1	+7 -1	-1		-P2	
	13R													
	17C													
	31C													
	31K											+P1		
	52D													
	54E									+P1				
	63B										-P1			
	71D													
	75B													

UNIT 521

F = 841016 N/7-15FAT ORD

GRADE	PROS	AUTH	-2	-1	F	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+11
E5	76Y															
	82B					+2										
	91B									+1						
	94B					+2										
E4	17C								+1							
	31C								+2	+1	+1		-2	+1 -1		
	31K					+1				+1 -1						
	31Y							+1	+3	+1	+1					
	52D							+1	+2	+1			-2			
	54E					+1										
	71L						+1	+1								
	76C									+1						
	76W							+1								

UNIT 521

F = 841016 · M/7-15FAT ORD

GRADE	PMOS	AUTH	+12	+13	+14	+15	+16	+17	+18	+19	+20	+21	+22	+23
E5	76Y											+1		
	82C													
	91B													
	94B					-P1								
E4	17C								-1					
	31C													
	31K								+1			-P1		
	31V				-1					-1			+1	
	52D											+1		
	54E									-P1				
	71L													
	76C													
	76W													

UNIT 521

F = 841016 M/7-15FAT ORD

GRADE	PMOS	AUTH	-2	-1	F	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+11
E4	76Y							+5 -1								
	82C					+1				+1	+2		-2			
	91A					+1	+1		+3	+1			-1	-1		
	13F					+1			-P1							

UNIT 521

F - 841016 H/7-15FAT ORD

GRADE	PMOS	AUTH	+12	+13	+14	+15	+16	+17	+18	+19	+20	+21	+22	+23
E4	76Y							-1			-1	+2	-1	
	82C			+1			-1		+1			+1		
	91A							-1		+1 -1		+2	-1	
	13F													

UNIT 522

F = 850125 A/7-15 FAT ORD

GRADE	PMOS	AUTH	-2	-1	F	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+11
OFF			+4	-1									+1	-1		+1 -1
E8	13B		+1	-1												
E7	13B		+2	+1	+1 -1						-1					
E6	13B		+5													+P1
	13E		+1											+P1		
	31V		+1				-1									
	76Y		+1													
E5	13B		+3			+1	+1							+1		-P1
	13E		+1											-P1		
	31K															
	54E		+1													
	63B					+1										
E4	31K				+2 -1	+1	+1				-1					
E4	31V															
	63B															
	76Y				+1						-1					

UNIT 522

F = 850123 A/7-15 FAT ORD

GRADE	PMOS	AUTH	+12	+13	+14	+15	+16	+17	+18	+19
OFF										
E8	13B			+P1						
E7	13B			-P1						
E6	13B		+P1	-1	+1 -1	+P1		+P2		
	13E									
	31Y									
	76Y									
E5	13B		-P1			-P1		-P2	+P1	
	13E									
	31K					+1				
	54E									
	63B		-D1						+1	
E4	31K									
E4	31Y			+1						
	63B		+D1				-1			
	76Y							+1		

UNIT 523

F = 850125 B/7-15 FAT ORG

GRADE	PIOS	AUTH	-2	-1	F	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+11
OFF			+4 -1										+1 -1			+1 -1
E8	13Y				+1			+1 -1								
E7	13B		+2	+1	-2					+P1						
E6	13B		+5	+P2						-P1		+1 -1		-1		+P1
	13E		+1													-1
	31Y		+1													
E5	13 B		+7	+1 -3-P2		+1						+1				-P1
	13E					+1										
	63B		+1				-1									
	76Y			+1												
E4	13E															
E4	31K				+1				+1							
	54E						+1									
	76Y				+1							-1				

UNIT 523

F = 850125 B/7-15 FAT ORD

GRADE	PMOS	AUTH	+12	+13	+14	+15	+16	+17	+18	+19
OFF									+1 -1	
E8	13Y									-1
E7	13B			+1 -1						
E6	13B		+P1		+1 -1					
	13E									
	31Y									
E5	13B		-P1	+1 -1		+P1			-D1	
	13E									
	63B				+1					
	76Y				-1					
E4	13E									
	31K				-1					
	54E								-1	
	76Y			+1				+1		

UNIT 524

F = 850125 C/7-15 FAT ORD

GRADE	PMOS	AUTH	-2	-1	F	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+11
OFF			+4 -1										+2 -2			
E8	13Y		+1													
E7	13B		+1		+1								+1 -1			
	31V															
E6	13B		+7									+1 -1				+1
	13E		+1										-1	+P1		
	31V			+1												
	76Y		+1													
E5	13B		+5	+1 -1		-1				+P1			+P1			+P1
	13E		+1											-P1		
	54E															+P1
	63B		+1													
E4	31K					+1		+1								
	54E						+1									-P1
	76Y				+1											

UNIT 524

F = 850125 C/7-15 FAT ORD

GRADE	PMOS	AUTH	+12	+13	+14	+15	+16	+17	+18	+19
OFF									+1	-1
E8	13Y									
E7	13B			+1						
	31V					+P1				
E6	13B									
	13E									
	31V					-P1				
	76Y									
E5	13B									
	13E							+1		
	54E									
	63B								-1	
E4	31K									
	54E									
	76Y									

UNIT 531

F - 850111 MS/3-9 IN ORD

GRADE	PMOS	AUTH	-2	-1	F	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+11
OFF			+14	+2	+1						+1 -1	+1	-2	+2 -1	+5 -6	+1
WO			+1							+P1						
E9	00Z														+1	
E8	11B		+4	+1						-P1		-1				
E7	11B		+4							-1			-1		+1	+1 -1
	11C		+2										+1		-1	
	11H		+1											+1		
	31V												+P1 -1			
	75Z		+1													
	76Y		+1													
	91B		+1				-1						+1+P1		-2	
E6	11B		+5				+P2			+1						
	11C		+1						+1							+1
	11H		+3								-2		-1			

UNIT 531

F = 850111 MS/3-9 IN ORD

GRADE	PMOS	AUTH	+12	+13	+14	+15	+16	+17	+18	+19	+20
OFF			+1 -1		+2 -1	-2	-1	-2	+3	+1	
WO											
E9	00Z										
E8	11B						-1		-1		
E7	11B			-2					+P1		
	11C							-1			
	11H										
	31V										
	75Z										
	76Y										
	91B										
E6	11B		+1	+1			+1 -1		+1 +P1 -1 -P1		
	11C										
	11H										

UNIT 531

F = 850111 MS/3-9 IN ORD

GRADE	PMOS	AUTH	-2	-1	F	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+11
E6	31V			+1										+1		
	54E		+1													
	76B		+1										-P1			
	76Y			+1												
	91B		+2		+1											-1
	96B		+1													
E5	11B		+9	+1		+P1	-P2	-1		-2	+2 -1		+2 -P1		-4	
	11C		+7				-1									
	11H		+1		+1									+1 -1		
	31K															
	31V		+2							-1						
	63B		+1						-1					+P1		
	71D		+1											+1 -1		
	75B		+1								-1					

UNIT 531

F = 850111 HS/3-9 IN ORD

GRADE	PMOS	AUTH	+12	[illegible]	+14	+15	+16	[illegible]	+18	+19	+20
E6	31V										
	54E			-1							
	75B										
	76Y										
	91B										
	96B										
E5	11B			+1 +P1					-P1		
	11C										
	11H									-1	
	31K								+1		
	31V						-1				
	63B										
	71D										
	75B					+1					

UNIT 531

F = 850111 HS/3-9 IN ORD

GRADE	PMOS	AUTH	-2	-1	F	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+11
E5	91A					+P1										
	91B		+1	+2												
E4	31K					+4	+1			+1					-1	
	31M							+2								
	31V						+2	+1						-1		
	63B								+1					-P1		
	71L			+1		+1							-8			
	71M					+1										
	76W						+1									
	76Y			+1	+4				+1						+1	
	91A		+1		+2	+1 -P1	+4			+1				+1		+1

UNIT 531

F = 850111 MS/3-9 IN ORD

GRADE	PIOS	AUTH	+12	+13	+14	+15	+16	+17	+18	+19	+20
E5	91A										
	91B										
E4	31K										
	31M							-1	-1		
	31V							+1	+1		
	63B										
	71L										
	71M						-1	+1			
	76W										
	76Y										
	91A			+1					+1	+1	

UNIT 532

F = 850111 A/3-9 IN ORD

GRADE	PMOS	AUTH	-2	-1	F	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+11
OFF			+4			+1									+2 -2	
E8	11B		+1	+1 -1												
E7	11B		+1									+P1	+P1			
	11C		+3										-1			
	76Y												+P1 -1			
E6	11B		+7	+P1		-1		+1		+P2 -1	+P1	-P1	-P1			+P1
	76Y				+1								-P1			
E5	11B		+12	+2 -P1				+1 -1		-P2	-P1				+2 -1	-P1
	31V									+1						
	54E			+1									-1			+1
E4	76Y		+1													

UNIT 532

F = 850111 A/3-9 IN ORD

GRADE	PMOS	AUTH	+12	+13	+14	+15	+16	+17	+18	+19	+20
OFF					+1	+1 -1			+1		
E8	11B										
E7	11B				-1						
	11C				-1						
	76Y										
E6	11B			+1	+1		-1				
	76Y									+1	
E5	11B			-101						-01	
	31V										
	54E										
E4	76Y										

UNIT 533

F - 850111 B/3-9 IN ORD

GRADE	PMOS	AUTH	-2	-1	F	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+11
OFF			+4		+1										+3 -3	
E8	11B		+1												-1	
E7	11B		+3					-1	+1	+1	-1					
	11C															+1
E6	11B		+8	+1	+2			+2 +P1	+1		-1		-2			
	11C			+1										+1	+1	+P1
	11H												+1			
	31V		+1					-1								
	76Y															
E5	11B		+8	+2				+1 -P1	+1 -1		-1	-1		-1	+2	-P1
	31K															
	54E			+1												
E4	31K														+1	
	76Y			+1					+1							

UNIT 533

F = 850111 8/3-9 IN ORD

GRADE	PMOS	AUTH	+12	+13	+14	+15	+16	+17	+18	+19	+20
OFF								+1 -1			
E8	11B							+P1			
E7	11B						+P1	+P1		-1	
	11C							-P1			
E6	11B			-1	-1		-P1	-P1	-1		
	11C						-1				
	11H			-1							
	31Y						+1				
	76Y					+1					
E5	11B		+P2		+1	+P1					
	31K			+P1							
	54E										
E4	31K			-P1							
	76Y										

UNIT 534

F = 850111 C/3-9 IN ORD

GRADE	PMOS	AUTH	-2	-1	F	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+11
OFF			+6												+1 -2	
E8	11B							+P1								
E7	11B		+3					-P1				-1		+1	+1	-1
	11C		+1													
E6	11B		+10	+2		+1	+P1	-2	-1				+1 +P3 -1		+2	
	11C		+1													
	11H												+1 -1			
	31V		+1											-1		
	76Y								+P1				-1		+1	
E5	11B		+8	+3		+P1	-P1	+1	-1		-2	+P1	-1-P3	+1	+2	
	11C			+1												
	54E			+1												
	76Y			+1					-P1							
E4	31V													+1		
	76Y			+1												

UNIT 534

F = 850111 C/3-9 IN ORD

GRADE	PMOS	AUTH	+12	+13	+14	+15	+16	+17	+18	+19	+20
OFF						+1		+1 -1	-1		
E8	11B										
E7	11B										
	11C										
E6	11B		-2	-2	-2	-2	+1		-1	+P1	
	11C					-1					
	11H										
	31V										
	76Y										
E5	11B									-P1	
	11C										
	54E										
	76Y										
E4	31V										
	76Y										

UNIT 571

F = 850315 H/A-17 JN ORD

GRADE	PMOS	AUTH	-2	-1	F	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+11
OFF			+10	+4	+1		+1				+1	+3 -2	+1 -1	+3 -2		+3 -2
W0												+1				
E9	00E		+1							+P1				-1		
E8	11B		+2				+1			-P1			+1			
E7	11B		+2		+P1								+2	+1		+1
	11C		+1													
	11H		+1													
	757		+1													
	76Y					+1										
	91B							+P1								
E6	11B		+5	+1	-P1	+2			+1		+P1 -1	+P1	+1 -1			
	11C		+1													
	11H		+2													

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UNIT 571

F = 850315 H/4-17 IN ORD

GRADE	PMOS	AUTH	+12	+13	+14	+15	+16	+17	+18	+19	+20
OFF			+1 -2	+4 -3	-1	-1		+1			
WO											
E9	00Z										
E8	11B						-1				
E7	11B		+2 -2			+1 -1	+P1 -1				
	11C										
	11H										
	75Z										
	76Y										
	91B										
E6	11B				-1						
	11C										
	11H										

UNIT 571

F = 850315 H/4-17 IN ORD

GRADE	PMOS	AUTH	-2	-1	F	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+11
E6	31V			+1												
	54E		+1												+1	
	75B															
	76Y		+1		+1											
	91B		+3					-P1								
	95B			+1												
E5	11B		+3	+2		+2	-1				-P1	-P1			+1	
	11C		+4			+1		-1								
	11H		+1				+1								-2	
	31K		+1							-1						
	36K					+1										
	63B		+1													
	75B		+2	+1												
	91A		+1													

UNIT 571

F = 850315 H/4-17 IN ORD

GRADE	MOS	AUTH	+12	+13	+14	+15	+16	+17	+18	+19	+20
E6	31V										
	54E		-1								
	75B				+P1						
	76Y										
	91B										
	96B										
E5	11B			-D1			-P1				
	11C				-1	+P1					
	11H										
	31K		+1		-1						
	36K										
	63B										
	75B				-P1						
	91A					+1					

UNIT 571

F = 850315 H/4-17 IN ORD

GRADE	PMOS	AUTH	-2	-1	F	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+11
E5	91B		+1													
	96B		+1													
E4	11C				+1											
	31K			+1	+1								+2			
	31M					+2	-2									
	31V		+1		+2	+1	+2						+1			
	36K															
	71D		+1													
	71M						+1									
	76W				+1											
	76Y		+4		+1	+3										
	91A			+1		+10	-1		+2	-1	+1 -1	+1	-1	+2	+1	

UNIT 571

F = 850315 H/4-17 IN ORD

GRADE	PMOS	AUTH	+12	+13	+14	+15	+16	+17	+18	+19	+20
E5	91B										
	96B		-1								
E4	11C					-P1					
	31K										
	31M			+1							
	31V		-1								
	36K										
	71D										
	71M										
	76W										
	76Y				-1						
	91A						+2 -2	+1 -1			

UNIT 572

F = 850315 A/4-171N ORD

GRADE	PMOS	AUTH	-2	-1	F	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+11
OFF			+3	+1						+1				+1		+1
E8	11B		+1										+1			
E7	11B		+3					+P1								
	11M							+P1								
E6	11B		+12					-P1	+P2		+P1	+P1	+1			
	11C		+1				+1									
	11M		+1					-P1								
	31V			+1												
	54E							+P1								
E5	11B		+6	+4		+2			-P2		-P1	-P1				
	11C															
	11M		+1													
	54E		+1					-P1							+1	
E4	54E															
	76Y					+1										

UNIT 572

F = 850315 A/4-17IN ORD

GRADE	PMOS	AUTH	+12	+13	+14	+15	+16	+17	+18
OFF				+1				+2	
E8	11B								
E7	11B					+1			
	11M								
E6	11B								
	11C								
	11M								
	31V								
	54E								
E5	11B						+1		
	11C								
	11M								
	54E								
E4	54E								
	76Y								

UNIT 573

F = 850315 B/4-17 IN ORD

GRADE	PMOS	AUTH	-2	-1	F	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+11
OFF			+4	+1										+1 -1		
E8	11B		+1											-1		
E7	11B		+2										-1	+1 -1		
E6	11B		+9 -1	+2		+1 +P1		+1	+P1		+1 +P2		+1	-01		
	31V					+1										
	76Y				+1											
E5	11B		+8	+2	+2	+3 -P1		+1	-P1		-P2	+P1		+D1	-1	-1
	11C						+P1 -1	+1								
	54E		+1													
E4	11C						+1 -P1									
	76Y				+1											

UNIT 573

F = 850315 8/4-17 IN ORD

GRADE	PMOS	AUTH	+12	+13	+14	+15	+16	+17	+18
OFF			+1 -1	+1 -2	+1				
E8	11B								
E7	11B					+P1			
E6	11B		+1	-1	-1	-P1			
	31V								
	76Y								
E5	11B								
	11C								
	54E								
E4	11C								
	76Y				+1				

UNIT 574

F = 850315 C/4-171M ORD

GRADE	PMOS	AUTH	-2	-1	F	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+11
OFF			+3	+2		+1						+1				
E8	11B		+1													
E7	11B		+1									+P1			+1	
E6	11B		+1	+1			+P1		+P2			+P3 -P1		+P1		
	11C		+1	+2												
E5	11B		+8	+4	+2	+3	-P1		-P2			-P3		-P1		
	31K															
	54E			+1												
E4	76Y					+1										

UNIT 574

F = 850315 C/4-17IN ORD

GRADE	PMOS	AUTH	+12	+13	+14	+15	+16	+17	+18
OFF			+1		+1		+1		
E8	11B								
E7	11B		+2						
E6	11B								
	11C								
E5	11B								
	31K				+1				
	54E								
E4	76Y								

UNIT 581

F - 850603 H/5-21IN ORD

GRADE	MOS	AUTH	-2	-1	F	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+11
OFF			+11	+4		+1			-1	+1	+1	-1	+1	-1	+5 -2	+1 -1
WC					+1											
	00Z		+1													
CO	11B		+2				-1	+1	+P1			-1			-1	
E7	11B		+4		+P2 -1	+1			-P1	+1						
	11C		+1													
	11H		+1													
	75Z										+P1					
	76Y		+1									-1				
	91B		+1												-1	
E6	11B		+4		-P2						+1	+P1	+1		+2	
	11C		+1													
	11H		+2				+P1									

UNIT 581
F = 850603 H/5-21IN ORD

GRADE	PMOS	AUTH	+12	+13	+14	+15
OFF			+2 -3	+4 -4	-1	
WO						
E9	00Z					
E8	11B			-1		
E7	11B			+1		
	11C					
	11H					
	75Z					
	76Y					
	91B					
E6	11B				+1 -1	
	11C					
	11H					

UNIT 581

F = 850603 H/5-21IN ORD

GRADE	PMOS	AUTH	-2	-1	F	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+11
E6	31M															
	31V		+1		+1			-1								
	54E		+1								+1 -1					
	75B		+1								+P1 -P1					
	76Y				+1	+1 -1										
	91B		+1													
E5	11B		+3			+2				-1		-P1				+1
	11C		+2													+1
	11H		+1		+1		-P1							-D1		
	31K													+1		
	63B		+1													
	75B		+1								-P1					
	91A			+1												

UNIT 581
F = 850603 H/5-21IN ORD

GRADE	PMOS	AUTH	+12	+13	+14	+15
E6	31N			+1		
	31V					+1
	54E					
	75B					
	76Y					
	91G					
E5	11B				+1 -1	
	11C				+1	
	11H					
	31K					
	63B					
	75B					
	91A				+1	

UNIT 581

F = 850603 H/5-21IN ORD

GRADE	PMOS	AUTH	-2	-1	F	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+11
E5	91B		+2											+01		
E4	11H															
	31K		+4		+3											
	31M		+2										+1			
	31V		+3		+1								+1			
	71D															
	71L															
	71M		+1													
	76Y		+4	+2					+1							-2
	91F		+3	+9	+4				-1			-2				

UNIT 581
F = 850603 H/5-21IN ORD

GRADE	PMOS	AUTH	+12	+13	+14	+15
E4	91B				+1	
E4	11H					
	31K			-1		
	31M		-1	-1		
	31V				+1	
	71D					
	71L				+1	
	71M					
	76Y				+2	
	91A			+4	+6 -1	

UNIT 582

F = 850603 A/5-21 IN ORD

GRADE	PMOS	AUTH	-2	-1	F	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+11
OFF			+4	+2 -1									+1 -1		-1	+1
E8	11B		+1				+1 -1									
E7	11B		+3							+1 -1						
E6	11B		+10		+P1	+P1									-1	
	11C					+1										
	31V							+1								
	76Y		+1			+1 -1										
E5	11B		+13		+1 -P1	+P1 -P1	+1				-1	-1				
	11C		+1													
	54E		+1											-1		
E4	54E															
	76Y		+1						-1							

UNIT 582

F = 850603 A/5-21 IN ORD

GRADE	PMOS	AUTH	+12	+13	+14	+15
OFF				+2 -2		
E8	11B					
E7	11B		+Pi	-4		
E6	11B		-P1		+1 -1	
	11C					
	31Y					
	76Y					
E5	11B				-1	
	11C					
	54E					
E4	54E		+1			
	76Y			+1		

UNIT 583

F = 850603 B/5-21 IN ORD

GRADE	PIOS	AUTH	-2	-1	F	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+11
OFF			+7		+2								-1		-2	
E8	11B						+P1									
E7	11B		+7	+1	-1		-P1				-1					
E6	11B		+10						+P2	-1			-1		-3	
	76Y		+1													
E5	11B		+17		-1	-1			-P2			+P1	+P1		-1	-1
	11C														+1	-1
	11H		+1													
	54E		+1													
E4	31V				+1											
	76Y		+1													

UNIT 583

F = 850603 8/5-21 IN ORD

GRADE	PMOS	AUTH	+12	+13	+14	+15
OFF				-1		
E8	11B					
E7	11B					
E6	11B				-1	
	76Y					
E5	11B			-D1	+1 -1	+1
	11C					
	11H					
	54E					
E4	31V					
	76Y					

UNIT 584

F = 950603 C/5-21 IN ORD

GRADE	PNOS	AUTH	-2	-1	F	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+11
OFF			+4		+1										-1	
E8	11B		+1					+1 -1								
E7	11B		+3												+1 -1	-1
E6	11B		+10		+P2				-1		-1					
	11C		+1			-1				+1						
	31V		+1										-1			
	76Y		+1									+P1 -1			-1	
E5	11B		+15		-P2	-1										
	54E		+1													
E4	76Y		+1													

UNIT 584

F = 850603 C/5-21 IN ORD

GRADE	PMOS	AUTH	+12	+13	+14	+15
OFF			+2 -1	+1 -1		
E8	11B					
E7	11B					
E6	11B				+P1	
	11C					
	31V					
	76Y					
E5	11B		-01		+1 -P1	
	54E					
E4	76Y					

ANNEX D

DEPARTMENT OF THE ARMY
HEADQUARTERS US ARMY ARMOR SCHOOL
FORT KNOX, KENTUCKY 40121-5000

ATSB-DOES-A (351f)

30 JAN 1986

SUBJECT: Phase II COHORT Cadre Training Evaluation

Commander
U.S. Army Training and Doctrine Command
ATTN: ATTG-C (Dr. Stenson)
Fort Monroe, Virginia 23651-5000

1. During 1985, the two scheduled COHORT Cadre experimental groups attended our Tank Commander's Certification Course (TC^3) to complete Phase II of the COHORT Cadre Training Evaluation. The A/1-66th AR cadre from Fort Hood and the B/4-37th AR(1) cadre from Fort Riley attended in August and October, respectively. Per HQ, TRADOC request, the Phase I post survey and the Phase II pre and post surveys were administered then forwarded to TRASANA.

2. The Phase II evaluation effort planned for Fort Knox also involved administering a pre and post test, i.e., Tank Crew Gunnery Skills Test (TCGST), to both experimental groups. Due to time and logistic constraints, only one group, the cadre from Fort Riley, received both administrations of the TCGST. TCGST results from this group indicate that training was successful. Averaging across the 21 participants, 11.9 (i.e., 66%) of the 18 TCGST tasks were passed on the pre-test administration. Subsequently, 17.03 (i.e., 96.47%) of the tasks were passed on the post-test administration. The difference between the pre and post administration of the TCGST was statistically highly significant, thus indicating highly successful training did occur.

3. I have enclosed a copy of the Phase II COHORT Cadre Training Evaluation Report and recommend incorporating the results in your overall COHORT Cadre Training Evaluation project.

FOR THE COMMANDANT:

M. B. Willett

M. B. WILLETT
Admin Asst

Encl

DEPARTMENT OF THE ARMY
HEADQUARTERS U.S. ARMY ARMOR SCHOOL
DIRECTORATE OF EVALUATION AND STANDARDIZATION
Fort Knox, Kentucky 40121-5214

ATSB-DOES-A 16 January 1986

SUBJECT: Evaluation of COHORT Cadre Training, Phase II

1. Statement of the Problem: The Phase II evaluation was performed to determine if there was a statistically significant difference between pre- and post-test, i.e., Tank Crew Gunnery Skills Test (TCGST), scores for the Armor COHORT cadre experimental groups.

2. Assumptions: There were two main assumptions:

a. First, it was assumed that the two experimental groups, the A/1-66th AR cadre from Fort Hood and the B/4-37th AR(1) cadre from Fort Riley, received and used the preliminary Phase I training materials.

b. Second, it was assumed both experimental groups would receive pre- and post-tests (i.e., TCGST) during attendance of the Tank Commander's Certification Course (TC^3).

3. Facts Bearing on the Problem: There were two main facts and an observation related to this evaluation. The first two facts correspond respectively to the two assumptions stated above.

a. Neither experimental group received the Phase I training materials before attending TC^3. Both groups indicated on the Cadre Training Effectiveness Analysis Survey (PIT) that they did not receive any preliminary Phase I training materials prior to reporting to the training base.

b. Only one experimental group, B/4-37th AR(1) cadre from Fort Riley, participated in a pre- and post-TCGST. The first group, A/1-66th AR cadre from Fort Hood, did not have the opportunity to receive a pre-TCGST. Also, post-TCGSTs for this group were not available. Therefore, only one Armor experimental group's (i.e., N=21) results were available for this evaluation.

c. One interesting observation to be made is that the COHORT cadre experimental group did not take any more time to proceed through the course than other groups that have attended TC^3. In fact, one source in the S-3 office indicated the group was a "fast" group in that they appeared to acquire the training quickly and wanted the pace of the classes to proceed at a faster rate.

4. Discussion: The TC^3 version of the TCGST was composed of 18 tasks; one written task and 17 hands-on tasks. First time GO/NO-GO records were used in

Incl 1

calculating whether a statistically significant difference existed between pre- and post-TCGSTs. Two different methods for calculating this difference were employed:

a. In applying a strict standard that failure on any one task constitutes a NO-GO for the entire TCGST, the first-time GO rate for the pre-TCGST was 0% (i.e., none of the 21 students passed on the first attempt). The first-time GO rate for the post-TCGST was 66.67% (i.e., 14 of the 21 students passed first attempt). Cochran's test was utilized to detect a significant difference for this approach. Briefly, Cochran's test is a two-sample test for repeated observations in which the dependent variable can only take on two values; a "1" for pass/GO and a "0" for fail/NO-GO. A highly significant difference (Q=14, p .001) was detected with this method (Encl 1).

b. Using a more relaxed standard that each task counts toward a possible total TCGST score of 18 per student, the average score for the pre-TCGST was 11.90 (i.e., 66% of the tasks were passed). The average score for the post-TCGST was 17.83 (i.e., 96.47% of the tasks were passed). (See Encl 2.) A t-test for related measures detected that a highly significant difference (i.e., t=7.77, p .001 for df=20) existed between the pre- and post-TCGST scores.

5. Conclusion: Based on both the Cochran's test and t-test results, there was a statistically significant difference between the pre- and post-TCGST scores at the .001 level.

6. Recommendation: It is recommended that these results be utilized in the COHORT Cadre Training Evaluation Project. If further information or assistance is required in this matter, POC for this evaluation is Mr. Gary Elliott, ATSB-DOES-A, AV 464-8451.

Gary Elliott
GARY ELLIOTT
GS-11, DAC
Personnel Psychologist

COCHRAN'S TEST FOR FIRST-TIME GOs ON PRE AND POST TCGST SCORES

$$Q = \frac{J(J-1)\sum_{i=1}^{J}(y_i - \bar{T})^2}{J(\sum_K y_K) - (\sum_K y_K^2)}$$

Where

J = Experimental conditions; pre and post TCGST (i.e., 2).

K = Number of subjects (i.e., 21).

Y_i = Total passed on first try (i.e., 0 for pre-TCGST and 14 for post-TCGST).

$\bar{T}$ = Sum of both columns divided by the number of columns ex. (0 + 14) 2 = 7.

$\sum_K y_K$ = Sum of each subject across the two conditions (i.e., 14).

$\sum_K y_K^2$ = Sum of the squared scores across the two conditions (i.e., 14).

$$Q = \frac{2(2-1)[(0-7)^2 + (14-7)^2]}{2(14) - (14)}$$

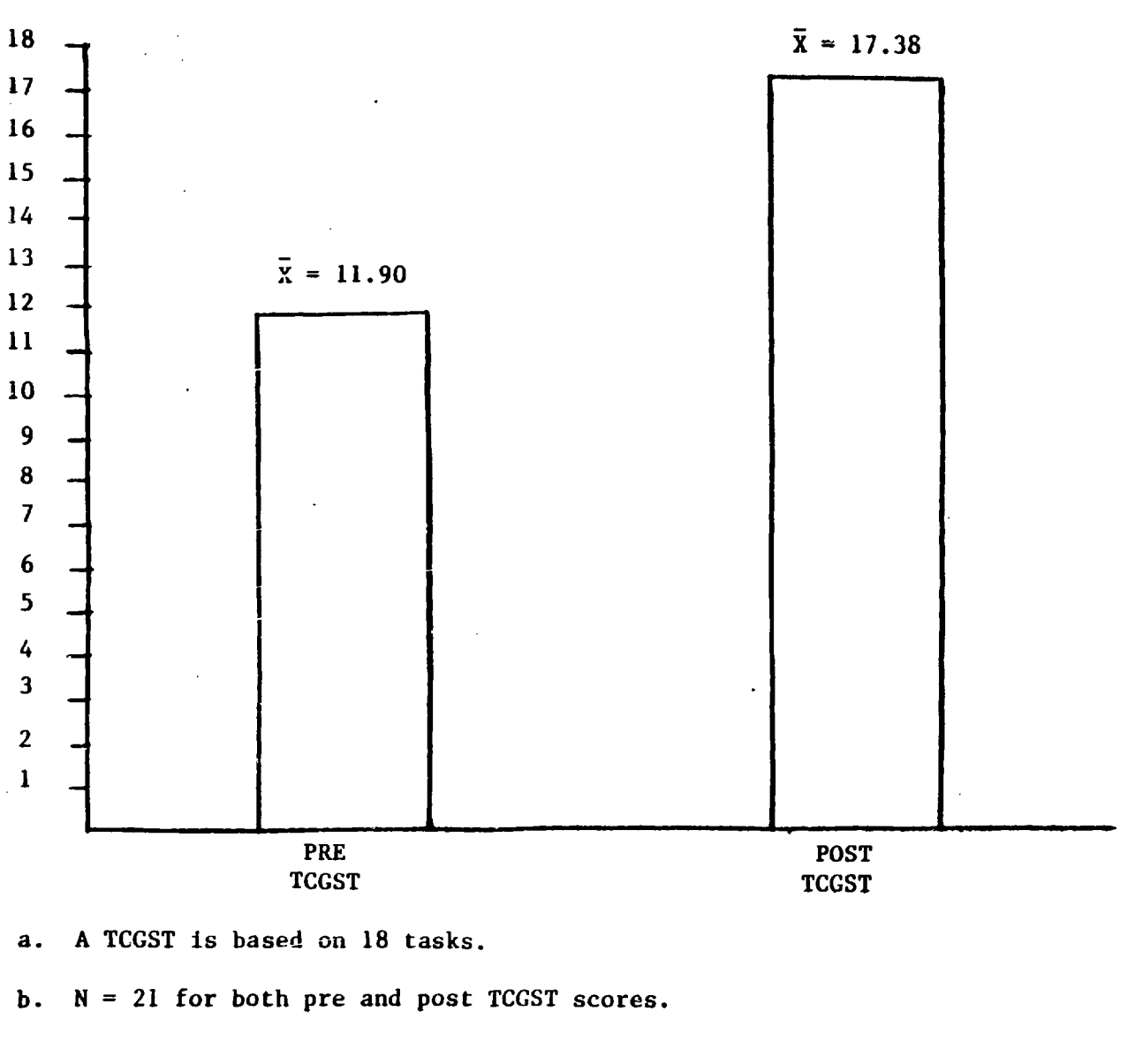
Q = 196/14

Q = 14

For 1 degree of freedom, chi square shows this value significant at $p \leq .001$.

Encl 1 to Encl 1

AVERAGE PRE-TCGST AND POST-TCGST SCORES



a. A TCGST is based on 18 tasks.

b. N = 21 for both pre and post TCGST scores.

Encl 2 to Encl 1

DEPARTMENT OF THE ARMY
UNITED STATES ARMY FIELD ARTILLERY SCHOOL
FORT SILL, OKLAHOMA 73503-5600

REPLY TO ATTENTION OF

ATSF-OE

13 JAN 1986

SUBJECT: Evaluation of COHORT Cadre Training, Phase II

Commanding General
U.S. Army Training and Doctrine Command
ATTN: ODCST-ATTG-C (Dr. Stenson)
Fort Monroe, VA 23651-5000

1. Reference message, Cdr, TRADOC, 190920Z Nov 85, Subject: COHORT Cadre Training Evaluation.

2. As requested in the above message, the staff study with annexes is attached.

3. POC for this action is Mr. Frank O'Connor, DOES, AV 639-2364/3809.

FOR THE COMMANDANT:

Encl

WILLIAM D. POUNDS
MAJ, FA
Assistant Secretary

DOES, USAFAS
Ft Sill, Oklahoma 73503-5600
10 January 1986

ATSF-OE

SUBJECT: Evaluation of COHORT Cadre Training, Phase II

1. PROBLEM. To determine if there is a statistically significant difference between the pre and posttest scores on tests administered to cadre attending the COHORT Cadre Training Course.

2. ASSUMPTIONS.

a. All cadre received and used Phase I material at their home station.

b. That the cadre were familiar with STP 21-1-SMCT and FM 21-3 (Soldier's Manuals of Common Tasks).

c. That the cadre were familiar with SM 6-13B (Cannon Crewman Soldier's Manual).

d. That the cadre had completed the Battalion Training Management System (BTMS) Course.

3. FACTS BEARING ON THE PROBLEM.

a. Pretests are designed to give the instructor(s) an overall idea of how much knowledge the student posesses on a subject that is scheduled to be taught.

b. Posttests are designed to measure the amount of knowledge that the student retains after the subject has been taught.

c. The majority of the questions on the pre and posttests were extracted from tasks which are in the Soldier's Manuals of Common Tasks and Cannon Crewmen Soldier's Manual.

d. The cadre received but did not use Phase I material.

4. DISCUSSION.

a. Annexes A, B, C and D present an analysis of the pre and posttest scores by subject area and unit tested.

b. The methodology used to prepare the analysis was the paired T Test (procedures for testing hypothesis about differences in related samples). See Annex E.

ATSF-O
SUBJECT: Evaluation of COHORT Cadre Training, Phase II

5. CONCLUSION.

a. There is a statistically significant difference between the pre and posttest scores at the .05 level.

b. Pretest scores could have been much higher if the cadre had been more familiar with the soldiers' manuals referred to in paragraph 2.

6. RECOMMENDATIONS.

a. That the results of this evaluation be used when planning future training for COHORT cadre.

b. That, at the small unit level, additional emphasis be placed on the use of the Soldier's Manuals of Common Tasks (STP 21-1-SMCT and FM 21-3).

Frank O'Connor
FRANK O'CONNOR
GS-11 Evaluator
351-2364

ANNEXES: A--Map Reading
B--Communications
C--BTMS
D--Supply and Maintenance Procedures
E--Statistical Methodology Used

APPROVED ✓ DISAPPROVED _____

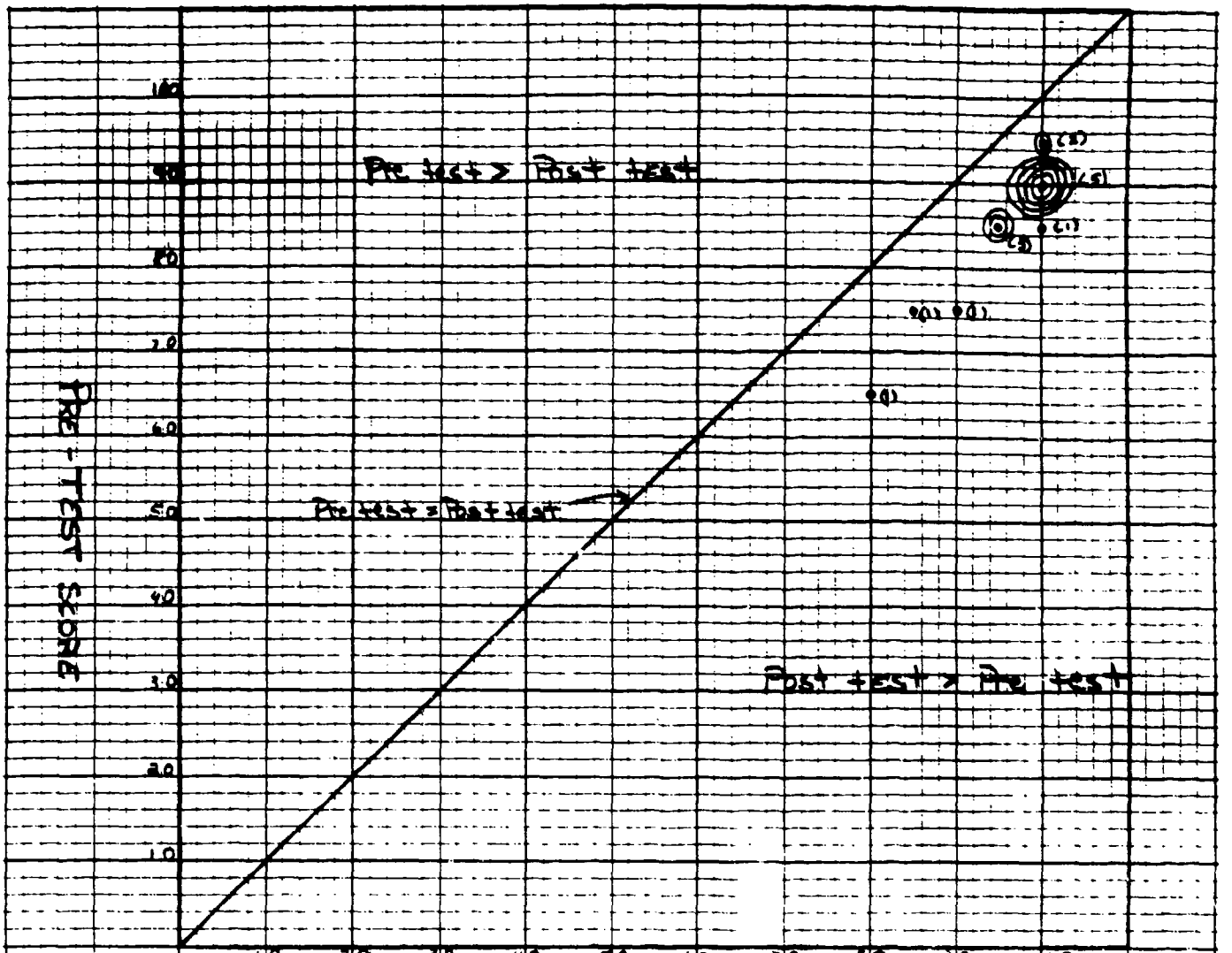
Thomas P. Tysdal
THOMAS P. TYSDAL
COL, FA
Director, DOES

ANNEX A

ANALYSIS OF MAP READING SCORES

UNIT		PRETEST	POSTTEST	SIGNIFICANT DIFFERENCES
B/1-29	Avg score	85.36	95.71	Posttest is significantly higher
	ST.D.	8.43	6.46	
C/3-3	Avg score	75.76	77.69	No significant difference
	ST.D.	19.02	13.78	
D/1-5	Avg score	79.23	83.46	No significant difference
	ST.D.	15.11	14.19	
C/5-15		No map reading test was given to this unit.		

- CASS + MAP READING

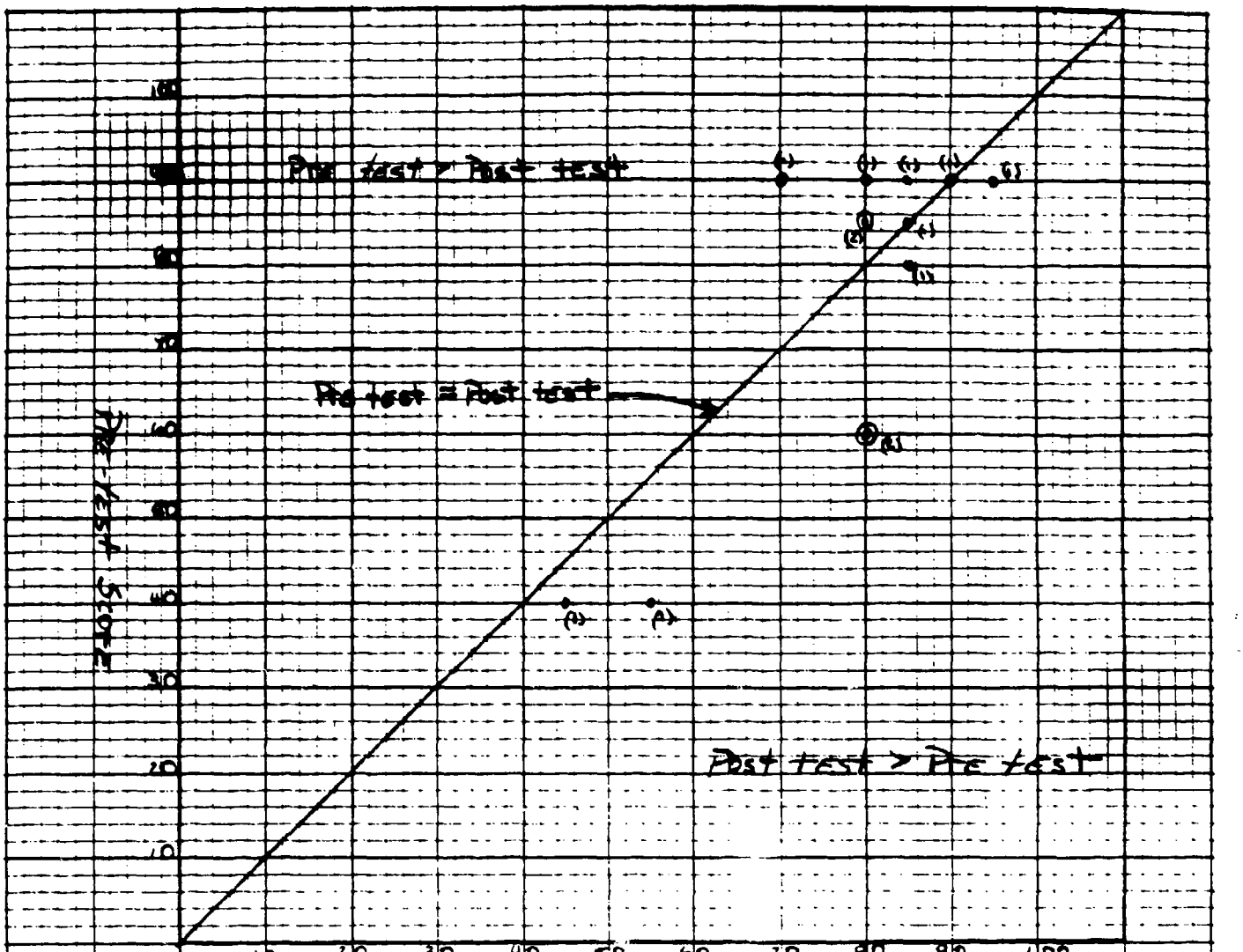


B/1-29 FA
Ft Carson, CO

MAP READING

Post test (MAP READING) is significantly Higher Based on Paired t test.

CLASS 2 MAP READING

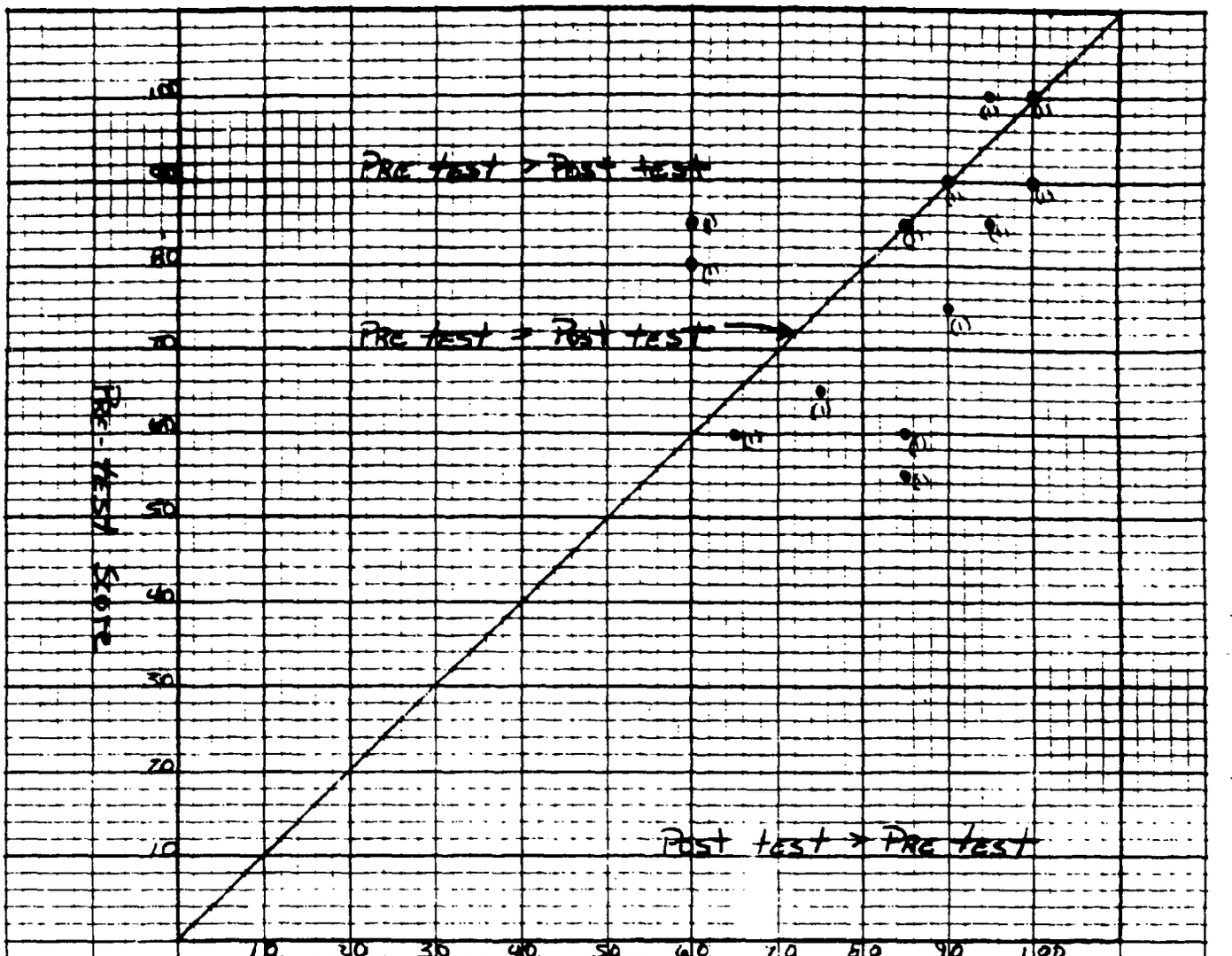


C/3-3 FA
Ft Hood, TX

MAP READING

No significant difference between Pre test and Post-test based on paired t test.

CLASS 3 MAP READING



D/1-5 FA
Ft Riley, KS

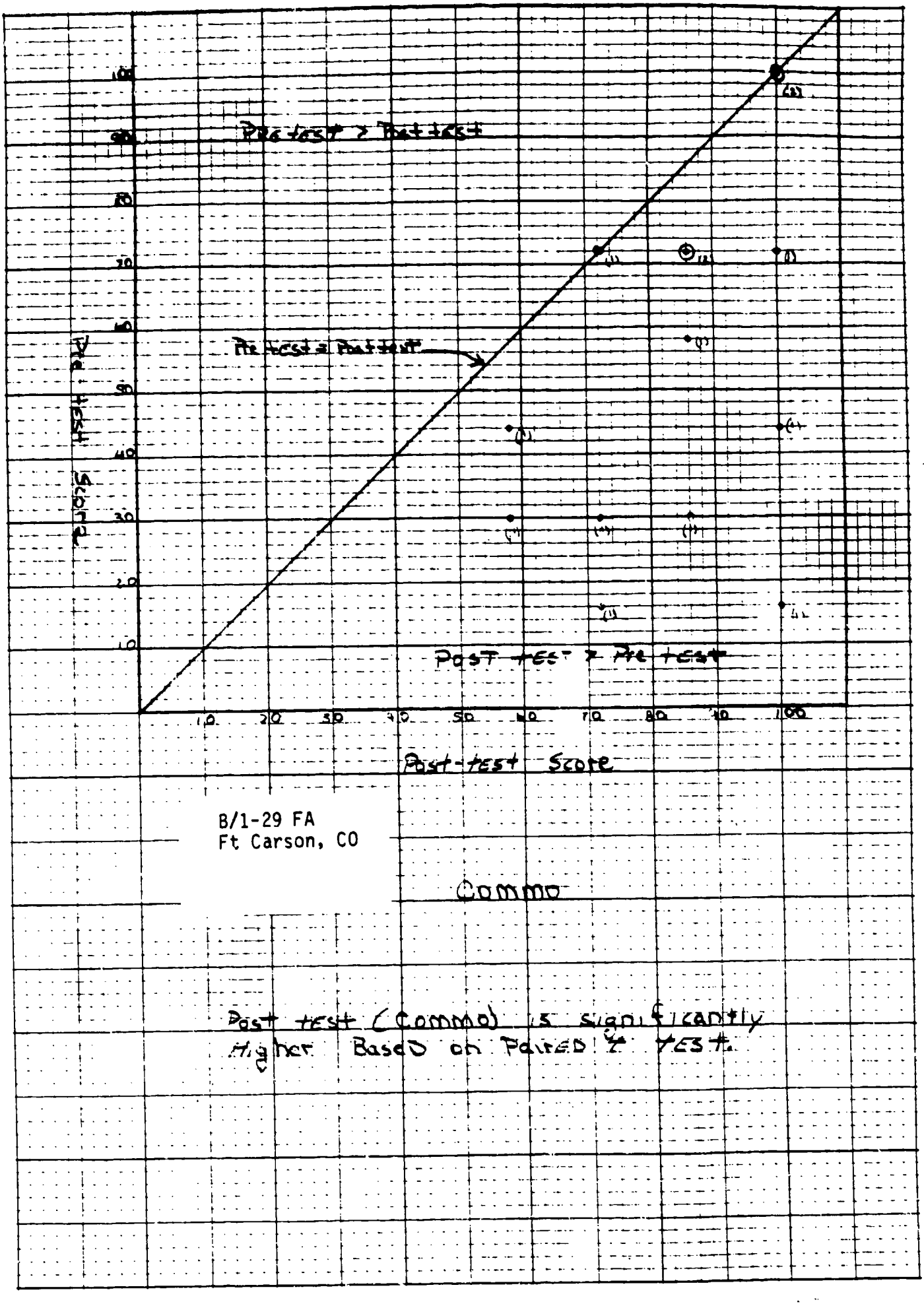
MAP READING

No Significant Difference between Pre-test and Post-test BASED on paired t Test.

ANNEX B

ANALYSIS OF COMMUNICATIONS SCORES

UNIT		PRETEST	POSTTEST	SIGNIFICANT DIFFERENCES
B/1-29	Avg Score	54.00	84.00	Posttest is
	ST.D	28.22	15.39	significantly higher
C/3-3	Avg Score	50.46	54.76	No signifi-
	ST.D	25.31	21.50	cant difference
D/1-5	Avg Score	63.38	81.69	Posttest is
	ST.D	23.24	18.41	significantly higher
C/5-15	Avg Score	64.00	85.00	Posttest is
	ST.D	21.06	13.69	significantly higher

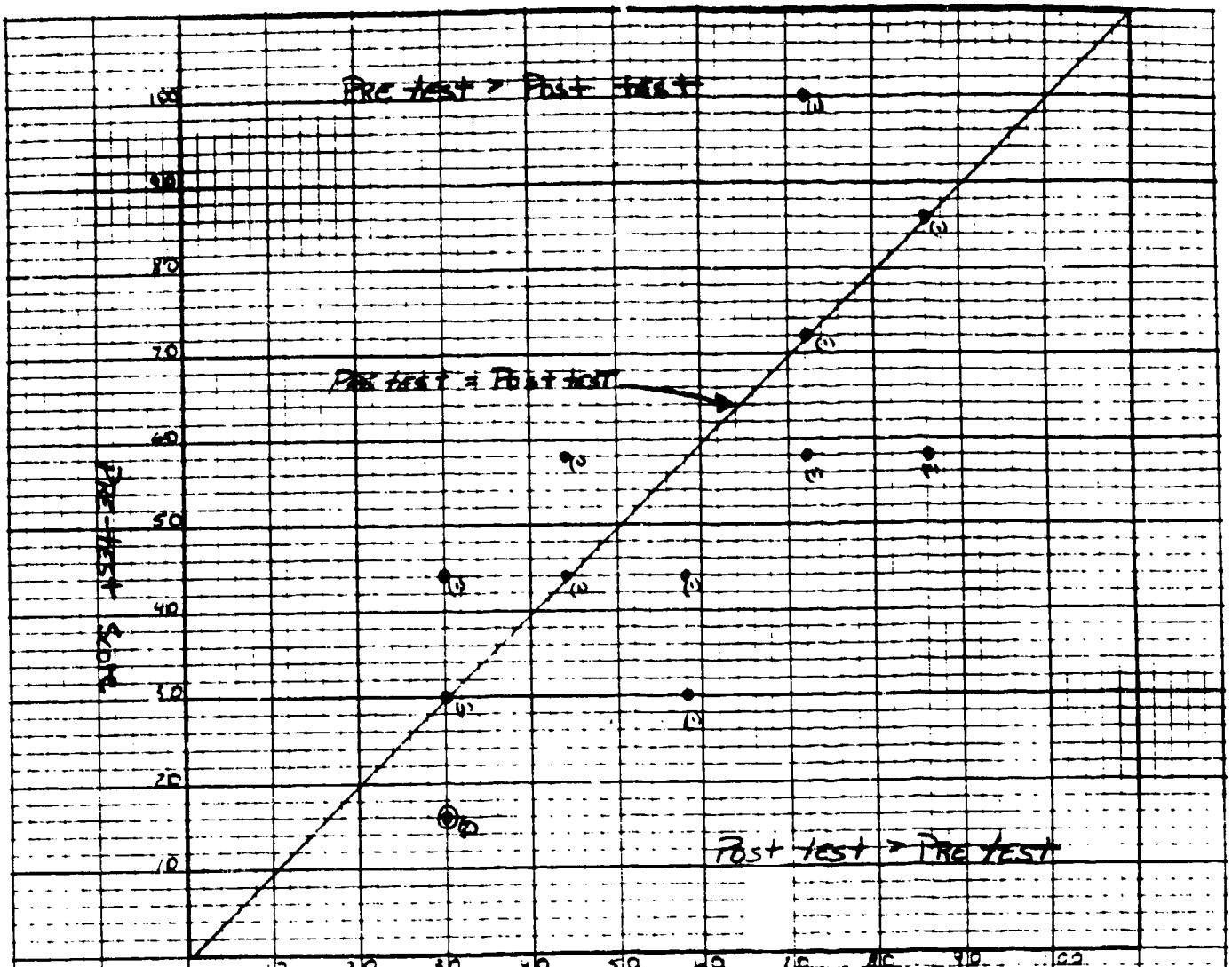


B/1-29 FA
Ft Carson, CO

Commo

Post test (Commo) is significantly higher Based on Paired t test.

Class 2 Commo

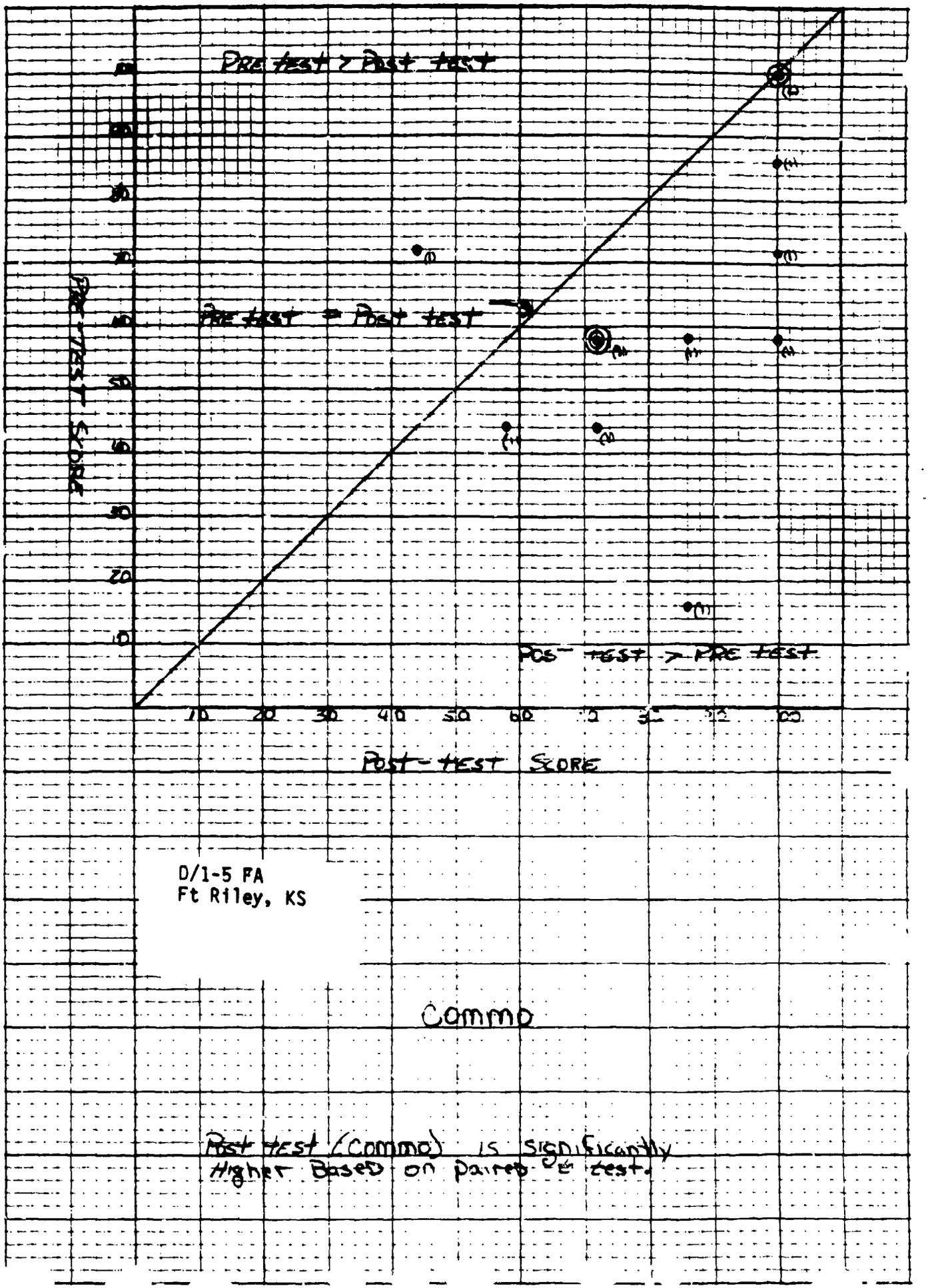


C/3-3 FA
Ft Hood, TX

Commo

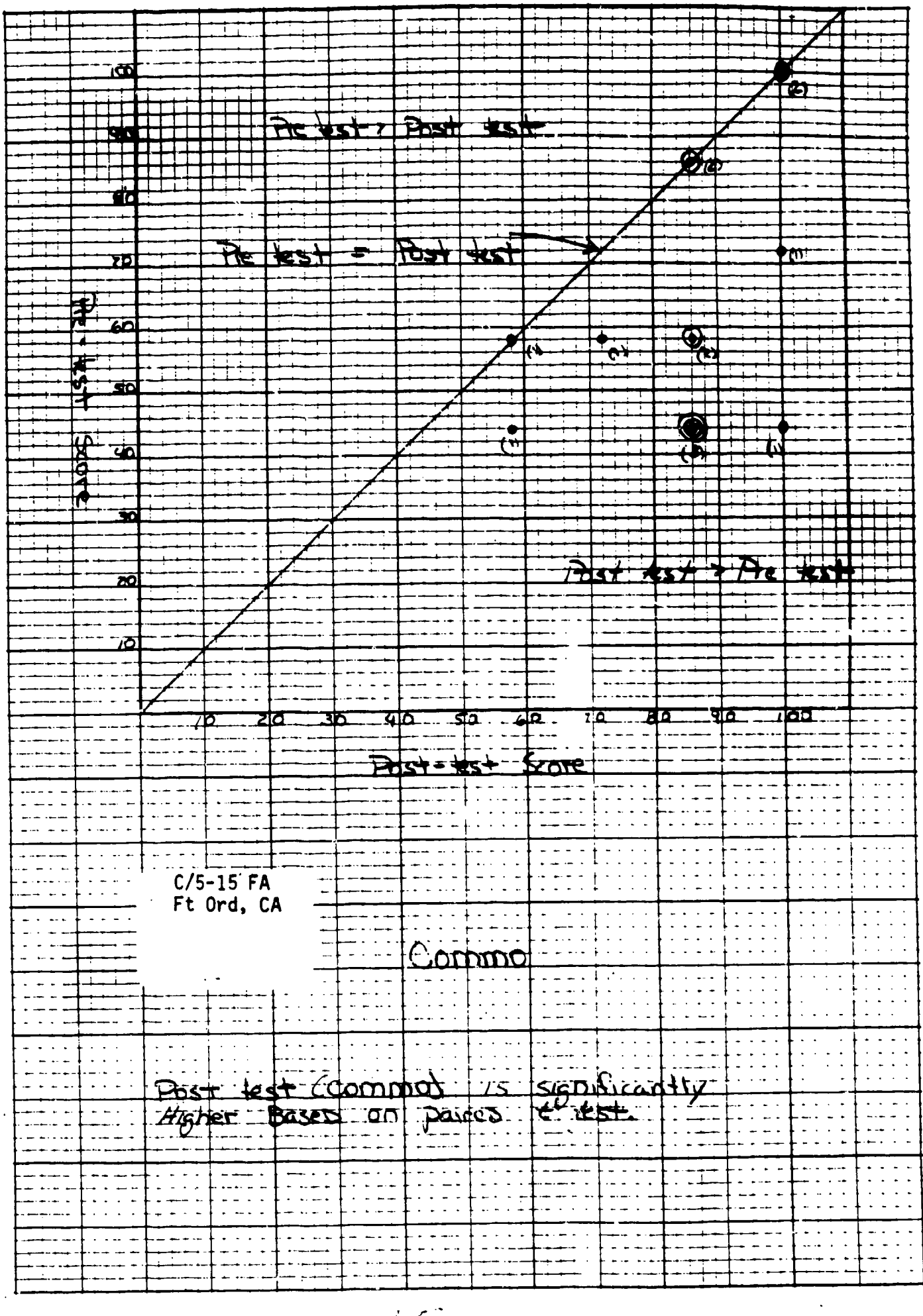
No significant Difference between Pre-test and Post-test based on paired t test.

CLASS 3 COMMO



Post test (Commo) is significantly higher based on paired t test.

Class 4 Commo



C/5-15 FA
Ft Ord, CA

Commo

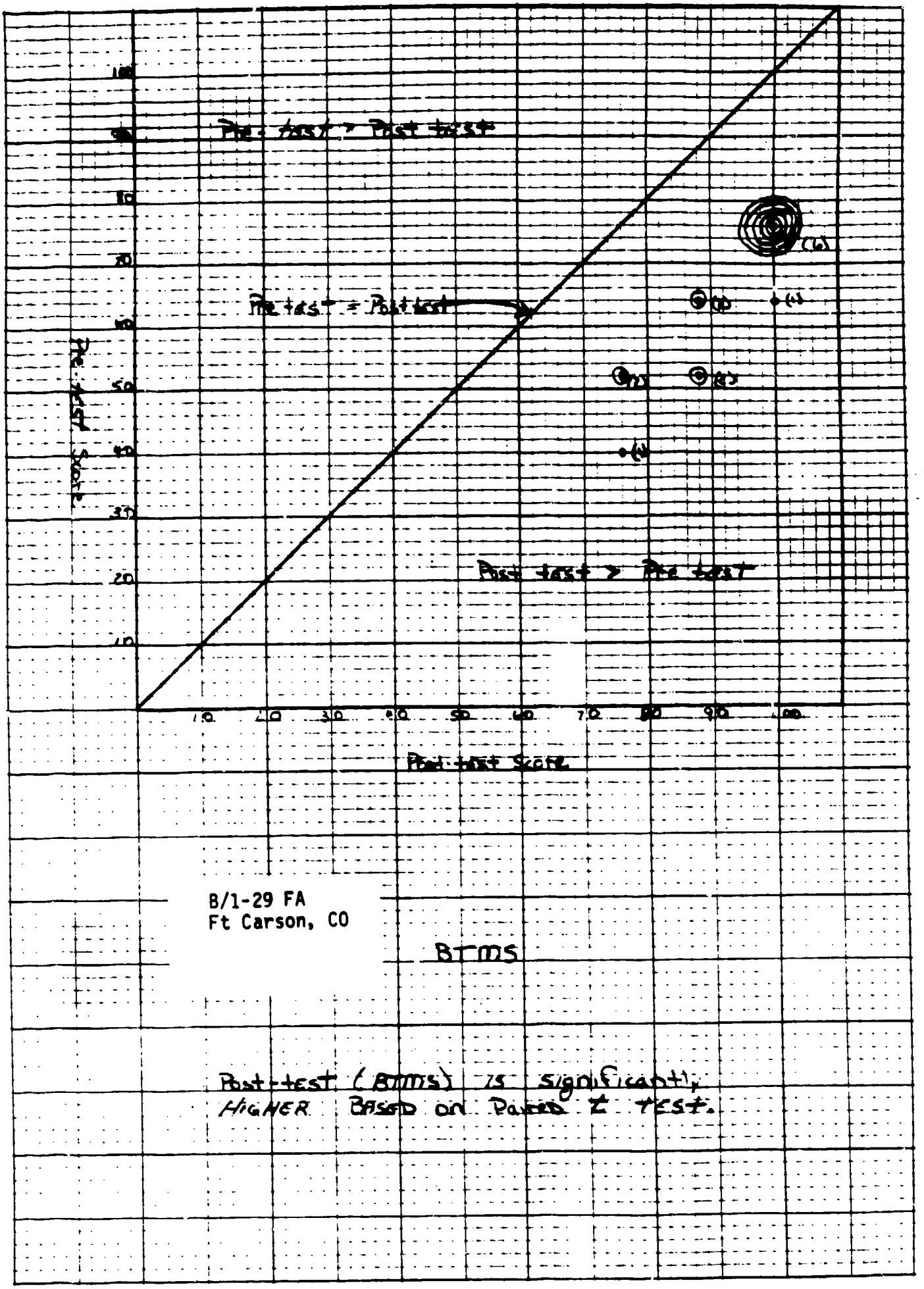
Post test (Commo) is significantly higher based on paired t test.

ANNEX C

ANALYSIS OF BATTALION TRAINING MANAGEMENT SYSTEM (BTMS) SCORES

UNIT		PRETEST	POSTTEST	SIGNIFICANT DIFFERENCES
B/1-29	Avg Score	64.00	91.42	Posttest is significantly higher
	ST.D	12.45	9.90	
C/3-3	Avg Score	59.38	75.07	Posttest is significantly higher
	ST.D	20.51	18.63	
D/1-5	Avg Score	64.92	64.00	No significant difference
	ST.D	13.38	17.66	
C/5-15	Avg Score	61.42	68.28	Posttest is significantly higher
	ST.D	23.14	14.58	

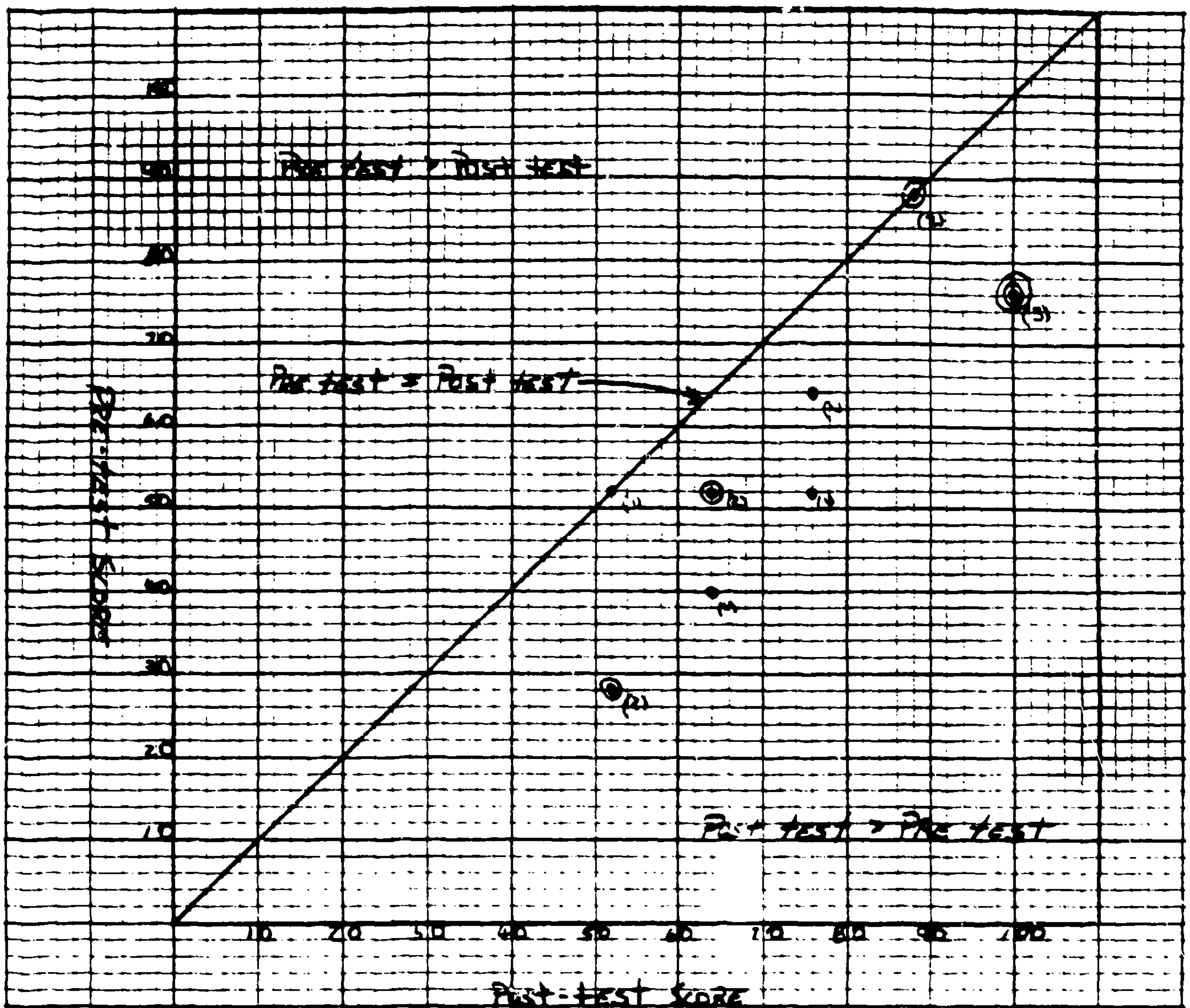
CLASS 1 BTMS



B/1-29 FA
Ft Carson, CO

BTMS

Post-test (BTMS) is significantly HIGHER based on Paired t test.

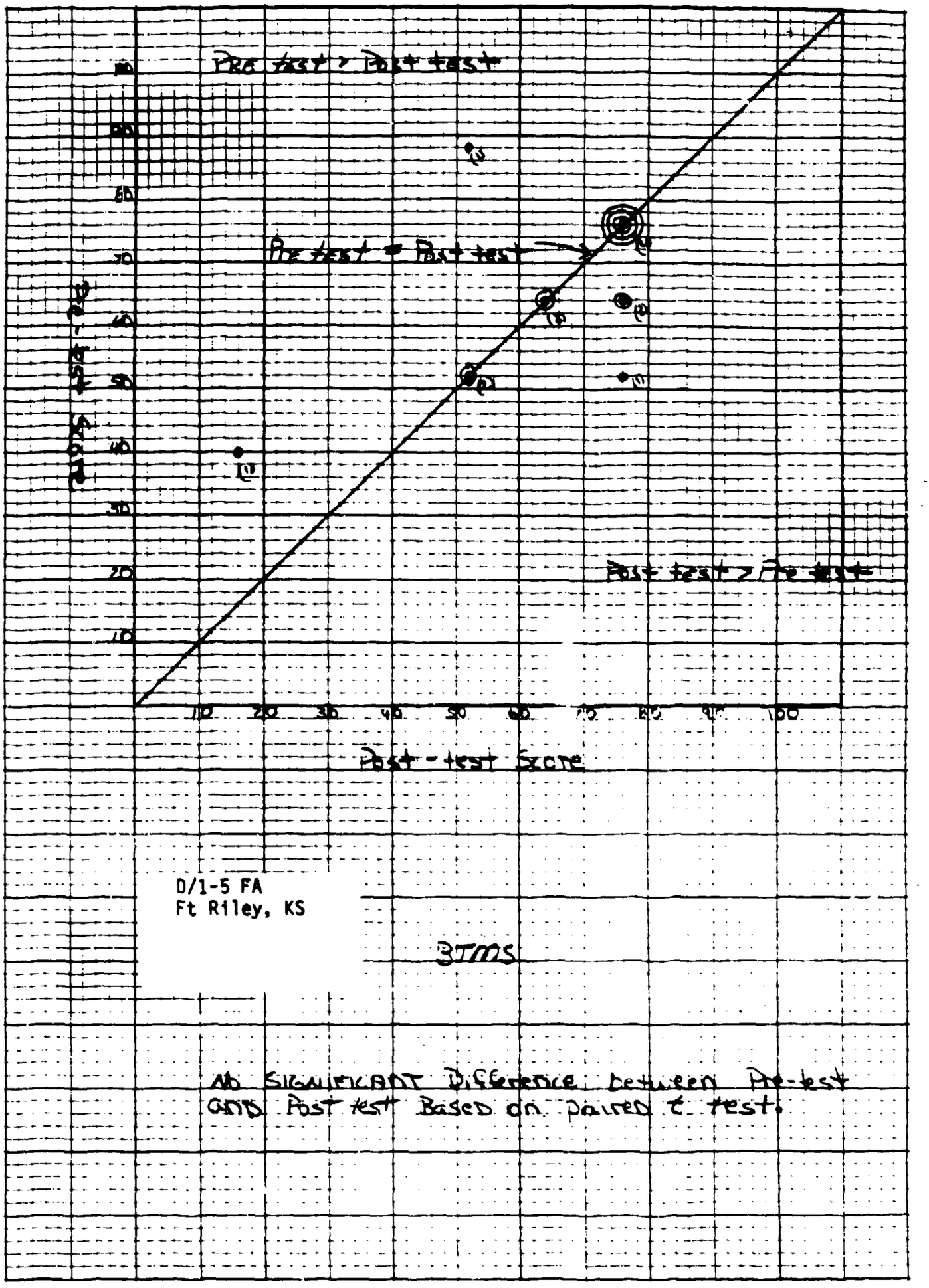


C/3-3 FA
Ft Hood, TX

BTMS

Post test (BTMS) is significantly
HIGHER BASED on Paired t test.

Class 3 - BTMS

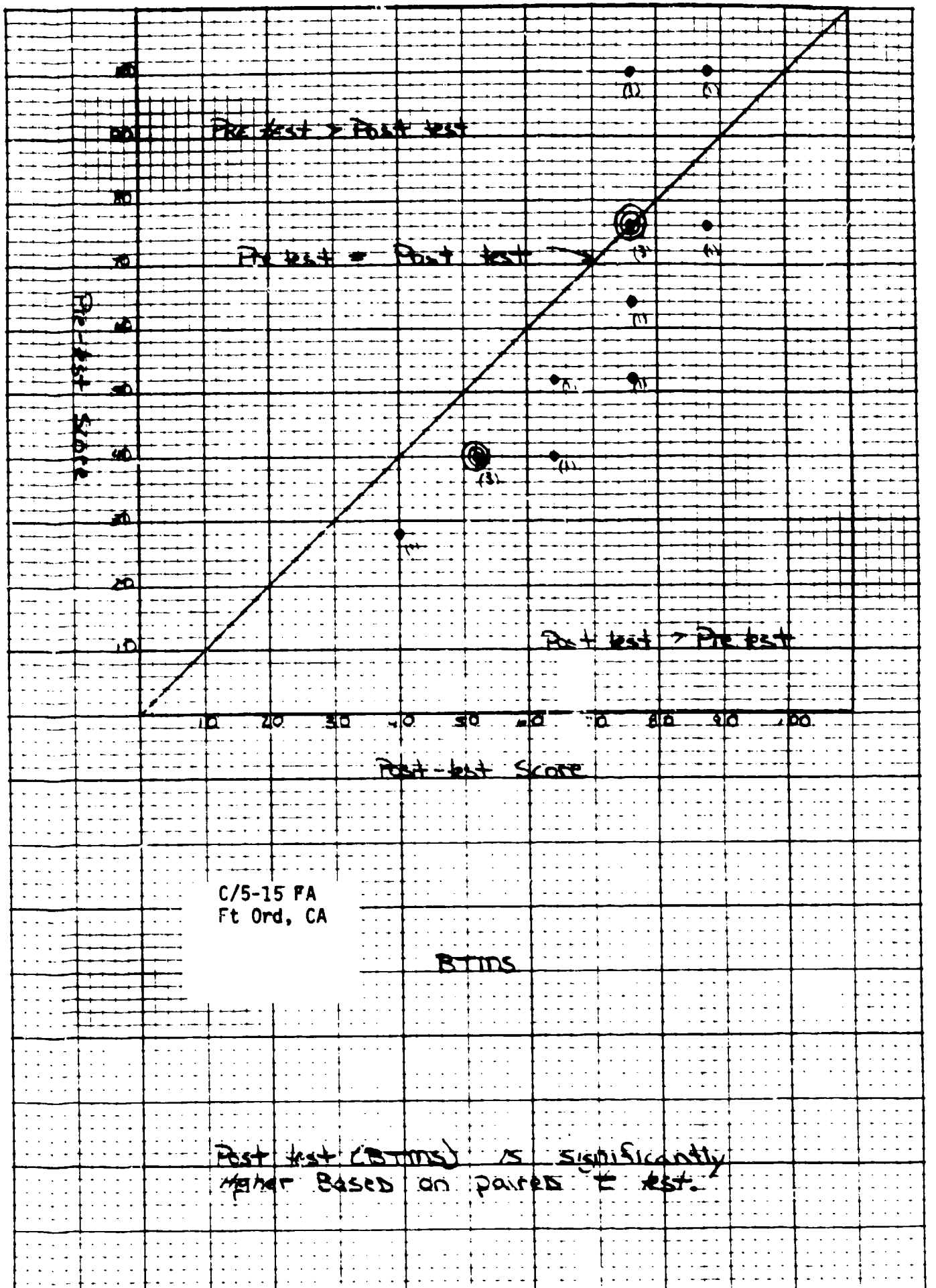


D/1-5 FA
Ft Riley, KS

BTMS

No Significant Difference between Pre-test and Post test Based on paired t test.

Class 4 BTMS



C/5-15 FA
Ft Ord, CA

BTMS

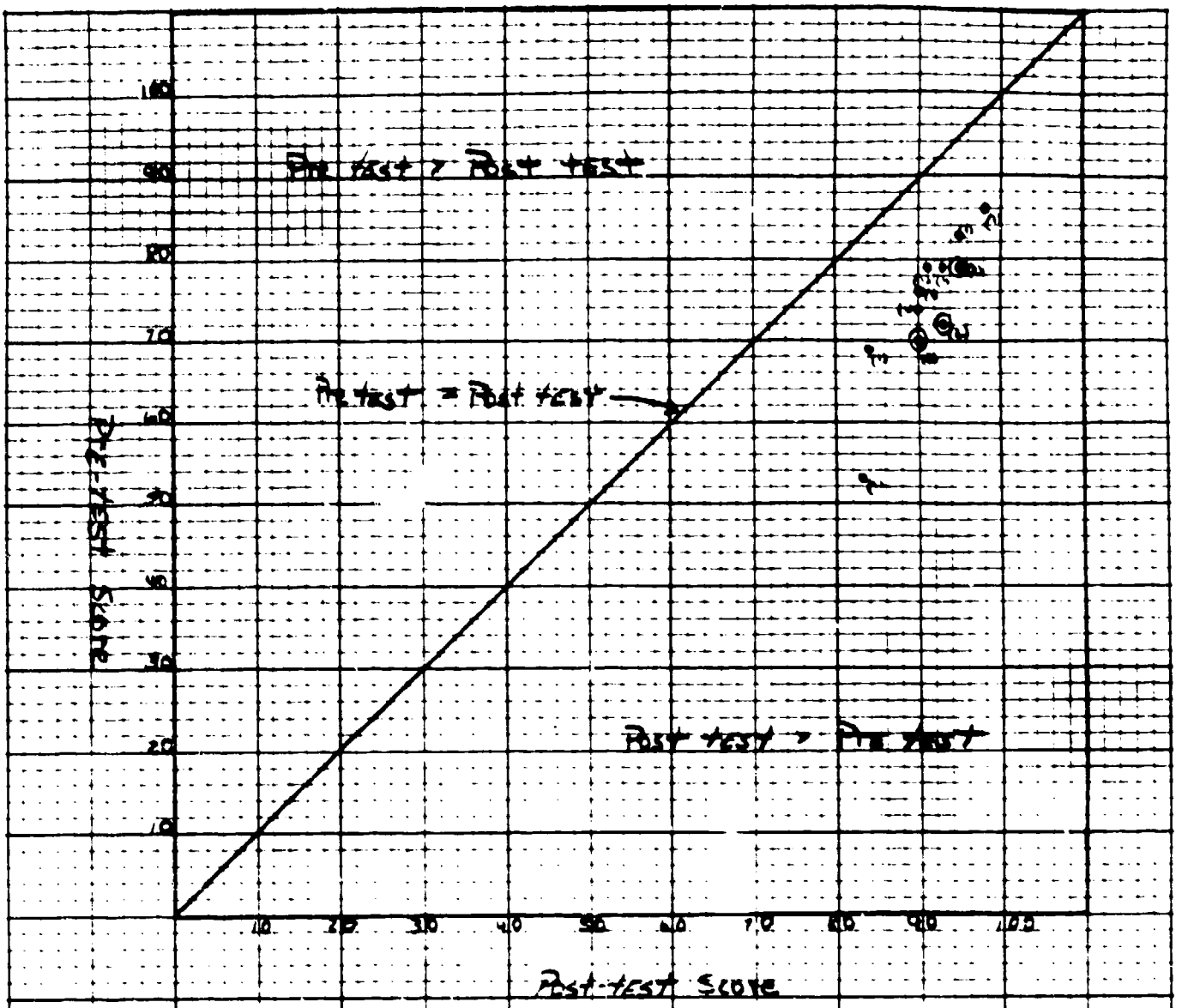
Post test (BTMS) is significantly higher Based on paired t test.

ANNEX D

ANALYSIS OF SUPPLY AND MAINTENANCE PROCEDURES SCORES

UNIT		PRETEST	POSTTEST	SIGNIFICANT DIFFERENCES
B/1-29	Avg Score	74.35	91.42	Posttest is significantly higher
	ST.D	8.00	4.14	
C/3-3	Avg Score	61.38	75.76	Posttest is significantly higher
	ST.D	9.29	10.36	
D/1-5	Avg Score	67.15	81.53	Posttest is significantly higher
	ST.D	8.69	7.96	
C/5-15	Avg Score	80.42	89.07	Posttest is significantly higher
	ST.D	6.60	5.79	

CLASS I ORG MAINT.

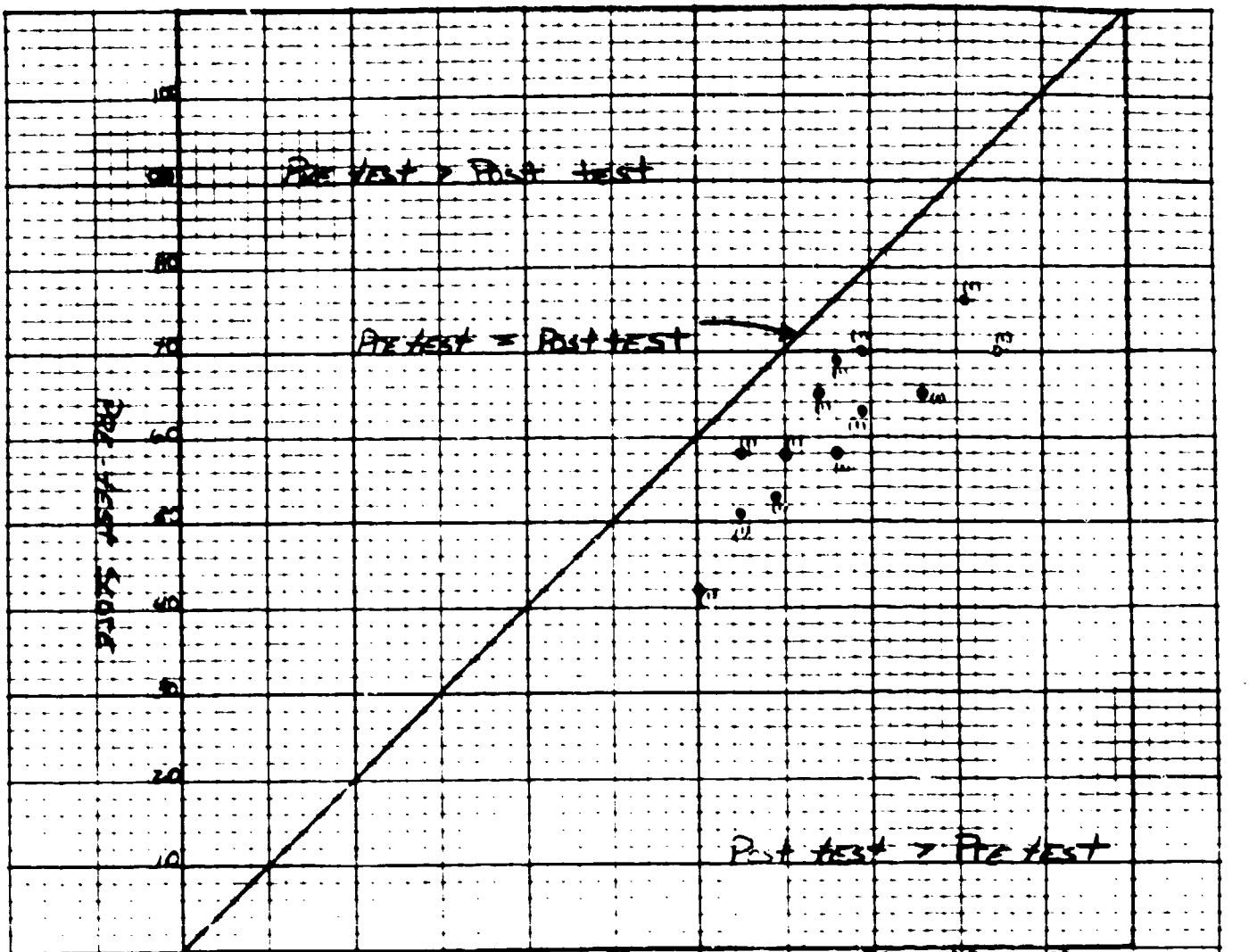


B/1-29 FA
Ft Carson, CO

ORG MAINT

Post test (ORG MAINT) is significantly higher Based on Paired t test.

CLASS 2 MAINT

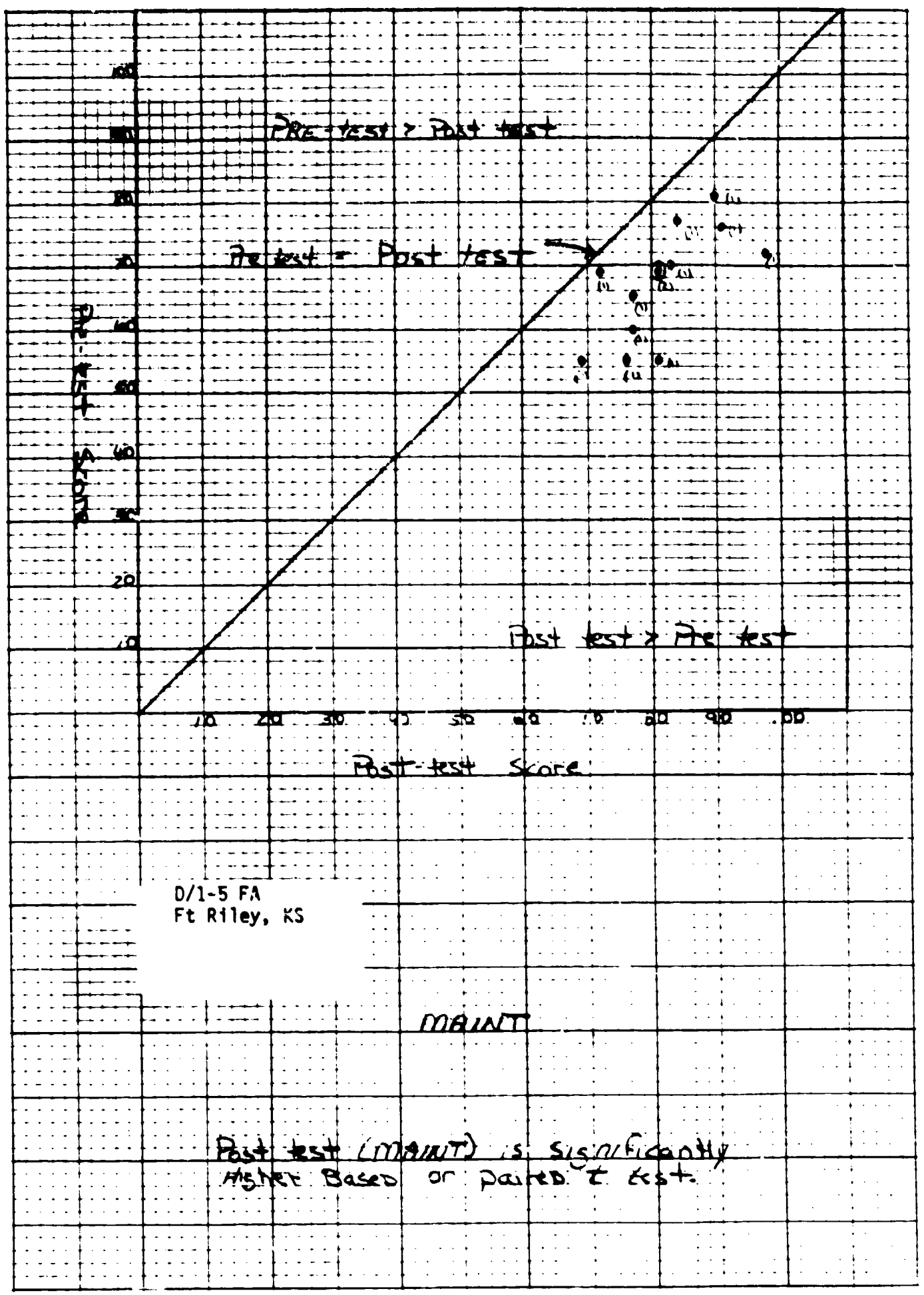


C/3-3 FA
Ft Hood, TX

MAINT

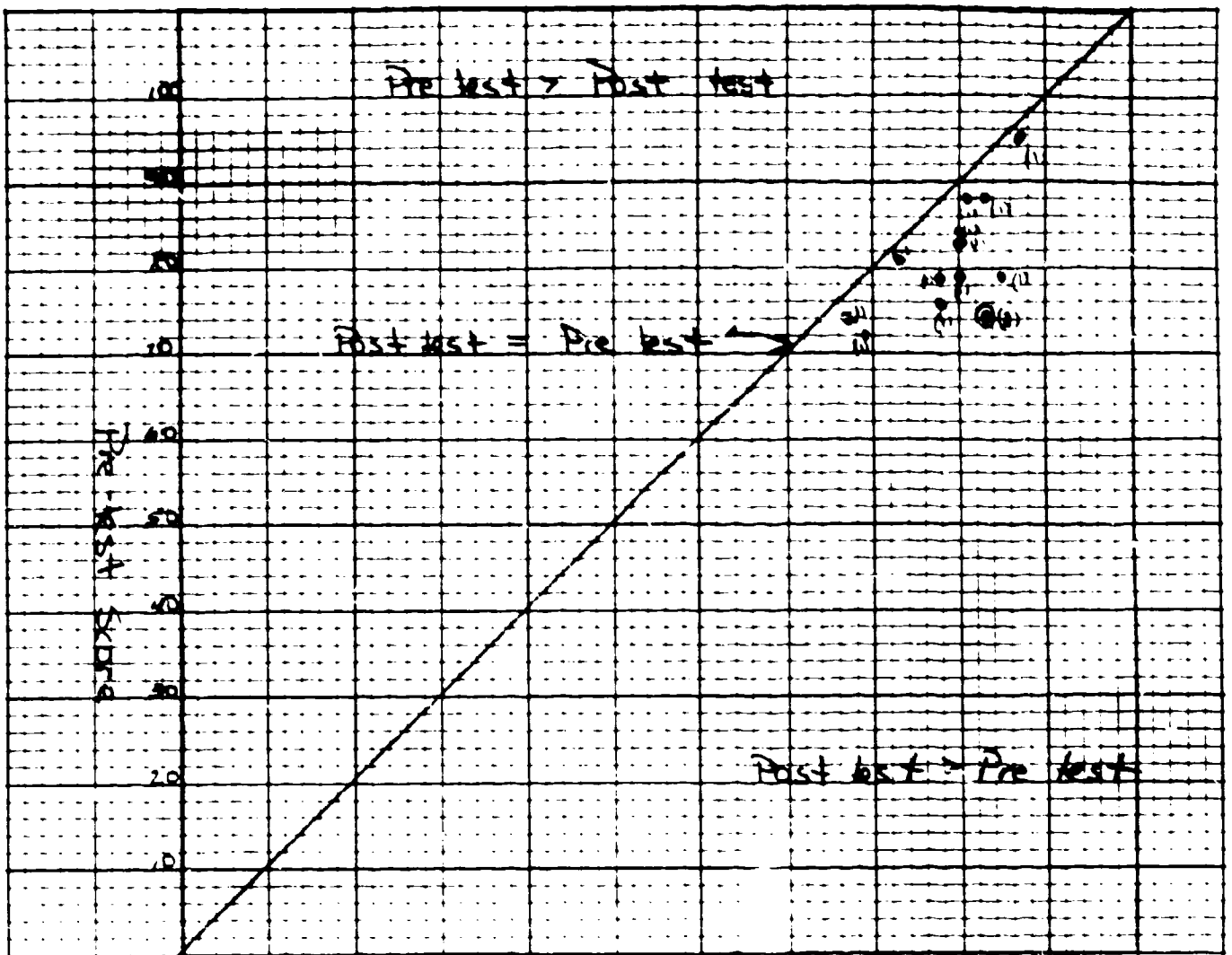
Post test (MAINT) IS SIGNIFICANTLY HIGHER BASED ON PAIRED t TEST.

Class 3 MAINT



Post test (MAINT) is significantly higher based on paired t test.

Class 4 Maint



C/5-15 PA
FT Ord, CA

MAINT

Post test (MAINT) is significantly higher based on paired t test.

DISPOSITION FORM

For use of this form, see AR 340-15; the proponent agency is TAGO.

REFERENCE OR OFFICE SYMBOL	SUBJECT
ATSH-ES	COHORT Cadre Phase II Training Evaluation

TO	FROM	DATE	CMT 1
ATTG-C ATTN: Dr. Stenson	ATSH-ES ATTN: CPT Walborn	9 JAN 86	CPT Walborn/lw/5-2518

1. Attached at enclosure 1 is the COHORT Cadre Phase II Evaluation as directed in HQ TRADOC message dated 190920 Nov 85. The use of the staff study format is from the same message.

2. Any questions concerning the report should be directed to CPT Walborn, DOES, AVON 835-2518/5372 or COMM (404) 545-2518/5372.

1 Encl

JOSEPH S. NAPIER
Colonel, Infantry
Director, Evaluation
and Standardization

COHORT Cadre Evaluation

The United States Army Infantry School
Fort Benning, Georgia 31905
07 January 1986

SUBJECT: Evaluation of Phase II COHORT cadre training for Co. A, 4-23 Inf; Co. B, 2-16 Inf; and Co. A, 2-16 Inf conducted between 23 Aug- 13 Nov, 1985 at Ft. Benning, Ga.

1. PROBLEM. To determine if there is a statistically significant difference between pre and post-test performance levels of selected COHORT unit cadres.

2. ASSUMPTIONS.

a. That unit cadres receive and use Phase I training packages.

b. That the Phase II POI remains consistant during the assessment period.

c. That the training strategy (POI) is applied in a consistant manner during the assesment period.

3. FACTS BEARING ON THE PROBLEM.

a. HQ TRADOC directed the Infantry School to conduct COHORT cadre training in a message dated 141800 Jun 84 explicitly stating that drills would be in the POI. The Infantry school decided to include marksmanship, land navigation, and maintenance in the final POI.

b. The CCHORT cadre training program was not included in the USAIC ARPRINT for FY85 and FY86. This meant that there was a definite possibility that training received by the unit cadres might not be standard because of possible facilities conflicts with courses already programmed in the ARPRINT.

c. There were problems in getting cadre members to the unit with sufficient lead time to undergo the Phase I training and accomplish necessary administrative requirements. Additionally, there were cadre members assigned to serve in a COHORT unit who were ineligible under provisions of DA Circular 600-82-2.

d. Due to a misunderstanding between testing officers, the post-test for the DRILLS/TLC portion of the POI was not administered to one of the cadre units resulting in a reduced size of the data base.

e. The training received by one of the cadre elements was not representative of the other two cadres because of reasons described in a para. 3.B.

4. DISCUSSION.

a. The scores contained in the Annex A tables represent the number of correct raw responses on single trial pre and post training examinations.

b. The statistical values contained in the Annex A tables were computed by using the formulas:

(1) Arithmetic Mean $\bar{X} = \frac{\Sigma X}{N}$

Where $\bar{X} \approx$ ARITHETIC MEAN
$\Sigma X \approx$ THE SUM OF INDIVIDUAL SCORES
$N \approx$ NUMBER OF MEASURMENTS

(2) Variance $\sigma^2 = \frac{\Sigma(X-\bar{X})^2}{N-1}$

Where $\sigma^2 \approx$ VARIANCE

$\Sigma(X-X)^2 \approx$ The sum of the squares of deviations about the mean.
$N \approx$ Number of Measurements

(3) Standard Deviation $S = \sqrt{\sigma^2} = \sqrt{\frac{\Sigma(X-X)^2}{N-1}}$

(4) Student's T-Value $t = \frac{\Sigma D}{\sqrt{[N\Sigma D^2-(\Sigma D)^2]/(N-1)}}$

Where $t \approx$ Calculated value of t
$D \approx$ Difference of pre and post test scores i.e. $D = P_2-P_1$
$N \approx$ Number of measurments

c. The markmanship portion of the training showed an increase in the mean score from 8.65 to 11.47 out of a possible 15.00. The increase of 2.82 raw responses equates to an increase of 32.60%. For specific results see Annex A Table 2.

d. The land navigation portion of the training showed an increase in the mean score from 24.31 to 30.10 out of a possible 39.00. The increase of 5.79 raw responses equates t an increase of 23.82%. For specific results see Annex A Table 3.

e. The Drills/TLC portion of the training showed an increase in the mean score from 9.57 to 11.18 out of a possible 14.00. The increase of 1.61 raw responses equates to an increase of 16.82%. For specific results see Annex A Table 4.

f. The maintenance portion of the training showed a.. increase in the mean score from 34.17 to 54.38 out of a possible 62.00. The increase of 20.21 raw responses equates to an increase of 59.15%. For specific results see Annex A Table 5.

g. The cost/resource data at Annex B is provided to show the costs incurred in transporting soldiers to Ft. Benning from selected FORSCOM installations, and of the Tactical Leaders' Course (TLC) portion of the training. This data does not reflect the total cost of the Phase II training. A formal cost analysis will be submitted to TRASANA at a later date yet to be determined.

h. The advantages for conducting the Phase II cadre training at Ft. Benning are listed below:

(1) The physical facilities to conduct the training are already present in one form or another. Should this become a permanent program, some of the facilities might require expansion and additional personnel to accomodate the increased student load.

(2) Standardization of the POI can best be maintained here, at Ft. Benning. Necessary modifications can be made to accomodate the type of cadre undergoing the training i.e. Bradley, mechanized, or light infantry.

(3) Any changes in doctrine and/or tactics can be effected into the POI with a minimum of delay.

i. The major disadvantage to conducting the PHASE II training at Ft. Benning is that the program is not currently resourced in the ARPRINT, therefore, funds and resources must be diverted from courses already scheduled. The objective of enhancing the vertical bonding within the cadres cannot be fully realized as long as cadre members must "strap hang" with students out at the TLC which is the portion of the program where the cadre members would get to know each other under field conditions.

5. CONCLUSION. There is a pronounced statistical difference between the pre and post training performance levels as indicated by the calculated t values when compared to the critical values at the .05 level of significance (Annex A, Table 1) for all areas of the POI.

6. RECOMMENDATION. The increase in cadre performance levels warrant consideration for continuing the Phase II training on a larger scale. If the program is not resourced and included in the ARPRINT at the earliest possible time, then the program should be discontinued. Exportation of the Phase II program to the field and having the unit cadres trained at the home station is not recommended because it would tax already strained training ammunition, manpower, vehicle, and training facility resources in establishing what would amount to a division level school. Insuring the standardization of the programs could also pose a problem.

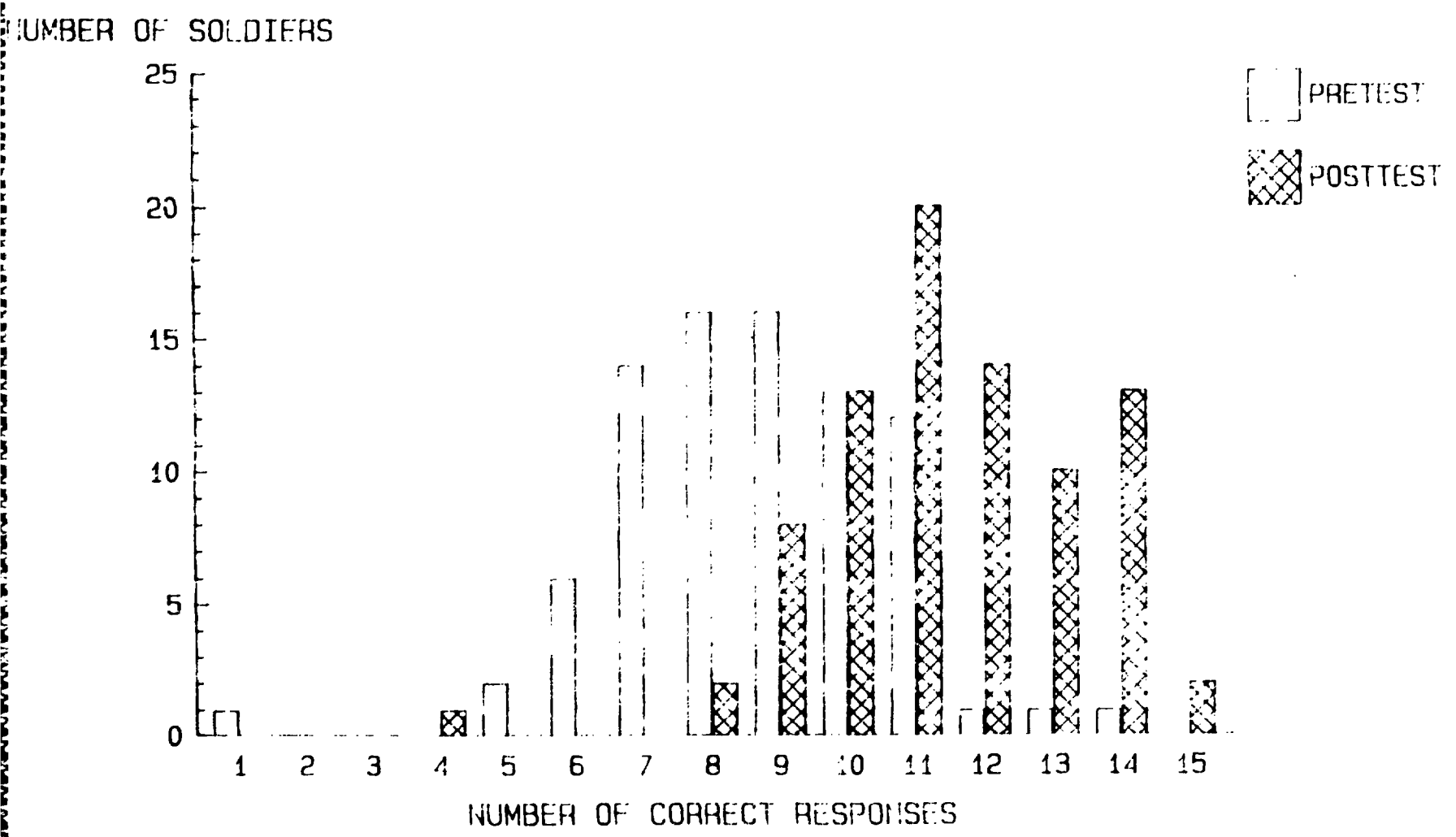
Table A-1 Significance Results

Training Type	Calculated t - Value	.05 Critical t - Value	Results Significant
Marksmanship	10.216	2.000	Yes
Land Navigation	7.856	2.000	Yes
TLC/Drills	6.106	2.021	Yes
Maintenance	16.481	2.000	Yes

TABLE A-2 Marksmanship Results

IDENTIFICATION	PRETEST	POST-TEST	Δ	Δ %
A-1-1	8	11	3	37.50
A-1-2	9	13	4	44.44
A-1-3	10	12	2	20.00
A-1-4	8	11	3	37.50
A-1-5	9	11	2	22.22
A-1-6	8	12	4	50.00
A-1-7	7	11	4	57.14
A-1-8	6	9	3	50.00
A-1-9	8	13	5	62.50
A-1-10	11	14	3	27.27
A-1-11	8	10	2	25.00
A-1-12	10	10	0	0.00
A-1-13	11	11	0	0.00
A-1-14	9	10	1	11.11
A-1-15	8	12	4	50.00
A-1-16	9	12	3	33.33
A-1-17	8	10	2	25.00
A-1-18	11	13	2	18.18
A-1-19	11	10	-1	-9.10
A-1-20	10	12	2	20.00
A-1-21	5	9	4	80.00
A-1-22	6	12	6	100.00
A-1-23	9	12	3	33.33
A-1-24	10	9	-1	-10.00
A-1-25	5	4	-1	-20.00
A-1-26	7	12	5	71.43
A-1-27	11	8	-3	-27.27
A-1-28	11	14	3	27.27
A-1-29	9	11	2	22.22
A-1-30	7	11	4	57.14
A-1-31	9	11	2	22.22
B-1	11	13	2	18.18
B-2	9	12	3	33.33
B-3	8	12	4	50.00
B-4	14	14	0	0.00
B-6	7	13	6	85.71
B-7	8	11	3	37.50
B-8	7	11	4	57.14
B-9	10	10	0	0.00
B-10	11	11	0	0.00
B-11	10	11	1	10.00
B-12	10	10	0	0.00
B-13	9	14	5	55.56
B-14	13	11	-2	-15.38
B-15	9	10	1	11.11
B-16	10	13	3	30.00
B-17	8	9	1	12.50
B-18	10	13	3	30.00
B-19	11	14	3	27.27
B-20	7	10	3	42.86

MARKSMANSHIP RESULTS
COHORT CADRE PHASE II TRAINING



83 Soldiers tested

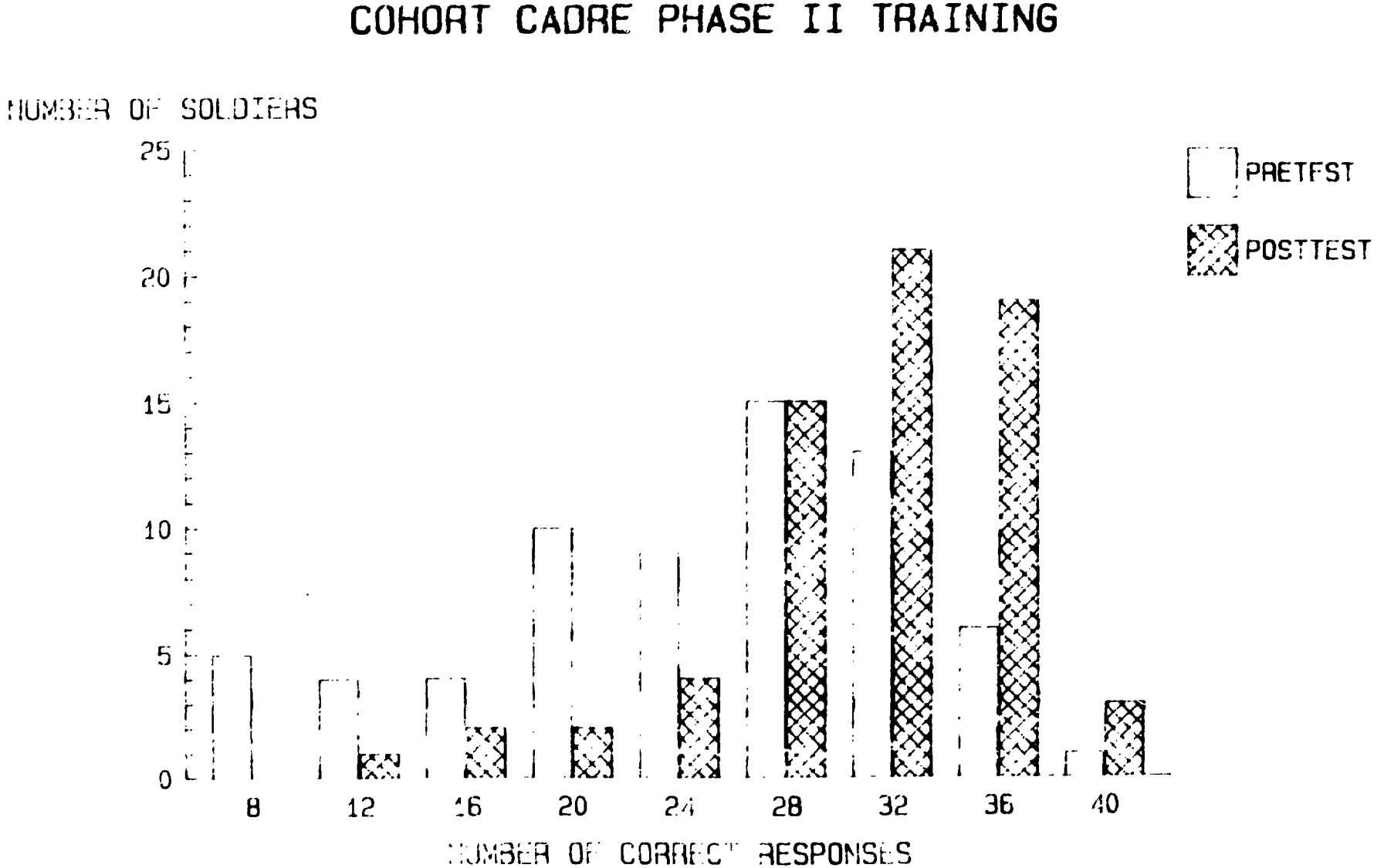
Encl 1 to Table A-2

TABLE A-2 Marksmanship Results

IDENTIFICATION	PRETEST	POST-TEST	Δ	Δ %
B-21	8	10	2	25.00
B-22	9	11	2	22.22
B-23	8	10	2	25.00
B-24	8	9	1	12.50
B-25	8	14	6	75.00
A-2-1	6	14	8	133.33
A-2-2	9	14	5	55.56
A-2-3	9	14	5	55.56
A-2-4	7	15	8	114.29
A-2-5	11	14	3	27.27
A-2-6	9	12	3	33.33
A-2-7	6	13	7	116.67
A-2-8	6	11	5	83.33
A-2-9	6	13	2	116.67
A-2-10	12	10	-2	-16.67
A-2-11	8	11	3	37.50
A-2-12	10	11	1	10.00
A-2-13	11	11	0	0.00
A-2-14	7	12	5	71.42
A-2-15	11	13	2	18.18
A-2-16	7	14	7	100.00
A-2-17	10	14	4	40.00
A-2-18	7	11	4	57.14
A-2-19	7	14	7	100.00
A-2-20	1	10	9	900.00
A-2-21	7	15	8	114.29
A-2-22	7	9	2	28.57
A-2-23	10	12	2	20.00
A-2-24	10	9	-1	-10.00
A-2-25	7	12	5	71.42
A-2-26	9	8	-1	-11.11
A-2-27	9	9	0	0.00
A-2-28	8	11	3	37.50
MEAN:	8.65	11.47	2.82	32.60

1. Maximum possible score 15.
2. The variance of the scores was: Pre - 3.94, Post - 3.62.
3. The standard deviations were: Pre - 1.98, Post - 1.90.
4. There were 82 degrees of freedom for this data.

LAND NAVIGATION RESULTS
COHORT CADRE PHASE II TRAINING



67 Soldiers tested

TABLE A-3 Land Navigation Results

IDENTIFICATION	PRETEST	POST-TEST	Δ	Δ %
A-1-1	31	31	0	0.00
A-1-2	27	34	7	25.93
A-1-3	34	34	0	0.00
A-1-4	20	16	-4	-25.00
A-1-5	26	37	11	42.31
A-1-6	25	39	14	56.00
A-1-7	12	29	17	141.67
A-1-8	27	31	4	14.81
A-1-9	29	27	-2	-6.90
A-1-10	29	30	1	3.45
A-1-11	34	34	0	0.00
A-1-12	20	28	8	40.00
A-1-13	29	33	4	13.79
A-1-14	19	30	11	57.89
A-1-15	33	39	6	18.18
A-1-16	8	37	29	362.50
A-1-17	20	26	6	30.00
A-1-18	26	31	5	19.23
A-1-19	28	34	6	21.42
A-1-20	33	32	-1	-3.03
A-1-21	8	16	8	100.00
A-1-22	20	19	-1	-5.00
A-1-23	33	33	0	0.00
A-1-24	28	32	4	14 29
A-1-25	14	18	4	28.57
A-1-26	15	31	16	106.67
A-1-27	24	29	5	20.83
A-1-28	28	31	3	10.71
A-1-29	24	30	6	25.00
A-1-30	32	33	1	3.13
A-1-31	26	30	4	15.38
B-2	36	36	0	0.00
B-6	27	28	1	3.70
B-7	9	24	15	166.67
B-10	22	29	7	31.82
B-13	29	36	7	24.14
B-15	22	34	12	54.55
B-16	20	32	12	60.00
B-17	11	26	15	136.36
B-20	24	30	6	25.00
B-22	11	22	11	100.00
B-24	17	29	12	70.59
A-2-2	33	33	0	0.00
A-2-3	38	38	0	0.00
A-2-4	30	36	6	20.00
A-2-6	36	36	0	0.00
A-2-7	27	30	3	11.11
A-2-8	20	27	7	35.00
A-2-9	32	32	0	0.00

TABLE A-3 Land Navigation Results

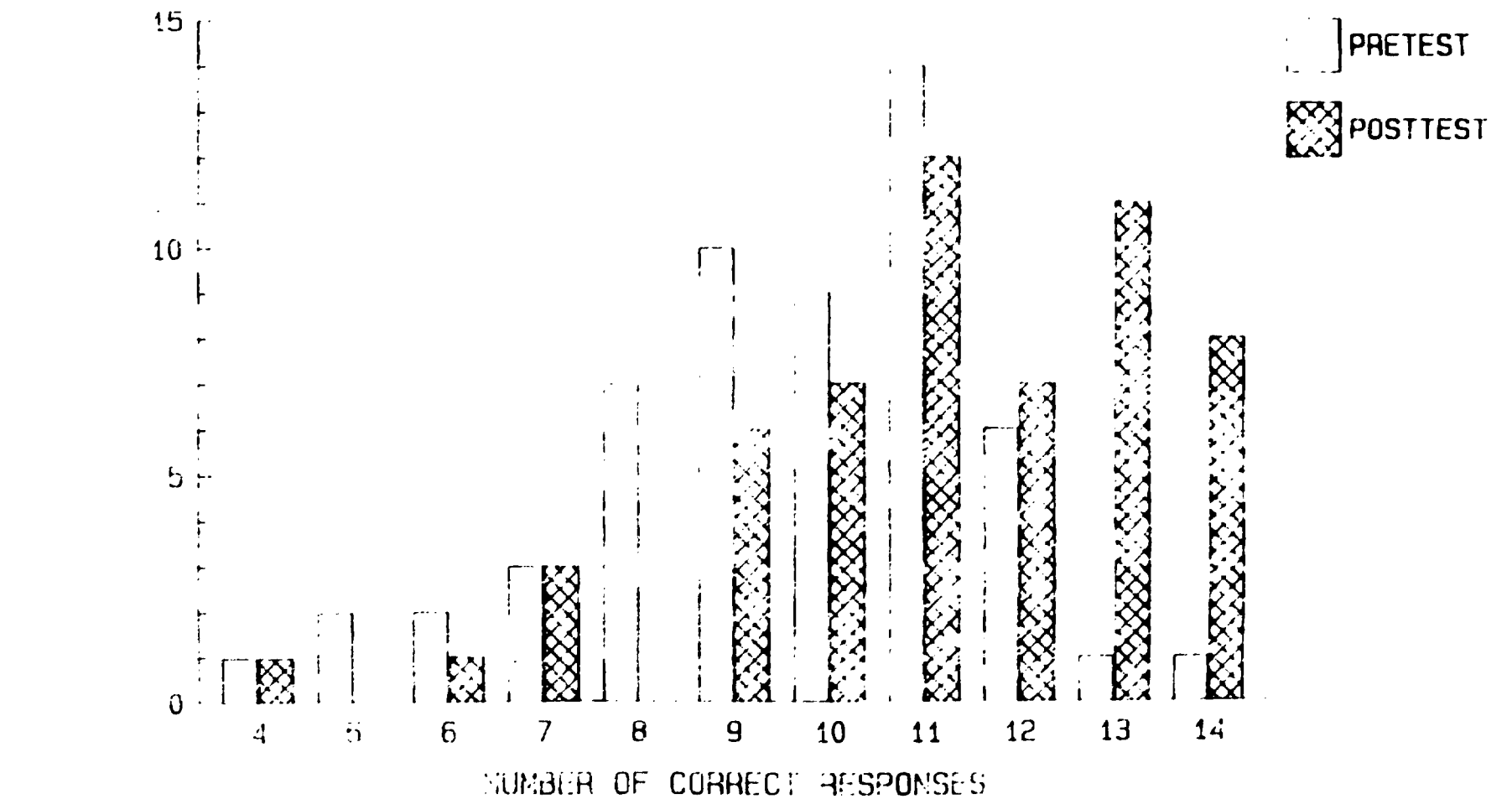
IDENTIFICATION	PRETEST	POST-TEST	Δ	Δ %
A-2-10	35	35	0	0.00
A-2-11	28	28	0	0.00
A-2-13	32	32	0	0.00
A-2-14	19	29	10	52.63
A-2-15	34	36	2	5.88
A-2-16	17	29	12	70.59
A-2-17	31	37	6	19.35
A-2-18	7	26	19	271.43
A-2-19	13	25	12	92.31
A-2-20	8	10	2	25.00
A-2-21	33	34	1	3.03
A-2-22	24	32	8	33.33
A-2-23	23	34	11	47.83
A-2-24	33	34	1	3.03
A-2-25	23	34	11	47.83
A-2-26	33	34	1	3.03
A-2-27	20	25	5	25.00
A-2-28	19	29	10	52.63
MEAN	24.31	30.10	5.79	23.82

1. Maximum possible score 39.
2. The variance of the scores was: Pre - 67.64, Post - 34.46.
3. The standard deviations were: Pre - 8.22, Post - 5.87.
4. There were 66 degrees of freedom for this data.

TABLE A-4 Tactical Leaders Course/Drills Results

IDENTIFICATION	PRETEST	POST-TEST	Δ	Δ %
A-1-1	12	13	1	8.33
A-1-2	9	11	2	22.22
A-1-3	12	13	1	8.33
A-1-4	10	13	3	30.00
A-1-5	9	11	2	22.22
A-1-6	7	12	5	71.43
A-1-7	8	12	4	50.00
A-1-8	12	14	2	16.67
A-1-9	8	14	6	75.00
A-1-10	11	14	3	27.27
A-1-11	10	14	4	40.00
A-1-12	11	13	2	18.18
A-1-13	11	12	1	9.09
A-1-14	10	11	1	10.00
A-1-15	14	14	0	0.00
A-1-16	12	14	2	16.67
A-1-17	11	14	3	27.27
A-1-18	9	13	4	44.44
A-1-19	11	11	0	0.00
A-1-20	11	13	2	18.18
A-1-21	8	10	2	25.00
A-1-22	10	12	2	20.00
A-1-23	11	11	0	0.00
A-1-24	9	12	3	33.33
A-1-25	4	10	6	150.00
A-1-26	5	9	4	80.00
A-1-27	7	11	4	57.14
A-1-28	13	14	1	7.69
A-1-29	10	13	3	30.00
A-1-30	11	13	2	18.18
*A-1-31	7	11	4	57.14
A-2-1	11	9	-2	-18.18
A-2-3	11	10	-1	-9.09
A-2-4	10	13	3	30.00
A-2-5	8	9	1	12.50
A-2-6	12	11	-1	-8.33
A-2-7	9	6	-3	-33.33
A-2-8	11	10	-1	-9.09
A-2-9	9	11	2	22.22
A-2-11	6	9	3	50.00
A-2-13	8	9	1	12.50
A-2-14	11	11	0	0.00
A-2-15	10	13	3	30.00
A-2-16	11	11	0	0.00
A-2-17	12	13	1	8.33
A-2-18	8	10	2	25.00
A-2-19	9	9	0	0.00
A-2-20	5	4	-1	-20.00
A-2-21	10	7	-3	-30.00
A-2-22	6	7	1	16.67

DRILLS / TACTICAL LEADERS COURSE RESULTS
COHORT CADRE PHASE II TRAINING



56 Soldiers tested

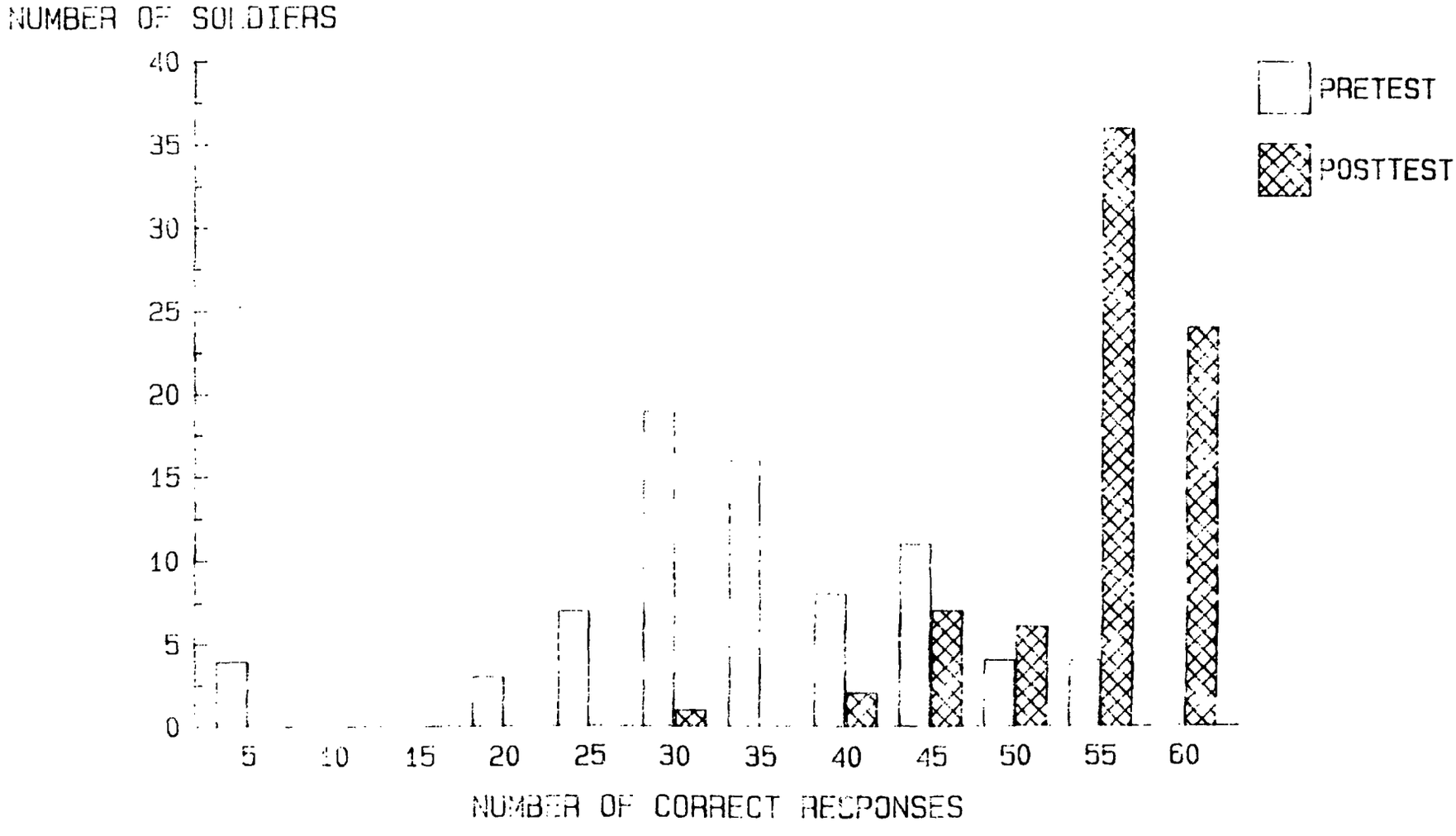
TABLE A-4 Tactical Leaders Course/Drills Results

IDENTIFICATION	PRETEST	POST-TEST	Δ	Δ %
A-2-23	9	10	1	11.11
A-2-24	9	12	3	33.33
A-2-25	11	12	1	9.09
A-2-26	10	11	1	10.00
A-2-27	9	10	1	11.11
A-2-28	8	7	-1	-12.50
MEAN:	9.57	11.18	1.61	16.82

* All subsequent scores reflect only 2 days of training at the Tactical Leaders Course instead of the 6 days the other unit cadres received.

1. Maximum possible score 14.
2. The variance of the scores was: Pre - 4.29, Post - 4.99.
3. The standard deviations were: Pre - 2.09, Post - 2.23.
4. There were 55 degrees of freedom for this data.

MAINTENANCE RESULTS
COHORT CADRE PHASE II TRAINING



/6 Soldiers tested

TABLE A-5 Maintenance Results

IDENTIFICATION	PRETEST	POST-TEST	Δ	Δ %
A-1-1	48	60	12	25.00
A-1-2	35	59	24	68.57
A-1-3	53	60	7	13.21
A-1-4	21	57	36	171.43
A-1-5	46	55	9	19.57
A-1-6	54	58	4	7.41
A-1-7	29	54	15	51.72
A-1-8	28	57	19	67.86
A-1-9	45	59	14	31.11
A-1-10	42	60	18	42.86
A-1-11	34	56	22	64.71
A-1-12	29	60	31	106.90
A-1-13	45	60	15	33.33
A-1-14	33	60	27	81.82
A-1-16	28	60	32	114.29
A-1-17	29	54	25	86.21
A-1-18	36	62	26	72.22
A-1-19	33	58	25	75.76
A-1-20	25	59	34	136.00
A-1-21	28	55	27	96.43
A-1-22	28	54	26	92.86
A-1-23	25	55	30	120.00
A-1-24	31	59	28	90.32
A-1-25	19	53	34	178.95
A-1-26	28	57	29	103.51
A-1-27	32	53	21	65.63
A-1-28	28	52	24	85.71
A-1-29	38	55	17	44.74
A-1-30	49	58	9	18.37
A-1-31	38	58	20	52.63
B-3	29	31	2	3.45
B-6	27	41	14	51.85
B-7	34	55	21	61.76
B-8	37	46	9	24.32
B-9	38	52	14	36.84
B-10	38	53	15	39.47
B-11	40	47	7	17.50
B-13	41	56	15	36.59
B-14	44	54	10	22.73
B-15	30	41	11	36.67
B-16	30	55	25	83.33
B-17	35	44	9	25.71
B-18	35	56	21	60.00
B-19	18	55	37	205.56
B-20	43	53	10	23.26
B-21	38	49	9	23.68
B-22	36	43	7	19.44
B-23	32	45	13	40.63
B-25	36	54	18	50.00

TABLE A-5 Maintenance Results

IDENTIFICATION	PRETEST	POST-TEST	Δ	Δ %
A-2-1	31	62	31	100.00
A-2-2	56	55	-1	-1.79
A-2-3	25	60	35	140.00
A-2-4	37	55	18	48.65
A-2-5	50	55	5	10.00
A-2-6	37	53	16	43.24
A-2-7	25	53	28	112.00
A-2-8	37	54	17	45.95
A-2-9	50	61	11	22.00
A-2-10	56	61	5	8.93
A-2-11	31	53	22	70.97
A-2-12	43	56	13	30.23
A-2-13	43	58	15	34.88
A-2-14	31	52	21	67.74
A-2-15	43	56	13	30.23
A-2-16	31	55	24	77.42
A-2-17	43	59	16	37.21
A-2-18	4	53	49	1225.00
A-2-19	4	55	51	1275.00
A-2-2-	6	45	39	650.00
A-2-21	43	61	18	41.86
A-2-22	25	45	20	80.00
A-2-23	25	51	26	104.00
A-2-25	37	59	22	59.46
A-2-26	43	56	13	30.23
A-2-27	37	53	16	43.24
A-2-28	6	50	44	733.33
MEAN:	34.17	54.38	20.21	59.15

1. Maximum possible score 62.
2. The variance of the scores was: Pre - 119.55, Post - 31.47.
3. The standard deviations were: Pre - 10.93, Post - 5.61.
4. There were 75 degrees of freedom for this data.

Transportation Costs
(Round Trip Air FY 85 Dollars)

Station	Individual Cost	Battalion Cadre <81>	Company Cadre <27>
Ft Lewis, Wa	$540.00	$43,740.00	$14,580.00
Ft. Hood, Tx	$430.00	$34,830.00	$11,610.00
Ft Riley, Ks	$452.00	$36,612.00	$12,204.00
Ft Carson, Co	$408.00	$33,048.00	$11,016.00
Ft Campbell, Ky	$176.00	$14,256.00	$4,752.00
Ft Bragg, NC	$288.00	$23,328.00	$7,776.00
Ft Drum, NY	$510.00	$41,310.00	$13,770.00
Ft Ord, Ca	$594.00	$48,114.00	$16,038.00
Ft Stewart, Ga	$280.00	$22,680.00	$7,560.00

TLC Support Requirements

Element Of Support	Cost Per Student IOBC Class (200)	Cost Per Student Bn Cadre (81)	Cost Per Student Co Cadre (27)
Ammunition ($41758.00)	$209.00	$516.00	$1547.00
Personnel (587 Man-Days)	3	7	22
Vehicles (76 Vehicle-Days)	.38	.94	2.8

Notes:

<1> This is a 20-station problem. All 20 stations run regardless of class size.

<2> Ammunition costs are computed on FY85 ammunition cost listing.

<3> Attached listings are extracts from POI Problem TX9B82, USAIS.

<4> These requirements are problem support requirements only; they do not include ammunition expended by the cadre personnel who are the students.

Support Requirements/Resourcing for Tactical Leader Course

Section I Ammunition

DODIC	Nomenclature	Qty	Cost	Total	Cost Per Student TOBC Class (200)	Cost Per Student Bn Cadre (81)	Cost Per Student Co Cadre (27)
A068	CTG 5.56 MM TR	0	0.28	$0.00	$208.79	$515.54	$1,546.61
A071	CTG 5.56MM BALL	0	0.24	$0.00			
A080	CTG 5.56MM BLANK	10000	0.12	$1,200.00			
A111	CTG 7.62MM BLANK NATO LKD	24000	0.28	$6,720.00			
A131	CTG 7.62MM NATO LKD 4-1	0	0.29	$0.00			
A598	CTG CAL .50 BLANK F/MG M2	1000	1.09	$1,090.00			
B519	CTG 40MM PRACTICE	0	3.43	$0.00			
G878	FUZE HAND GREN PRAC	240	0.97	$232.80			
G930	GREN HAND SMK HC	400	13.59	$5,436.00			
G940	GREN HAND GREEN SMK	200	16.65	$3,330.00			
G945	GREN HAND YELLOW SMK	200	17.69	$3,538.00			
G950	GREN HAND RED SMK	20	17.89	$357.80			
G963	GREN HAND CS	100	17.65	$1,765.00			
H708	RKT TP 35MM	0	17.71	$0.00			
K866	SMK POT GROUND TYPE	20	251	$5,020.00			
L307	SIG ILLUM WHITE STAR CLUS HAND	40	28.8	$1,152.00			
L312	SIG ILLUM WHITE STAR PARA HAND	100	28.52	$2,852.00			
L314	SIG ILLUM GREEN STAR CLUS HAND	80	28.8	$2,304.00			
L366	SIM PROJ AIR BURST F/AN M8	60	17.94	$1,076.40			
L367	SIM LAUNCHING ATWESS	120	5.87	$704.40			
L594	SIM PROJ GROUND BURST	300	9.23	$2,769.00			
L600	SIM BOOBY TRAP WHISTLING	160	2.4	$384.00			
L601	SIM HAND GRENADE	300	6.09	$1,827.00			
				$0.00			
	Totals:			$41,758.40			

Support Requirements/Resourcing for Tactical Leader Course

Section II Support Personnel

Troops	Problem Day	OFF	NCO	Enlisted	Total	Support Per Student IOBC Class (200)	Support Per Student Bn Cadre (81)	Support Per Student Co Cadre (27)
BI	Two Days Prior To Problem	0	4	25	29	2.94	7.25	21.74
Trans		0	0	4	4	(Man-Days)	(Man-Days)	(Man-Days)
Inf	One Day Prior To Problem	1	5	47	53			
BI		0	4	25	29			
Trans		0	0	3	3			
Inf	Problem Day One	1	5	47	53			
Mech		0	2	6	8			
BI		0	6	37	43			
Trans		0	0	11	11			
Inf	Problem Day Two	1	5	47	53			
Mech		0	2	6	8			
Trans		0	0	1	1			
Inf	Problem Day Three	1	5	47	53			
Mech		0	2	6	8			
Trans		0	0	8	8			
					0			
Inf	Problem Day Four	1	5	47	53			
Mech		0	2	6	8			
Trans		0	0	8	8			
					0			
Inf	Problem Day Five	1	5	47	53			
Mech		0	2	6	8			
Trans		0	0	2	2			
					0			
Inf	Problem Day Six	1	5	47	53			
Mech		0	2	6	8			
BI		0	2	12	14			
Trans		0	0	8	8			
					0			
Trans	One Day Following Problem	0	0	8	8			
	Totals:	7	63	517				
	Grand Totals:	587						

Legend: BI = Branch Immaterial Detail Soldiers
Inf - Infantry Specific Soldiers
Mech = Mechanized Infantry Specific Soldiers
Trans = Transportation Specific Soldiers

Support Requirements/Resourcing for Tactical Leader Course

Section III Vehicle Support

Type	Problem Day	Number	Support Per Student IOBC Class (200)	Support Per Student Bn Cadre (81)	Support Per Student Co Cadre (27)
1/4 Ton	Two Days Prior To Problem	2	0.38	0.94	2.81
2 1/2 Ton		1	(Veh-Days)	(Veh-Days)	(Veh-Days)
1/4 Ton	One Day Prior To Problem	2			
2 1/2 Ton		1			
1/4 Ton	Problem Day One	8			
2 1/2 Ton		3			
Wtr Tir		2			
M113 APC		2			
1/4 Ton	Problem Day Two	1			
M113 APC		2			
1/4 Ton	Problem Day Three	6			
2 1/2 Ton		2			
M113 APC		2			
Wtr Tir		2			
1/4 Ton	Problem Day Four	6			
2 1/2 Ton		2			
M113 APC		2			
Wtr Tir		2			
2 1/2	Problem Day Five	2			
M113 APC		2			
Wtr Tir		2			
1/4 Ton	Problem Day Six	6			
2 1/2 Ton		2			
M113 APC		2			
Wtr Tir		2			
1/4 Ton	One Day Following Problem	6			
2 1/2 Ton		2			
Wtr Tir		2			
	Total Vehicles	76			

INFANTRY HOME STATION

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
Week #1	(A) PT (A) BN Level Orientation TLO #1 (P) New Manning System Information TLO #2	(A) PT (A) New Manning System Information TLO #2 (P) Cohesion/ Team Building TLO #3	(A) PT (A) Company Level Orientation TLO #4 (P) Phase II and III Preparation	(A) PT (A) Map Reading Diagnostic (A) Terrain Association Skill Test (P) Map Reading, Terrain Association Instruction	(A) PT/Diagnostic (A) How to Plan and Implement Orienteering
Week #2	(A) PT (A) Weapons Maintenance Instruction M16A1, M60, M203 (A) How to Run a Small Arms Range (P) Phase II and III Preparation	(A) PT (A) Planning Good Training (A) Conduct Performance Oriented Training (P) Setting standards and Team Building (P) Bayonet Training	(A) PT/4 Mile Road March (w/ ruck only) (A) Counselling (A) Motivation (P) Communications Maintenance Instruction PRC77, 68 TA1,TA312,DK-8 (P) CEOI Instruction	(A) PT (A) M60 Maintenance instruction (A) MOPP Proficiency Training (P) How to Conduct TA 50-900 Inspection	(A) PT (A) M16A1 Zeroing (P) Call for and Adjust Indirect Fire
Week #3	(A) PT (A) Drill and Ceremonies (A) Introduction to Infantry Sqd and Plt Drill (P) Troop Leading Procedure/OPORD	(A) PT (A) Squad Battle Drill Familiarization (P) Squad Battle Drill Familiarization	(A) PT (A) Military Skills, Refresher Stakes (P) Military Skills, Refresher Stakes	(A) PT/Road March 12 miles w/weapons/ruck (A) TA 50-900 maintenance/ Inspection	(A) PT (P) Preparation for Phase II/III (P) Commander's Time

INFANTRY INSTITUTION

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
Week #1	(A) Inf Traditions, Missions (P) Squad tactics review	Platoon and Company Tactics Review	(A) Maintenance Update (P) Inspections, Leader Responsibilities	Train the trainer; Develop STX's to support ARTEP	Marksmanship (Techniques, Range procedures)
Week #2 (wrap around)	(A) Orientation (A) Observe soldier training (P) Observe soldier training	(A) Terrain Orientation walk (P) Tactical exercise without troops (P) Platoon Trainer Conference	(A) Movement by by fire teams (P) Movement by squads	(A) Movement to Contact (Sqds) (P) Drills (React to Indirect Fire; hasty defense) (P) Night Movement techniques	(A) Patrolling (P) Ambush Patrol (P) Night Patrolling
Week #3	Tactical Leadership Course (How to train, fight, lead, build a team) Drills (20) (i.e., Break contact, clear trenchlines, etc.)				

INFANTRY ICUT

WEEK	TRAINING
1	- Personnel asset Inventory, 1SG brief, Company Commander welcome, Unit history - In-process (Room assignments, supply issue, PAC, CIF, TA-50 inspection, etc.)
2	- M203 FAMFIRE (and qualification for designated gunners) - L/W FAMFIRE - Hand Grenade/Claymore Familiarization - Protective mask fitting/NBC Proficiency Course - Driver Training
3	- Rifle Plts: Battle/Situation Drills Tng - MG Crews: Crew Tng/Drills - Mortars: Drivers/Maintenance Tng
4	- Rifle Plts: Movement to Contact/Hasty Attack, Anti-armor Ambush, Recon Patrol, Raid Patrols, Ambush Patrol - MG Crews: M60 Tng/Qualification, .45 Qual - Mortars: Crew Drill, Gunners Exam, Section Tng Sub-Cal live fire
5	- Rifle Plts: Battle/Situation Drills, Sqd Tng, Rappelling - MG Crews: Integrated into Sqd Tng - Mortars: Section Drill, Tactical Tng, Sub-cal live fire, Rappelling
6	- Rifle Plts: Sqd ARTEP - MG Crews: Integrated - Mortars: Section Live Fire

ARMOR HOME STATION (TBP)

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
Week #1					
Week #2					
Week #3					

USAARMS BRANCH TRAINING STRATEGY

FORSCOM Home Station Training (Cadre)

1. This training is conducted prior to the cadre arriving at Ft Knox for COHORT Cadre Training Program. The FORSCOM package will require one week to complete; the TRADOC portion will be ~~three~~ TWO weeks in the training base.

2. Training Topics

"Mindset" Training Program (Soldier Support Center) 3 Days

Train the Trainer Seminar 4 Hrs

Armored Vehicle and Aircraft Recognition 6 Hrs

Communications 6 Hrs

- Radio Telephone Procedures
- CEOI

Map Reading/Land Navigation 19 Hrs

Common Task Test (Skill Level 3) 4 Hrs

The accomplishment of this training program is designed to bring all the unit's tank commanders to a baseline of skills and knowledges prior to the training at Ft Knox. Portions of this training are directly applicable to the Tank Commander proficiency training and portions apply to the joint Cadre-OSUT training week.

ARMOR INSTITUTION

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
Week #1	- In Process - Commander's Orientation - Driver's Station	- Intro to Fire Control - Gunner's Station	- TC Machinegun - TC's Station - Troubleshoot Turret	- Conduct of Fire - Loader's Station	- Pre-Gunnery Maintenance - System's Calibration
Week #2	- PMCS - Road March - Tank Tactical Tables	- PMCS - Prepare to Fire - Crew Drill - Tank Crew Proficiency Course (TCPC) - Training Devices	- TCPC - Hands-on testing	- Table VII A&B	- Written Test - Outprocess
Week #3 (Wrap around)	- Prep. for Field - PMCS - Road March - Crew Drill - TCPC	- TCPC	- PMCS - Road March - Tank Tactical Tables (Reaction Drills)	- Tank Combat Tables VI/VII - Stationary/Moving Tank & Targets	- Same as Thursday

ARMOR ICUT

(Each Week Integrates Individual Task Training)

WEEK	TRAINING
1	- In-Process, Draw Equipment and Billets
2-4	- Co NCO's and Officer: SOP's, Tactics, Drills, Threat
5-7	- Platoon MAPEX, sand table drills - Staff STX's - TEWT
8	- CPX's
9-12	- Drills - Staff STX's - TOC/Trains CFX - Log STX's
13	- Platoon Gunnery Tables - CPX: Staff/Log STX's
14-16	- TCPC, CFX's, STX's
17-20	- Crew Tank Combat Tables (I-IV) - Platoon FTX's
21-23	- Tank Combat Tables V-XII
24	- FTX - External EVAL CALFEX
25-27	- Plt, CO-TM, Bn ARTEP EVAL

FA HOME STATION

SSC MINDSET WORKSHOP	(.5 WK)
Mobile Training Team	(1 WK)
- If requested by unit	
- Specific Howitzer Training tailored to unit	
Cadre must complete:	(2-3 WKS)
- Firing Platoon Workbook (WCXXWF)	
- Safety Computations (FC 6-50-20)	
- XO's Min. Quadrant (FM 6-50)	
- 22 TEC Lessons (Boresighting, Lay Battery by Grid Azimuth, etc.)	
	2.5-5 WKS

FA INSTITUTION

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
Week #1	13B Refresher: TAMMS, PMCS, Prepare Ammo, Record/maintain fire mission data, align collimator, refer the piece, etc.			- CEOI Training	- Commo Systems Update - Land Nav
Week #2	Training Management Workshop			Doctrinal and Tactical Updates	
Week #3 (Wrap around FTX)	- LDR Training - Sign over Equip	- RSOP - Occupations - PMCS - Critique - Pinmeter Defense	- RSOP - Live fire - Common Skills - Critique	- RSOP - Occupations - Live Fire - Critique - BC Time	- Direct Fire - Fire .50 CAL - Outbrief - Sign over Equipment

FA ICUT

WEEK	TRAINING
1	STX A
2	STX B
3	STX C
4	STX D
5	STX F
6	FTX 2
7	STX A, B, H
8	STX C, F
9	STX D, E, G
10	FTX 1
11-13	Review Previous Training
14	FTX 3

KEY:

SECTION STX's

A: Reconaissance, Survey, and Occupation of Position
B: Tactical Road March
C: Delivery of Fires
D: Secure and Defend Battery Perimeter
E: Perform Nuclear Operations
F: Perform NBC Operations
G: Conduct Emergency Fire Mission (Hipshoot)
H: Conduct Hasty Displacement

BATTERY FTX'S

1: High Intensity Offense/Defense (STX A, B, C, D, E, F, G, H)
2: Low Intensity Offense/Defense (STX A, B, C, D, F)
3: Mission Essential Operations (STX A, B, C, D, E, F, G, H)

ANNEX E

DEPARTMENT OF THE ARMY
HEADQUARTERS, 1ST BATTALION, 41ST INFANTRY, 2D ARMORED DIVISION
FORT HOOD, TEXAS 76546

REPLY TO
ATTENTION OF

AFVB-STL-CDR

14 June 1985

SUBJECT: Training Assesment of 1st Battalion, 41st Infantry (M) Leadership Training at Fort Benning, Georgia.

THRU: Commander, ~~2d Armored Division, ATTN: G3, Fort Hood, Texas 76546~~
Commander, III Corps & Fort Hood, ATTN: G3, Fort Hood, Texas 76546

TO: Commander, FORSCOM, ATTN: AFOP-TAI, Fort McPherson, Georgia 30330

Message first under requires COHORT unit to provide feedback concerning cadre training. Second under is 1st Battalion, 41st Infantry's response.

FOR THE COMMANDER:

PETER J. FAGAN
CPT, IN
Adjutant

DEPARTMENT OF THE ARMY
Headquarters, 1st Battalion (M), 41st Infantry
2d Armored Division
Fort Hood, Texas 76546

AFVBSTL-1-41-CDR 11 June 1985

SUBJECT: Training Assessment of 1-41 (M) Infantry Leadership Training at Fort Benning 10-22 February 1985

THRU: Commander
2d (ST LO) Brigade
2d Armored Division
Fort Hood, Tx 76546

Commander
2d Armored Division
Fort Hood, Tx 76546

TO: Commander
FORSCOM
Fort McPherson, GA

1. GENERAL: When the initial plans for the battalion leadership training at Fort Benning were made back in October 1984, I established three objectives for the trip:

a. To begin bonding with the OSUT soldiers.

b. To sharpen the leaders on marksmanship training techniques, dismounted infantry battle drills, and Bradley tactics.

c. To develop cohesion among the officer and NCO leadership in the battalion.

The trip was a resounding success as all objectives were met. But more importantly, the battalion leadership returned to Fort Hood with 294 well trained and highly motivated new members of the "Straight and Stalwart" battalion.

2. COORDINATION:

a. The decision to fly 79 officers and NCO's to and from Fort Benning by MAC charter was the correct one because of the convenience of a point to point trip. Soldiers boarded the aircraft in BDU's. Their luggage only had to be handled once on each end.

SUBJECT Training Assessment of 1-41 (M) Infantry Leadership Training at Fort Benning 10-22 February 1985

b. LTC Bruce Harris, Commander 6th Battalion, 1st ITB and Mr. Joe Albrecht, COHORT project officer in DOTD provided excellent assistance throughout our stay at Fort Benning. The few minor problems that did arise were quickly and easily solved.

3. TRAINING: The training consisted [illegible] marksmanship training (three days); tactics seminar (one day); interaction with OSUT soldiers (three days); and tactical leaders course (five days). Each will be briefly addressed.

a. Marksmanship training: This three day phase was taught by the Army Marksmanship Unit (AMU) and was outstanding . The instructors concentrated on the basics, emphasizing the use of known distance ranges. Marksmanship in the battalion should show marked improvement in the coming months because of the techniques and BRM skills that were learned.

b. Tactics Seminars: This one day phase was taught by LTC Ernst and his instructors from the Combined Arms Tactics Directorate. Battalion, company and platoon level tactics were covered. The day not only provided an excellent review of Bradley tactics but also included a spirited exchange between the school house and "the field".

c. Tactical Leadership Course (TLC): During the five days of training the battalion received training on twelve of the twenty battle drills that are taught to IOBC and ANCOC students.

(1) One of our young lieutenants summed this week up best when he said, "The TLC helped develop young NCO's and helped to refresh some old Non-Commissioned Officers on previously learned tasks. The Tactical Leadership Course was a very good learning experience in the way of showing individual leaders their ability or inability to teach properly. Whether you taught well or not, you learned where your weaknesses were, and where self-improvement was needed."

(2) The TLCD provided needed training. The battalion is going to use similar battle drills when it begins collective training in the coming months.

(3) As good as the TLC was there were a couple of areas that need some attention:

(a) ndards vary from drill to drill.

(b) The quality of after action reviews varies greatly among drill sites.

(c) [illegible]dents move from the drill site to drill site administratively ins[illegible] of tactically.

(4) The TLC not only reinforced rusty tactical skills but more importantly it forged a cohesion among the leaders, especially between NCO's and officers.

AFVBSTL-1-41-CDR

SUBJECT. Training Assessment of 1-41 (M), Infantry Leadership Training at Fort Benning 10-22 February 1985

d. Interaction with OSUT soldiers: The three days were divided into an OSUT orientation, family day, and graduation day.

(1) Graduation day was the culmination of the trip. Everything came together. It was truly a significant emotional event. It was the day when the trainees became soldiers and members of the 1st Battalion (M), 41st Infantry, the fightingest battalion in the United States Army. The entire ceremony was very professional. LTC Harris and his staff did a great job.

(2) Unfortunately the OSUT orientation and family day didn't turn out quite as well.

(a) Not enough planning went into the orientation and it was of limited value to the battalion leaders.

(b) The family day turned out better but it also suffered from a lack of planning. Nevertheless, each company did get an opportunity to get together with their OSUT soldiers for a few minutes. This was valuable time for each unit and the first real beginning of the transition process.

4. Looking back at the whole two week trip, there is little if anything I would do differently. The support the battalion received was excellent. Both LTC Harris and Joe Albright provided the 1-41 (M) Infantry with the best that was availalble. It was an excellent two weeks of training.

JAMES G. PULLEY
LTC, IN
Commanding

DEPARTMENT OF THE ARMY
Battery C, 5th Battalion, 29th Field Artillery
Fort Carson, Colorado 80913-5000

AFZC-5/29-C 6 May 1985

SUBJECT: After Action Report, Phase II Initial COHORT Unit Training (ICUT)

THRU: Commander
5th Battalion, 29th Field Artillery
Fort Carson, Colorado 80913-5432

Commander
4th Infantry Division (Mechanized) Artillery
Fort Carson, Colorado 80913-5432

Commander
4th Infantry Division (Mechanized)
Fort Carson, Colorado 80913-5432

TO: Commander
FORSCOM
ATTN: AFOP-TAI
Fort Carson, Colorado 80913-5432

1. Reference: MSG dtd 2308207 April 1985; SUBJECT: COHORT Unit Branch Training Support Packages and Test of the Cadre.

2. In accordance with reference message the following information is provided.

a. Unit Participating: Battery C, 5th Battalion, 29th Field Artillery, 4th Infantry Division, Fort Carson, Colorado 80913-5432.

b. Course Date: 11-22 February 1985.

c. Participants: one(1) 02 13E
six(6) E6 13B
five(5) E5 13B

3. GENERAL: It is felt that resident training at Fort Sill could provide an excellent MOS refresher with the advantages of the school environment. Unfortunately the curriculum provided left those participating less than satisfied with the amount and applicability of instruction. With the changes recommended below, training in phase II would be much more valuable.

4. PROBLEMS AND RECOMMEDATIONS:

a. Communications

(1) Problem: A large amount of instruction was devoted to radio systems, none of which was directed at the Firing Battery level. Furthermore, no instruction was provided covering the intercom system (WIC-1) or battery internal wire system. These are the only communications systems organic to the firing battery.

(2) Recommendation: Reduce the amount of radio classes and add instruction covering the battery internal wire and howitzer intercom systems.

b. Land Navigation

(1) Problem: 13B's are habitually weak in this area. This unit was no exception - in that a large majority of the cadre failed the four hour course.

(2) Recommendation: Add instruction on map reading and an additional navigation course.

c. Maintenance

(1) Problem: The weapons department presented excellent instruction on TAMMS, supply accountability, and turret maintenance. The publications class was too extensive and of minimal utility to the 13B NCO. Automotive (drive train) maintenance was not addressed.

(2) Recommendation: Shorten or delete the publications class and add at least an eight (8) hour block of instruction on automotive maintenance (M109, M548, M35, M577).

d. Training Management

(1) Problem: The training management classes were excessive. The material presented was somewhat repetitive of that given in BTMS instruction. The department eventually cancelled the final class due to early completion of instruction.

(2) Recommendation: Reduce this instruction to one-third of that scheduled previously.

e. Training Time

(1) Problem: Excessive time without scheduled training (Commandant's Time) and an unnecessary morning scheduled for non-existant inprocessing.

5. Point of contact: POC's this report are CPT Russell R. Sherrett/1LT Edwin W. Selman, phone 579-2860/5390 or Autovon 691-2860/5390.

RUSSELL R. SHERRETT
CPT, FA
Commanding

HISTORICAL COHORT CADRE TRAINING COSTS AND MANPOWER FOR FY85-86 TEST UNITS

Encl 2

Table 1. TRADOC AND FORSCOM COST SUMMARY
FOR COHORT TEST CADRE TRAINING IN FY85-86
(CURRENT $(000))

	FY85	FY86	TOTAL
PHASE I			
TRADOC	149.7	59.5	209.2
FORSCOM	15.2	4.7	19.9
TOTAL	164.9	64.2	229.1
PHASE II			
TRADOC	321.0	412.1	733.1
FORSCOM	63.4	122.8	186.2
TOTAL	384.4	534.9	919.3
PHASE I & II			
TRADOC	470.7	471.6	942.3
FORSCOM	78.6	127.5	206.1
TOTAL	549.3	599.1	1148.4

Table 2. NUMBER OF FORSCOM COHORT TEST CADRE TRAINED BY TYPE AND SCHOOL IN FY85-86

	FY 85				FY 86				
	IN	FA	AR	TOTAL	IN	FA	AR	TOTAL	TOTAL FY85-86
PH I ONLY									
OFFICER	25	0	0	25	0	0	0	0	25
ENLISTED	125	0	0	125	0	0	0	0	125
TOTAL	150	0	0	150	0	0	0	0	150
PH I AND PH II									
OFFICER	4	0	4	8	7	6	5	18	26
ENLISTED	27	0	17	44	49	45	18	112	156
TOTAL	31	0	21	52	56	51	23	130	182

Table 3. FORSCOM COHORT TEST CADRE TRAINING IN MAN- YEARS (MY) BY PHASE AND SCHOOL FOR FY85-86 *

	FY 85				FY 86				
	IN	FA	AR	TOTAL	IN	FA	AR	TOTAL	TOTAL FY85-86
PH I ONLY									
OFFICER	1.5	0.0	0.0	1.5	0.0	0.0	0.0	0.0	1.5
ENLISTED	7.5	0.0	0.0	7.5	0.0	0.0	0.0	0.0	7.5
TOTAL	9.0	0.0	0.0	9.0	9.0	18.0	27.0	54.0	63.0
PH I AND PH II									
OFFICER	0.4	0.0	0.3	0.7	0.7	0.5	0.4	1.6	2.3
ENLISTED	2.7	0.0	1.4	4.1	4.9	3.5	1.4	9.8	13.9
TOTAL	3.1	0.0	1.7	4.8	5.6	4.0	1.8	11.4	16 2

* PH I TRAINING FOR OSAIS IS 3 WEEKS LONG AND 2 WEEKS FOR USAFAS AND USAARMS.
PH II TRAINING FOR ALL 3 SCHOOLS IS 2 WEEKS LONG.

Table 4. PHASE I HISTORICAL TRADOC RESOURCE REQUIREMENTS
FOR COHORT TEST CADRE TRAINING BY APPROPRIATION AND SCHOOL IN FY85-88
(CURRENT $(000) AND MAN-YEARS (MY))

	FY 85				FY 86				TOTAL
OMA	IN	FA	AR	TOTAL	IN	FA	AR	TOTAL	FY85-88
CIV. PERSONNEL									
INSTRUCTORS	0.0	0.0	0.0	0	0.0	0.0	0.0	0	0
(MY)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0
SUPPORT	96.7	26.6	0	123.3	33.2	0.0	0.0	33.2	156.5
(MY)	(3.3)	(.9)	(0)	(4.2)	(1.1)	(0)	(0)	(1.1)	(5.3)
REPRO/P&M	1.9	0.0	0.2	2.1	0.4	0.0	0.4	0.8	2.9
TDY TO UNITS	5.2	0.0	0.0	5.2	0.1	5.8	0.0	5.9	11.1
OTHER	19.1	0.0	0.0	19.1	6.4	0.0	0.0	6.4	25.5
TOTAL OMA	122.9	26.6	0.2	149.7	40.1	5.8	0.4	46.3	196.0
MPA									
INSTR/SUPRT	0.0	0.0	0.0	0	0.0	13.2	0.0	13.2	13.2
(MY)	(0)	(0)	(0)	(0)	(0)	(0.3)	(0)	(0.3)	(0.3)
TOTAL PH I	122.9	26.6	0.2	149.7	40.1	19.0	0.4	59.5	209.2

Table 5. PHASE II HISTORICAL TRADOC RESOURCE REQUIREMENTS FOR COHORT TEST CADRE TRAINING IN FY85-86
(CURRENT $(000) AND MAN-YEARS(MY))

	FY85				FY86				TOTAL
OMA	IN	FA	AR	TOTAL	IN	FA	AR	TOTAL	FY85-86
CIV. PERSONNEL									
INSTRUCTORS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(MY)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
SUPPORT	93.8	0.0	0.0	93.8	100.3	1.6	0.0	101.9	195.7
(MY)	(3.2)	(0)	(0)	(3.2)	(3.5)	(.1)	(0)	(3.6)	(6.8)
SUPPLIES									
POL/PLL	3.0	0.0	14.9	17.9	6.0	0.0	9.7	15.7	33.6
OS/GS	0.0	0.0	11.4	11.4	0.0	0.0	7.4	7.4	18.8
OTHER	17.3	0.0	1.4	18.7	21.5	1.8	1.6	24.9	43.6
TOTAL OMA	114.1	0.0	27.7	141.8	127.8	3.4	18.7	149.9	291.7
MPA									
INSTR/SPRT	0.0	0.0	35.7	35.7	0.0	26.4	37.5	63.9	99.6
(MY)	(0)	(0)	(1)	(1)	(0)	(.6)	(1)	(1.6)	(2.6)
PAA									
AMMUNITION	43.5	0.0	100.0	143.5	87.0	0.0	111.3	198.3	341.8
TOTAL PH II	157.6	0.0	163.4	321.8	214.8	29.8	167.5	412.1	733.1

Table 6. PHASE I AND II HISTORICAL FORSCOM RESOURCE REQUIREMENTS FOR COHORT TEST CADRE TRAINING IN FY85-86
(CURRENT $(000))

	FY85				FY86				TOTAL
PHASE I	IN	FA	AR	TOTAL	IN	FA	AR	TOTAL	FY85-86
ONA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PAA	15.2	0.0	0.0	15.2	4.7	0.0	0.0	4.7	19.9
TOTAL PH I	15.2	0.0	0.0	15.2	4.7	0.0	0.0	4.7	19.9
PHASE II									
ONA-TDY	44.8	0.0	18.6	63.4	76.5	29.4	16.9	122.8	186.2
TOTAL PH II	44.8	0.0	18.6	63.4	76.5	29.4	16.9	122.8	186.2

ANNEX F

DEPARTMENT OF THE ARMY
US ARMY TRADOC ANALYSIS COMMAND
White Sands Missile Range, New Mexico 88002-5502

REPLY TO ATTENTION OF

ATRC-WDA

19 MAR 1987

SUBJECT: Transmittal of COHORT Cadre Training Evaluation - Cost Analysis, TRAC-WSMR TEA-12-86

Commander
US Army Training and Doctrine Command
ATTN: ATTG-C/ATRM-RA
Fort Monroe, VA 23651-5000

1. Reference:

a. Your ATTG-C, 251300Z Nov 86, (U) subject: COHORT Cadre Training Evaluation.

b. Message, this office, 111743Z Dec 86, (U) subject: COHORT Cadre Training Evaluation.

2. Subject report is transmitted for your retention and use. This report fulfills the requirement for cost analysis set forth in reference a and b.

3. TRAC-WSMR POC for this action is Mr. Douglas R. Johnson, AUTOVON 258-3290.

FOR THE DIRECTOR:

Encl

FERNANDO PAYAN, JR.
Director, Special Studies Directorate

TRAC-WSMR-TEA-12-86

COHESION OPERATIONAL READINESS TRAINING
COHORT CADRE

1.0 INTRODUCTION

1.1 Purpose. This report is an addendum to the TRAC-WSMR TEA-12-86 Cost Analysis directed by DCST, HQ TRADOC. This report presents an analysis of the resource (cost and manpower) requirements of two training alternatives for infantry, field artillery, and armor COHORT (Cohesion, Operational Readiness, Training) Cadre Training. The results are to be incorporated in a comprehensive report on COHORT cadre training by Headquarters Training and Doctrine Command (HQ TRADOC).

1.2 Background. This addendum to the COHORT Cadre Training Cost Analysis was generated because major changes in the student load requirements and cost analysis methodology was directed by DCST, HQ TRADOC. The new student load required for COHORT cadre training more than tripled the training requirements (see appendix A). The cost methodology change provides a consistent costing approach based on cost estimating relationships (CERs) and manpower estimating relationships (MERs) from the TRADOC-FORSCOM Resource Factor Handbook. There are two COHORT training phases described below.

a. Phase I training orients the cadre toward the COHORT unit concept and gives them refresher training in tasks specific to their military occupational specialty (MOS). This training is conducted at the unit's home station and consists of an exportable COHORT Leader Orientation Package and an exportable branch package from the appropriate school i.e., US Army Infantry School (USAIS), US Army Field Artillery School (USAFAS), or US Army Armor School (USAARMS).

b. Phase II training, designed by the branch schools, consists of a 2-week program of instruction (POI) and emphasizes how to train others in MOS-specific skills.

1.3 Study Alternatives. Phase I training is required under all alternatives. The cost of phase I training is constant between the alternatives.

a. Alternative 1: No phase II training, only phase I training.

b. Alternative 2: Conduct phase II training at the appropriate TRADOC branch school, requiring the FORSCOM cadre to be on TDY status.

c. Alternative 2 Excursion: Conduct phase II training at the FORSCOM units requiring TRADOC school instructors to be on TDY status instead of the FORSCOM cadre. TRADOC trainers are hereafter referred to as a mobile training team (MTT). This excursion is the MTT option to alternative 2.

Encl

1.4 Ground Rules

a. Costs are presented in constant FY87 thousands (000) of dollars for the FY87-91 timeframe. Costs incurred before FY87 are considered sunk.

b. Where necessary, HQ TRADOC, ATRM-R, inflation guidance of 14 Feb 86 was used in converting current dollars to constant FY87 dollars.

c. FORSCOM-TRADOC Resource Factor Handbook, Cost Planning Factors, Apr 86, VOL I, was used to estimate military pay and allowances and was used to develop mission and base operation costs and personnel requirements.

d. Cost and manpower estimates for phase I and phase II COHORT cadre training were based on the DCST, HQ TRADOC-provided document entitled, "DA UPDATE, 7 Oct 1986, Proposed Student Load for COHORT Cadre Training" (hereafter referred to as the revised ramp-up). See appendix A.

e. Nonpersonnel mission costs developed from the FORSCOM-TRADOC Resource Factor Handbook were used to estimate the training supply costs of the MTT borne by FORSCOM units.

f. Cadre military pay and allowances were excluded since the end-strength levels of the Army are independent of the COHORT cadre issue.

g. All estimates contained in this report are provided for cost analysis purposes and should not be used for budgetary purposes.

h. Base operations costs for FORSCOM units were developed from cost and manpower estimating relationships provided by DCSRM, HQ TRADOC. See appendix B.

1.5 Assumptions

a. The acquisition costs of inherited assets was considered sunk; however, recurring costs for equipment and facilities were included in the analysis.

b. Ammo costs for COHORT cadre training provided by DCSPRD, HQ TRADOC are shown in appendix C. Since these costs have not been programed and would have to be taken "out-of-hide," they are displayed in the school resource requirements but not considered in the comparative analysis.

c. Equipment costs for COHORT cadre training provided by DCSPR, HQ TRADOC (shown in appendix C) are nonrecurring investment costs. It is assumed that all required equipment is available at each school or unit to accomplish COHORT cadre training. Only the recurring or sustainment costs are considered in the comparative analysis.

2.0 METHODOLOGY

2.1 Data Development. Cost data for this analysis was provided to TRAC-WSMR on 4 Nov 86 by DCST, HQ TRADOC (appendix C). This cost data includes:

a. Equipment costs for COHORT cadre training developed by DCSPR, HQ TRADOC.

b. Training ammo costs for COHORT cadre training developed by DCSPR, HQ TRADOC.

c. Mission and base ops costs and manpower requirements for phase II COHORT cadre training developed by DCSRM, HQ TRADOC.

These cost data provide the basis for generating the resource requirements for COHORT cadre training in phase II and also the completion of a comparative cost analysis. Phase I training costs were developed from school-provided estimates (see appendix D) of the exportable COHORT Leader Orientation Package and the exportable unique branch packages. The school methodologies for developing phase I training were inconsistent in content and approach; therefore a consistent methodology was developed by TRAC-WSMR based on school-provided data.

2.2 Resource Requirements

2.2.1 The cost data provided by DCSPR for training equipment and ammo is shown as a possible resource requirement. Due to the lack of resource impact studies by the schools it was assumed that ammo would be taken "out-of-hide" and equipment is an "inherited" asset. Only the recurring operating and support costs of equipment is costed. These resources being constant between the phase II options will not influence the comparative analysis. The resource requirements developed by DCSRM, HQ TRADOC were estimated from CERs and MERs applied consistently to the individual branch schools. These estimates provide consistency suitable for comparative analysis.

2.2.2 Phase I training costs originally estimated by each school (see appendix D) used various methods and assumptions for estimating. In some cases costs were omitted assuming they were taken "out-of-hide" while other schools included them. For purposes of this study the Infantry School methodology was applied to all branch schools.

2.3 Alternative Comparison Methodology. As stated in section 1.3, Study Alternatives, phase I training costs are constant between all alternatives. Phase II training costs differ significantly between study alternatives. The cost comparison considers the following essential elements of analysis.

a. What are phase I costs and how do they compare to phase II costs?

b. What is the least costly method of conducting phase II training?

c. What is the least costly method of conducting phase II training for TRADOC and FORSCOM?

d. What are the major cost drivers in phase II training?

e. What cost drivers account for the major differences in costs between alternatives?

The detailed analysis of training alternatives are presented below.

3.0 RESOURCE ANALYSIS

3.1 Resource Requirements.

3.1.1 Table 1 shows the phase I COHORT cadre training summarized by branch school. TRADOC costs consist of nonpersonnel costs including reproduction and mailing of course materials to each FORSCOM unit. Personnel costs are for civilian personnel required to develop, maintain, and update course materials. FORSCOM costs include a cost for base operations based on the student load and permanent party load. The manpower resource shown is for TRADOC civilians required to develop and upgrade phase I training materials at each branch school.

Table 1. PHASE I DEVELOP/SEND TRAINING MATERIELS - SUMMARY
(Constant FY87 000$)

	Ft Benning	Ft Knox	Ft Sill	Total
TRADOC COSTS				
MISSION				
Non Personnel	9.4	8.8	4.9	23.1
Personnel - OMA	172.0	172.0	172.0	516.0
Personnel - MPA	-	-	-	-
Total	$ 181.4	$ 180.8	$ 176.9	$ 539.1
Instructor TDY	-	-	-	-
Total TRADOC Cost	$ 181.4	$ 180.8	$ 176.9	$ 539.1
FORSCOM COSTS	$ 193.6	$ 134.6	$ 51.2	$ 379.4
Total TRADOC + FORSCOM Costs	$ 375.0	$ 315.4	$ 228.1	$ 918.5
MANPOWER				
MISSION				
Personnel - Civ	5.5	5.5	5.5	16.5

3.1.2 Table 2 summarizes the COHORT resource requirements for phase II training if conducted at the branch schools. TRADOC costs are broken out as mission costs and base ops costs. The mission costs include personnel and nonpersonnel costs. Nonpersonnel costs include costs for training supplies and equipment and operations. Personnel costs (OMA) is pay for civilian support and MPA is the pay and allowance for military instructors. Base ops

costs include nonpersonnel and personnel costs. Nonpersonnel costs include costs for operating and maintaining ranges, classrooms and other base operations in support of the school. Personnel costs are for base operations supporting the school activities. FORSCOM cadre TDY costs include the cost for transportation and perdiem of cadres during the 2-week COHORT training at the branch school. Other costs shown related to training include nonvehicle equipment costs and ammo costs. These costs are shown separately from the TRADOC and FORSCOM costs. TRADOC manpower resources include support personnel and instructor personnel dedicated to the mission. Personnel for base ops support the range, classroom and housing requirements for training. The FORSCOM cadre training is shown by total students trained and student load. Detailed displays of phase II resources by branch school time-phased over 5 years (FY87 through FY91) are shown in appendix E. The reason for the large difference in costs of Fort Sill from the other schools is primarily the difference in number of students trained. This can be seen at the bottom of table 2 where it shows the FORSCOM number of students.

Table 2. PHASE II - COSTS OF ALTERNATIVE 2 COHORT RESOURCES SUMMARY
(Constant FY87 000$)

	Ft Benning	Ft Knox	Ft Sill	Total
TRADOC COSTS				
MISSION				
Non Personnel	184.1	121.8	112.5	$ 418.4
Personnel - OMA	83.6	279.6	92.8	456.0
Personnel - MPA	1,823.0	1,857.9	439.9	4,120.8
Total	$ 2,090.7	$2,259.3	$ 645.2	$ 4,995.2
BASE OPS				
Non Personnel	276.4	194.5	80.5	$ 551.4
Personnel - Civ	512.1	254.1	120.0	886.2
Personnel - Mil	141.2	101.7	34.1	277.0
Total	$ 929.7	$ 550.3	$ 234.6	$ 1,714.6
Total TRADOC	$ 3,020.4	$2,809.6	$ 879.8	$ 6,709.8
FORSCOM COSTS				
Student TDY:	$ 7,644.9	$2,288.0	$ 942.9	$10,875.8
TOTAL FORSCOM + TRADOC	$10,665.3	$5,097.6	$1,822.7	$17,585.6
Other Costs				
Hardware N/Veh	$ 165.8	$ 12.3	$ 142.3	$ 450.4
Ammo	$ 7,700.0	$8,800.0	-	$16,500.0
MANPOWER				
TRADOC				
Mission - Civ	4	12	4	
- Mil	40	42	10	
Base Ops - Civ	22	10	5	
- Mil	4	3	1	
TOTAL - Civ	26	22	9	57
- Mil	44	45	11	100
Total	70	67	20	157
FORSCOM				
Students - Number	5,742	3,657	1,530	10,929
Student - MY	(221.4)	(139.8)	(59.2)	(420.4)

3.1.3 Table 3 summarizes the resource requirements for phase II assuming an MTT option. This option accomplishes the same training function but with a MTT exported to the individual FORSCOM unit locations for two weeks. TRADOC pays instructor TDY but does not operate ranges and classrooms for instruction. FORSCOM will bear the cost of training supplies (mission-nonpersonnel cost) and of classrooms and ranges (base ops costs). The TRADOC manpower required is limited to instructors while FORSCOM requires civilian personnel to maintain and operate ranges and classrooms. This is in addition to the FORSCOM student load. Detailed displays of phase II resources for the MTT option are in appendix F. The reason for the large difference in costs of Fort Sill is the students trained as seen at the bottom of table 3.

Table 3. PHASE II MTT OPTION SUMMARY
(Constant FY87 000$)

	Ft Benning	Ft Knox	Ft Sill	Total
TRADOC COSTS				
MISSION				
Personnel - OMA	83.6	279.6	92.8	456.0
Personnel - MPA	1,823.0	1,857.9	439.9	4,120.8
Total	$ 1,906.6	$2,137.5	$532.7	$ 4,576.8
Instructor TDY	$ 1,376.0	$ 718.2	$164.0	$ 2,258.2
Total TRADOC Cost	$ 3,282.6	$2,855.7	$696.7	$ 6,835.0
FORSCOM COSTS				
Mission				
Non Personnel	$ 184.1	$ 121.8	$112.5	$ 418.4
BASE OPS	$ 387.1	$ 269.2	$102.4	$ 758.7
Total FORSCOM Cost	$ 571.2	$ 391.0	$214.9	$ 1,177.1
TOTAL TRADOC + FORSCOM	$ 3,853.8	$3,246.7	$911.6	$ 8,012.1
MANPOWER				
TRADOC				
Mission - Civ	4	12	4	20
- Mil	40	42	10	92
FORSCOM				
BASE OPS - Civ	14	10	4	28
Students - Number	5,742	3,657	1,530	10,929
Student - MY	(221.4)	(139.8)	(59.2)	(420.4)

3.2 Comparative Analysis

a. Table 4 shows phase II training costs for TRADOC and FORSCOM in detail. TRADOC costs include mission, base operations, and instructor TDY as applicable. FORSCOM costs include mission and base operations costs and student TDY costs as applicable.

b. Phase II training, if conducted at TRADOC schools, is much more costly than conducting the training at FORSCOM units ($17.6M versus $8.0M). TRADOC's total phase II training costs are about the same under either option due to trade-offs between base operations costs and instructor TDY costs (see table 4).

c. FORSCOM's total phase II training costs ($10.9M versus $1.2M) are much higher if the training is conducted at TRADOC schools due to student TDY costs.

Table 4. PHASE II TRAINING COSTS*
(Constant FY87 000$)

	Train at TRADOC Alt 2	Train at FORSCOM Alt 2, MTT Option
TRADOC Costs		
Mission	$ 4,995	$4,577
Base Ops	1,715	-
Instructor TDY	-	2,258
Total TRADOC	$ 6,710	$6,835
FORSCOM Costs		
Mission + Base Ops	-	$1,177
Student TDY	10,876	-
Total FORSCOM	10,876	1,177
Total Phase II Cost	$17,586	$8,012

***Phase II training costs of approximately 11,000 students for FY87-91 timeframe.**

d. On a cost basis, the preferred method of accomplishing phase II training is to conduct it at the FORSCOM units (MTT Option). The associated phase II training cost would be approximately $8M.

e. Table 5, column 1, shows that total cost (phases I and II) for alternative 2 using the MTT option to be $8.9M. Column 2 shows the total cost if no phase II training is conducted ($.9M). The cost differences between these alternatives ($6.8M TRADOC and $1.2M FORSCOM) represent these command's respective phase II training costs under the MTT option.

Table 5. COHORT ALTERNATIVE COSTS BY COMMAND*
(Constant FY87 $000)

	Col. 1 Alt 2: MTT Option Train at FORSCOM Units	Col.2 Alt 1: No Phase II Training	Col. 1 - Col. 2 Difference	Alt 2 Train at TRADOC Schools
TRADOC Costs				
Phase I	539	539	0	539
Phase II	6,835	-	6,835	6,710
Total TRADOC	7,374	539	6,835	7,249
FORSCOM Costs				
Phase I	379	379	0	379
Phase II	1,177	-	1,177	10,876
Total FORSCOM	1,556	379	1,177	11,255
Total	8,930	918	8,012	18,504

***Costs based on approximately 11,000 students for FY87-91 timeframe.**

3.4 Cost Per Student. Table 6 summarizes the cost per student for COHORT cadre training by alternative and by branch school. Alternative 1 costs are very low. Alternative 2 with training at the school costs about double the cost of training at the FORSCOM units. This cost difference is borne by FORSCOM. Student TDY cost is the major FORSCOM cost driver if phase II training is conducted at the schools. Thus, total phase II costs increase in direct proportion to student quantity. Total phase II training costs are less sensitive to student quantity if conducted at FORSCOM units.

Table 6. COHORT - COST PER STUDENT* BY ALTERNATIVE
(Constant FY87 $)

	Ft Benning	Ft Knox	Ft Sill
Students Trained:	5,742	3,657	1,530
Cost Per Student:			
Alternative 1	$ 65	$ 86	$ 149
Alternative 2	1,923	1,480	1,341
Alternative 2 (MTT Option)	737	974	745

***Excludes ammo costs**

4.0 CONCLUSIONS

4.1 Alternative 1 (phase I only) is the least expensive alternative. Phase I training is borne about equally by TRADOC and FORSCOM.

4.2 Alternative 2 with training at FORSCOM is the least expensive option for alternative 2. Costs of conducting phase II training at FORSCOM units is approximately $8M. Costs for conducting phase II training at TRADOC costs about $10M more than at FORSCOM units.

4.3 The TRADOC costs are about the same when training at the branch schools or at the units, however FORSCOM pays about $11M for TDY to have their students train at TRADOC branch schools.

4.4 On a cost per student basis and a total cost basis training at the unit is significantly less expensive (one-half) than training COHORT units at TRADOC branch schools.

APPENDIX A

STUDENT TRAINING REQUIREMENTS

	FY87	FY88	FY89	FY90	FY91	TOTAL
Infantry School						
Old Ramp-Up	300	450	270	330	480	1,830
New Ramp-Up	1,102	1,305	1,450	783	1,102	5,742
Field Artillery School						
Old Ramp-Up	160	115	201	160	125	761
New Ramp-Up	225	375	270	315	345	1,530
Armor School						
Old Ramp-Up	84	252	63	84	252	735
New Ramp-Up	368	506	805	943	1,035	3,657
Total						
Old Ramp-Up						3,326
New Ramp-Up						10,929

APPENDIX B

FORSCOM - BASE OPS RESOURCE FACTORS*

$1,481 per military manyear supported includes:

student load, permanent party, and MTT instructors

Civilian personnel requirement:

.055 factor x military manyear supported

e.g., 100my x .055 = 5.5 civ spaces (OMA)

*Provided by Mr. Mike Rattsman, DCSRM, HQ TRADOC.

FACSIMILE TRANSMITTAL HEADER SHEET

COMMAND	NAME/OFFICE SYMBOL	TELEPHONE NO.	AUTHORIZED RELEASOR'S SIGNATURE
FROM: HQ TRADOC Fort Monroe, VA (ATTG-C)	Sharon Stetson ATTG-C	AV 680-4365	Sharon Stetson
TO: TRAC White Sands Missile Range, NM	Mr. Johnson ATCR-TDA	AV 835-2518	DATE-TIME GROUP: / PAGES: / SUBJECT:

CLASSIFICATION	NO. PGS.	PRECEDENCE	REMARKS
Unclassified Priority	16	Priority	Please call Mr. Johnson at AV 835-2518 for pickup.

SPACE BELOW FOR COMMUNICATIONS CENTER USE ONLY

DA FORM 2028-R
1 AUG 79

APPENDIX C

ROUTING AND TRANSMITTAL SLIP

Date: 4 Nov 86

TO: (Name, office symbol, room number, building, Agency/Post)	Initials	Date
1. Jerry Johnson		
2.		
3.		
4.		
5.		

	Action		File		Note and Return
	Approval		For Clearance		Per Conversation
	As Requested		For Correction		Prepare Reply
	Circulate	X	For Your Information		See Me
	Comment		Investigate		Signature
	Coordination		Justify		

REMARKS Subject: COHORT Cable Cost Analysis

(1) Enclosed is the information from ODCSRM and PRD. I've annotated PRD's equipment data since we may [illegible] to cost the vehicles. [illegible] ask the schools if these vehicles are not presently there and if they could be used for COHORT cable training. Also, the graph shows differences among schools per student cost.

(2) If you need anything else, please let me know.

(3) Please let me know when you've received the information. Thanks.

[signature]

DO NOT use this form as a RECORD of approvals, concurrences, disposals, clearances, and similar actions

FROM: (Name, org. symbol, Agency/Post): Dr. [signature]

Room No.—Bldg

Phone No. 680-4[illegible]

5041-102

OPTIONAL FORM 41 (Rev. 7-76)
Prescribed by GSA
FPMR (41 CFR) 101-11.206

DISPOSITION FORM

For use of this form, see AR 340-15; the proponent agency is TAGO

REFERENCE OR OFFICE SYMBOL	SUBJECT
ATTG-R	Cost for COHORT Cadre Training

TO	FROM	DATE	CMT 1
Dir, TCA	Dir, PR	28 Oct 86 Mr. Holbruner/alb/4448	

1. Attached at enclosure 1 are the equipment costs for the Infantry input for COHORT cadre training. Several line item numbers could not be identified, e.g., Small Arms Alignment Fixture; Microphone, Chest, M30, Vehicle System Test Set; Controller Gun, and MILES Kit, Viper.

2. Costs were taken from the DA Supply Bulletin 700-20, dated Sep 85.

3. Suggest LIN be obtained from the originator for those items not identified. Also, suggest the quantity of LIN M75714 be verified.

4. The optimum class size used for computations was 30 students.

Encl

ROBERT H. SMITH
COL, GS
Director, Program and Resources

Infantry

COST FOR COHORT CADRE TRAINING

LIN	UNIT COST	QTY	TOTAL COST	
A72260	710	1	710.00	
B67081	210	10	2100.00	
B68790	5.44	6	33.00	
D12087	160,002	2	320,004.00	
E56896	369,906	1	369,906.00	
J45699	4,491	1	4,491.00	
L44595	214	6	1,284.00	
U42808	41.41	1	41.00	
X60833*	3,196	1	3,196.00	
R50681	836,512	1	836,512.00	
R94977	446	30	13,380.00	
T05028	11,520	1	11,520.00	
M75714	259	1 (3)	259.00	(777)
X40009	14,249	1	14,249.00	
H04732	3,212	10	32,120.00	
X58504	15,830	1	15,830.00	
R50544	263,660	1	263,660.00	
Q21483	244	2	488.00	
P84187	329	1	329.00	
L92386	2,715	3	8,145.00	
J81750	1,497,312	1	1,497,312.00	
W98825	6,645	1	6,645.00	
X38562	7,838	1	7,838.00	
Q38299	1,462	10	14,620.00	
L44999	32.96	2	65.00	
L63994	2,114	1	2,114.00	
S58707	1,266	30	37,980.00	
S88164	1,311	18	23,598.00	
S58775	3,679	3	11,037.00	
S88266	5,210	1	5,210.00	
		TOTAL	3,505,194.00	

*NOTE: The M151 1/4 ton should be replaced by the CUCV or HMMWV.

Infantry

Annotated

COST FOR COHORT CADRE TRAINING

LIN	UNIT COST	QTY	TOTAL COST
A72260	710	1	710.00
B67081	210	10	2100.00
B68790	5.44	6	33.00
D12087 (M113)	160,002	2	320,004.00
E36896 (ITV)	369,906	1	369,906.00
J45699	4,491	1	4,491.00
L44595	214	6	1,284.00
U42808	41.41	1	41.00
X60833* (M151)	3,196	1	3,196.00
B50681 (M88)	836,512	1	836,512.00
B94977	446	30	13,380.00
T05028 (M1008)	11,520	1	11,520.00
M75714	259	1 (3)	259.00 (777)
X40009 (Truck, M35)	14,249	1	14,249.00
N04732	3,212	10	32,120.00
X58504 (2½ ton truck)	15,830	1	15,830.00
B50544 (M578)	263,660	1	263,660.00
Q21483	244	2	488.00
P84187	329	1	329.00
L92386	2,715	3	8,145.00
J81750 (M4)	1,497,312	1	1,497,312.00
W98825 (Tank Trailer)	6,645	1	6,645.00
X38562	7,838	1	7,838.00
Q38299	1,462	10	14,620.00
L44999	32.96	2	65.00
L63994	2,114	1	2,114.00
S58707	1,266	30	37,980.00
S88164	1,311	18	23,598.00
S58775	3,679	3	11,037.00
S88266	5,210	1	5,210.00
		TOTAL	3,505,194.00

$1/65,842 Non vehicle Hdwe Cost

*NOTE: The M151 1/4 ton should be replaced by the CUCV or HMMWV.

DISPOSITION FORM

For use of this form, see AR 340-15, the proponent agency is TAGO.

REFERENCE OR OFFICE SYMBOL	SUBJECT
ATTG-R	Costs for COHORT Cadre Training

TO: Dir, TCA

FROM: Dir, PRD

DATE: 20 Oct 86

CMT 1

Mr. Holbruner/ej/4448

1. Attached at enclosure 1 is the ammunition costs requested to support the COHORT Cadre training. Costs for the required ammunition were extracted from applicable Program of Instruction (POI) and the TAMIS Cost File.

2. At enclosures 2 and 3 are the equipment costs for the items listed in the equipment summaries of the POI for COHORT Cadre training. The cost per item is provided from Supply Bulletin 700-20, Army Adopted Item of Equipment, dated September 1985. The quantities and costs are based on optimum class size.

3. Several requirements quantities for equipment are listed on the equipment summaries using the maximum class size rather than the optimum class size. The binoculars, tanks and machine guns are items in question.

Encls

ROBERT H. SMITH
Colonel, GS
Director, Program and Resources

5

DA FORM 1496 PREVIOUS EDITIONS WILL BE USED

The following are training ammunition costs to conduct projected COHORT training. These items have never been programmed and may not be available unless taken "out of hide". Of particular concern are the pyrotechnic and smoke items (LIMA & Golf items).

Infantry

87	88	89	90	91
$1.5M	$1.7M	$1.9M	$1.1M	$1.5M

Armor

87	88	89	90	91
$ .9M	$1.2M	$1.9M	$2.3M	$2.5M

Artillery

No ammo used

Artillery POI - WI4422

LIN	UNIT COST	QTY	TOTAL COST
D11049	$106,425	3	$319,275
E98103	217	3	651
K57392	126,016	3	378,048
K56981	529,967	3	1,589,901
K57667	285,000	3	855,000
K57821	208,000	3	624,000
N02758	164	1	164
Q34308	1,325	8	10,600
Q38299	1,462	3	4,386
Q53001	4,986	8	39,888
Q54174	7,289	8	58,312
Q78282	1,197	8	9,576
S01373	2,300	8	18,400
T40405	161	2	322
W98825	6,645	1	6,645
X39432	5,000	3	15,000
X40009	41,822	1	41,822
X40077	48,574	3	145,722
X40794	69,754	3	209,262
X60833	16,214	3	48,642
			$4,375,616

Artillery POI - WT4422

LIN		UNIT COST	QTY	TOTAL COST
D11049	(Cargo Carrier)	$106,425	3	$319,275
E98103		217	3	651
K57392	(How. Tract, M55)	126,016	3	378,048
K56981	(How Tract, 8.4)	529,967	3	1,589,901
K57667	(How. Tract, 155 mm)	285,000	3	855,000
K57821	(How. Tract, modified)	208,000	3	624,000
M02758		164	1	164
Q34308		1,325	8	10,600
Q38299		1,462	3	4,386
Q53001		4,986	8	39,888
Q54174		7,289	8	58,312
Q78282		1,197	8	9,576
S01373		2,300	8	18,400
T40405		161	2	322
W98825	(Trailer Tank)	6,645	1	6,645
X39432	(Truck, ¼ ton)	5,000	3	15,000
X40009	(Truck, ¾ ton)	41,822	1	41,822
X40077	(Truck, 2½ ton (M36/M	48,574	3	145,722
X40794	(Truck, 5 ton)	69,754	3	209,262
X60833	(Truck, ¼ ton)	16,214	3	48,642

$4,375,616

~~$148,744~~ non vehicle Hdwr cost
$142,299

Encl 2

Armor

LIN	UNIT COST *	QTY	QTY	QTY	TOT COST	
B67218	467	10*	10*	10*	4,670	
K33400						
L	340	10	10	10	3,400	
S	340	15	15	15	5,100	
M	340	15	15	15	5,100	
L92112	21,189	10*	10*	10*	211,890	
L92352	4,650	10*	10*	10*	46,500	
M10936						
M	234	10	10	10	2,340	
S	234	15	15	15	3,510	
L	234	15	15	15	3,510	
Q03468	189	2	2	2	378	
Q56783	1,941	10	10	10	19,410	
V13101	716,111	10*			7,716,111	(M60A1)
T13169	1,292,865		10*		12,918,650	(M60A3)
T13574	1,817,000			10*	18,170,000	(M1)
X60833	16,214	1	1	1	16,214	
X38961	13,924	1	1	1	13,924	
X4G009	41,822	1	1	1	41,822	
W98825	1,284	1	1	1	1,284	
A01942	12.31	0	10	10	123	
TOTALS		$8,095,286	$13,297,815	$[illegible],549,174		

NOTE: Quantities are reduced from the POI. To obtain costs for the increased number, multiply the unit cost by the difference.

Armor

LIN	UNIT COST *	QTY	QTY	QTY	TOT COST
B67218	467	10*	10*	10*	4,670
K33400					
L	340	10	10	10	3,400
S	340	15	15	15	5,100
M	340	15	15	15	5,100
L92112 (M60A3)	21,189 (gun)	10*	10*	10*	211,890
L92352 (M60A3)	4,650 (gun)	10*	10*	10*	46,500
M10936					
M	234	10	10	10	2,340
S	234	15	15	15	3,510
L	234	15	15	15	3,510
Q03468	189	2	2	2	378
Q56783	1,941	10	10	10	19,410
V13101	716,111	10			7,716,111 (M60A3)
T[illegible],169 (M[illegible]	1,292,865 (gun)		10*		12,918,650 (M60A3)
T13374 (M1)	1,817,000			10*	18,170,000 (M1)
X60833 (Truck)	16,214 (4 ton)	1	1	1	16,214
F38961 (Dump)	13,924 (1½ ton)	1	1	1	13,924
X40009 (Truck	41,822 (5 ton)	1	1	1	41,822
W98825 (Trk. Tow)	1,284	1	1	1	1,284
A01942	12.31	10	10	10	123
TOTALS		$8,095,286	$13,297,815	$18,549,174	

NOTE: Quantities are reduced from the POI. To obtain costs for the increased number, multiply the unit cost by the difference.

$5,811 Non vehicle HDWR Cr
$47,541

DISPOSITION FORM

For use of this form, see AR 340-15, the proponent agency is TAGO.

REFERENCE OR OFFICE SYMBOL	SUBJECT
ATRM-RA	Cohesion Operational Readiness Training Cohort Cadre

TO: ATIG-C
ATTN: Dr. Stenson

FROM: DCSRM

DATE: 28 OCT 1986

CMT 1

Robin Bates/aw/4451

As required from the 1 October 86 COHORT Meeting in DCSRM Conference Room, the following cost estimates are at enclosure

FOR THE DEPUTY CHIEF OF STAFF FOR RESOURCE MANAGEMENT:

for Michael D. Rathman

MERVIN A. FRANTZ
Director, Management and
Resource Directorate

Encl

11

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Resource Impact Associated With a Change in Student Load

RECAP

Mission	Ft Benning	Ft Knox	Ft Sill 645,047
Total	$2,090,637	$2,259,432	$ ~~472,198~~
Non-Personnel	$ 184,037	$ 121,893	$ 112,367
Personnel(OMA)	$ 83,540	$ 279,672	$ 92,824
Personnel(MPA)	$1,823,060	$1,857,867	$ 439,856
Manpower			
Total	44	54	14
Military	40	42	10
Civilian	4	12	4
Base Ops			
Total	$ 929,787	$ 550,317	$ 234,802
Non-Personnel	$ 276,388	$ 194,534	$ 80,499
Personnel(OMA)	$ 512,099	$ 254,152	$ 120,220
Personnel(MPA)	$ 141,300	$ 101,631	$ 34,083
Manpower			
Total	26	13	6
Military	4	4	1
Civilian	22	10	5
TOTAL			
Total	$3,020,424	$2,809,749	$ 879,849
Non-Personnel	$ 460,425	$ 316,427	$ 192,866
Personnel(OMA)	$ 595,639	$ 533,824	$ 213,044
Personnel(MPA)	$1,964,360	$1,959,489	$ 473,939
Total	70	68	20
Military	44	46	11
Civilian	26	22	9

Resource Impact Associated With a Change in Student Load

INSTALLATION: Ft Knox--Armor School

Mission	FY 87	FY 88	FY 89	FY 90	FY 91
Total	$264,022	$332,229	$487,730	$533,466	$641,985
Non-Personnel	$ 12,523	$ 16,698	$ 26,716	$ 31,726	$ 34,230
Personnel(OMA)	$ 23,306	$ 46,612	$ 69,918	$ 69,918	$ 69,918
Personnel(MPA)	$228,193	$268,919	$391,096	$431,822	$537,837
Manpower					
Total	6	8	12	13	15
Military	5	6	9	10	12
Civilian	1	2	3	3	3
Base Ops					
Total	$ 46,110	$ 52,319	$127,132	$159,791	$164,965
Non-Personnel	$ 20,695	$ 26,904	$ 42,425	$ 49,668	$ 54,842
Personnel(OMA)	$ 25,415	$ 25,415	$ 50,830	$ 76,246	$ 76,246
Personnel(MPA)	-	-	$ 33,877	$ 33,877	$ 33,877
Manpower					
Total	1	1	3	4	4
Military	0	0	1	1	1
Civilian	1	1	2	3	3
TOTAL					
Total	$310,132	$384,548	$614,862	$693,257	$806,950
Non-Personnel	$ 33,218	$ 43,602	$ 69,141	$ 81,394	$ 89,072
Personnel(OMA)	$ 48,721	$ 72,027	$120,748	$146,164	$146,164
Personnel(MPA)	$228,193	$268,919	$424,973	$465,699	$571,714
Manpower	7	9	15	17	19
Military	5	6	10	11	13
Civilian	2	3	5	6	6

Resource Impact Associated With a Change in Student Load

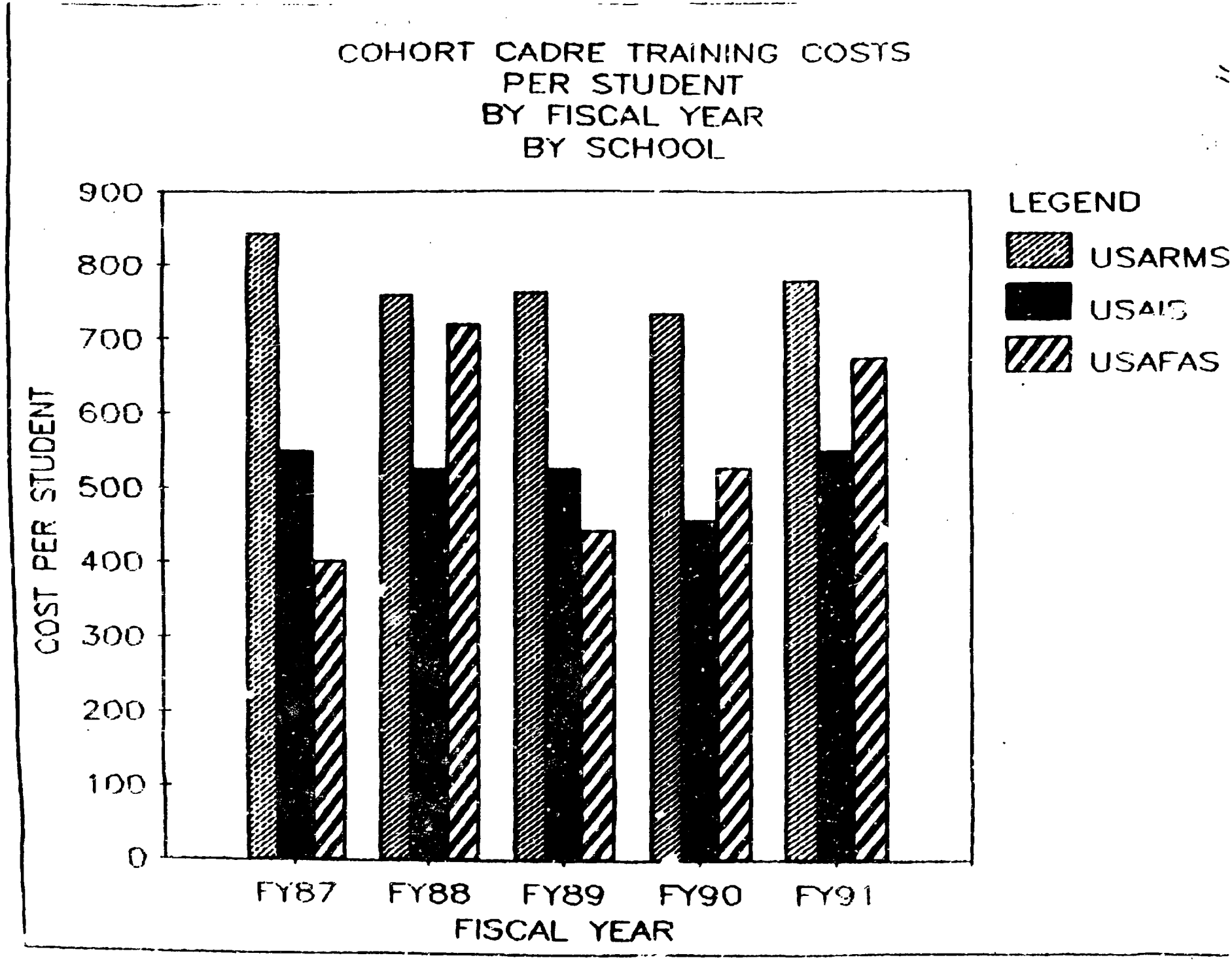
INSTALLATION: Ft Sill--Field Artillery School

Mission	FY 87	FY 88	FY 89	FY 90	FY 91
Total	$ 55,444	$192,054	$ 82,275	$125,033	$190,241
Non-Personnel	$ 16,311	$ 27,186	$ 19,936	$ 23,561	$ 25,373
Personnel(OMA)	-	$ 23,206	$ 23,206	$ 23,206	$ 23,206
Personnel(MPA)	$ 39,133	$141,662	$ 39,133	$ 78,266	$141,662
Manpower					
Total	1	4	2	3	4
Military	1	3	1	2	3
Civilian	0	1	1	1	1
Base Ops					
Cost	$ 35,224	$ 78,252	$ 37,460	$ 40,815	$ 43,051
Non-Personnel	$ 11,180	$ 20,125	$ 13,416	$ 16,771	$ 19,007
Personnel(OMA)	$ 24,044	$ 24,044	$ 24,044	$ 24,044	$ 24,044
Personnel(MPA)	-	$ 34,083	-	$ -	$ -
Manpower					
Total	1	2	1	1	1
Military	0	1	0	0	0
Civilian	1	1	1	1	1
TOTAL					
Total	$ 90,668	$270,306	$119,735	$165,848	$233,292
Non-Personnel	$ 27,491	$ 47,311	$ 33,352	$ 40,332	$ 44,380
Personnel(OMA)	$ 24,044	$ 47,250	$ 47,250	$ 47,250	$ 47,250
Personnel(MPA)	$ 39,133	$175,745	$ 39,133	$ 78,266	$141,662
Manpower	2	6	3	4	5
Military	1	4	1	2	3
Civilian	1	2	2	2	2

Resource Impact Associated With a Change in Student Load

INSTALLATION: Ft Benning--Infantry School

Mission	FY 87	FY 88	FY 89	FY 90	FY 91
Total	$425,051	$472,339	$518,021	$250,175	$425,051
Non-Personnel	$ 35,361	$ 41,790	$ 46,612	$ 24,913	$ 35,361
Personnel(OMA)	$ 20,885	$ 20,885	$ 20,885	-	$ 20,885
Personnel(MPA)	$368,805	$409,664	$450,524	$225,262	$368,805
Manpower					
Total	9	10	11	5	9
Military	8	9	10	5	8
Civilian	1	1	1	0	1
Base Ops					
Total	$181,862	$214,386	$244,856	$106,821	$181,862
Non-Personnel	$ 53,428	$ 62,675	$ 69,868	$ 36,989	$ 53,428
Personnel(OMA)	$ 93,109	$116,386	$139,663	$ 69,832	$ 93,109
Personnel(MPA)	$ 35,325	$ 35,325	$ 35,325	-	$ 35,325
Manpower					
Total	5	6	7	3	5
Military	1	1	1	0	1
Civilian	4	5	6	3	4
TOTAL					
Total	$606,913	$686,725	$762,877	$356,996	$606,913
Non-Personnel	$ 88,789	$104,465	$116,480	$ 61,902	$ 88,789
Personnel(OMA)	$113,994	$137,271	$160,548	$ 69,832	$113,994
Personnel(MPA)	$404,130	$444,989	$485,849	$225,262	$404,130
Manpower	14	16	18	8	14
Military	9	10	11	5	9
Civilian	5	6	7	3	5


COHORT CADRE TRAINING COSTS
PER STUDENT
BY FISCAL YEAR
BY SCHOOL
900
800
700
600
500
400
300
200
100
0
COST PER STUDENT
FY87
FY88
FY89
FY90
FY91
FISCAL YEAR
LEGEND
USARMS
USAID
USAFAS

APPENDIX D

PHASE I BASED ON SCHOOL DATA SUMMARY
(Constant FY87 000$)

	Ft Benning	Ft Knox	Ft Sill	Total
TRADOC COSTS				
MISSION				
Non Personnel	43.4	38.9	0.5	82.8
Personnel - OMA	172.0	-	-	172.0
Personnel - MPA	-	-	530.3	530.3
Total	$ 215.4	$ 38.9	$ 530.8	$ 785.1
Instructor TDY	$ 81.2	-	$ 141.2	$ 222.4
Total TRADOC Cost	$ 296.6	$ 38.9	$ 672.0	$ 1,007.5
FORSCOM COSTS	None	None		
Mission				
Non Personnel			$ 112.3	$ 112.3
BASE OPS	$ 193.6	$ 134.6	$ 51.2	$ 379.4
Total FORSCOM Cost	$ 193.6	$ 134.6	$ 163.5	$ 491.7
TOTAL TRADOC + FORSCOM	$ 490.2	$ 173.5	$ 815.5	$ 1,499.2
MANPOWER				
TRADOC				
Mission - Civ	5.5	-	-	5.5
- Mil	-	-	11.6	11.6
FORSCOM				
BASE OPS - Civ	-	-	5	5
- Mil	-	-	1	1
Students - Number	5,742	3,657	1,530	10,929
Student - MY	(221.4)	(139.8)	(59.2)	(420.4)

Table E-1. FORT BENNING - INFANTRY SCHOOL PHASE II RESOURCES COHORT
(Constant FY87 000$)

	FY87	FY88	FY89	FY90	FY91	Total
TRADOC COSTS:						
MISSION:						
Non Personnel	35.4	41.8	46.6	24.9	35.4	184.1
Personnel - OMA	20.9	20.9	20.9	-	20.9	83.6
Personnel - MPA	368.8	409.6	450.5	225.3	368.8	1,823.0
Total	$ 425.1	$ 472.3	$ 518.0	$ 250.2	$ 425.1	$ 2,090.7
BASE OPS:						
Non Personnel	53.4	62.7	69.9	37.0	53.4	276.4
Personnel - OMA	93.1	116.4	139.7	69.8	93.1	512.1
Personnel - MPA	35.3	35.3	35.3	-	35.3	141.2
Total	$ 181.8	$ 214.4	$ 244.9	$ 106.8	$ 181.8	$ 929.7
TOTAL TRADOC	$ 606.9	$ 686.7	$ 762.9	$ 357.0	$ 606.9	$ 3,020.4
FORSCOM COSTS:						
Student TDY	$1,579.9	$1,654.3	$1,919.9	$1,100.2	$1,390.6	$ 7,644.9
TOTAL COSTS TRADOC & FORSCOM	$2,186.8	$2,341.0	$2,682.8	$1,457.2	$1,997.5	$10,665.3
HARDWARE COST						$ 165.8
AMMO COST	$1,500.0	$1,700.0	$1,900.0	$1,100.0	$1,500.0	$ 7,700.0
MANPOWER:						
TRADOC MANPOWER:						
MISSION - Civ	1	1	1	0	1	4
- Mil	8	9	10	5	8	40
BASE OPS - Civ	4	5	6	3	4	22
- Mil	1	1	1	0	1	4
TOTAL TRADOC						
Civ	5	6	7	3	5	26
Mil	9	10	11	5	9	44
TOTAL	14	16	18	8	14	70
FORSCOM:						
Students Number	1,102	1,305	1,450	783	1,102	5,742
Student - MY	(42.6)	(50.7)	(55.4)	(30.0)	(42.7)	(221.4)

Table E-2. FORT KNOX - ARMOR SCHOOL PHASE II RESOURCES COHORT
(Constant FY87 000$)

	FY87	FY88	FY89	FY90	FY91	Total
TRADOC COSTS:						
MISSION:						
Non Personnel	12.5	16.7	26.7	31.7	34.2	121.8
Personnel - OMA	23.3	46.6	69.9	69.9	69.9	279.6
Personnel - MPA	228.2	268.9	391.1	431.8	537.9	1,857.9
Total	$ 264.0	$ 332.2	$ 487.7	$ 533.4	$ 642.0	$ 2,259.3
BASE OPS:						
Non Personnel	20.7	26.9	42.4	49.7	54.8	194.5
Personnel - OMA	25.4	25.4	50.8	76.2	76.3	254.1
Personnel - MPA	-	-	33.9	33.9	33.9	101.7
Total	$ 46.1	$ 52.3	$ 127.1	$ 159.8	$ 165.0	$ 550.3
TOTAL TRADOC	$ 310.1	$ 384.5	$ 614.8	$ 693.2	$ 807.0	$ 2,809.6
FORSCOM COSTS:						
Student TDY	$ 224.6	$ 348.2	$ 443.5	$ 561.4	$ 710.3	$ 2,288.0
TOTAL COSTS TRADOC & FORSCOM	$ 534.7	$ 732.7	$1,058.3	$1,254.6	$1,517.3	$ 5,097.6
HARDWARE COST						$ 142.3
AMMO COST	$ 900.0	$1,200.0	$1,900.0	$2,300.0	$2,500.0	$ 8,800.0
MANPOWER:						
TRADOC MANPOWER:						
MISSION - Civ	1	2	3	3	3	12
- Mil	5	6	9	10	12	42
BASE OPS - Civ	1	1	2	3	3	10
- Mil	0	0	1	1	1	3
TOTAL TRADOC						
Civ	2	3	5	6	6	22
Mil	5	6	10	11	13	45
TOTAL	7	9	15	17	19	67
FORSCOM:						
Students Number	368	506	805	943	1,035	3,657
Student - MY	(14.4)	(19.4)	(30.4)	(36.0)	(39.6)	(139.8)

Table E-3. FORT SILL - FIELD ARTILLERY SCHOOL PHASE II RESOURCES COHORT
(Constant FY87 000$)

	FY87	FY88	FY89	FY90	FY91	Total
TRADOC COSTS:						
MISSION:						
Non Personnel	16.3	27.2	20.0	23.6	25.4	112.5
Personnel - OMA	-	23.2	23.2	23.2	23.2	92.8
Personnel - MPA	39.1	141.7	39.1	78.3	141.7	439.9
Total	$ 55.4	$ 192.1	$ 82.3	$ 125.1	$ 190.3	$ 645.2
BASE OPS:						
Non Personnel	11.2	20.1	13.4	16.8	19.0	80.5
Personnel - OMA	24.0	24.0	24.0	24.0	24.0	120.0
Personnel - MPA	-	34.1	-	-	-	34.1
Total	$ 35.2	$ 78.2	$ 37.4	$ 40.8	$ 43.0	$ 234.6
TOTAL TRADOC	$ 90.6	$ 270.3	$ 119.7	$ 165.9	$ 233.3	$ 879.8
FORSCOM COSTS:						
Student TDY	$ 135.2	$ 214.5	$ 208.7	$ 191.4	$ 193.1	$ 942.9
TOTAL COSTS TRADOC & FORSCOM	$ 225.8	$ 484.8	$ 328.4	$ 357.3	$ 426.4	$ 1,822.7
HARDWARE COST						$ 142.3
AMMO COST	NONE					
MANPOWER:						
TRADOC MANPOWER:						
MISSION - Civ	0	1	1	1	1	4
- Mil	1	3	1	2	3	10
BASE OPS - Civ	1	1	1	1	1	5
- Mil	0	1	0	0	0	1
TOTAL TRADOC						
Civ	1	2	2	2	2	9
Mil	1	4	1	2	3	11
TOTAL	2	6	3	4	5	20
FORSCOM:						
Students Number	225	375	270	315	345	1,530
Student - MY	(8.7)	(14.5)	(10.1)	(12.4)	(13.5)	(59.2)

Table F-1. FORT BENNING INFANTRY SCHOOL
PHASE II MTT OPTION COSTS
(CONSTANT FY87 000$)

	FY87	FY88	FY89	FY90	FY91	Total
TRADOC COSTS:						
MISSION:						
Personnel - OMA	20.9	20.9	20.9	-	20.9	83.6
Personnel - MPA	368.8	409.6	450.5	225.3	368.8	1,823.0
Total	$ 389.7	$ 430.5	$ 471.4	$ 225.3	$ 389.7	$ 1,906.6
Instructor TDY	$ 275.2	$ 309.6	$ 344.0	$ 172.0	$ 275.2	$ 1,376.0
Total TRADOC Cost	$ 664.9	$ 740.1	$ 815.4	$ 397.3	$ 664.9	$ 3,282.6
FORSCOM COSTS						
MISSION						
Non Personnel	$ 35.4	$ 41.8	$ 46.6	$ 24.9	$ 35.4	$ 184.1
BASE OPS:	$ 74.9	$ 88.4	$ 96.9	$ 51.8	$ 75.1	$ 387.1
TOTAL FORSCOM	$ 110.3	$ 130.2	$ 143.5	$ 76.7	$ 110.5	$ 571.2
TOTAL COSTS TRADOC & FORSCOM	$ 775.2	$ 870.3	$ 958.9	$ 474.0	$ 775.4	$ 3,853.8

Table F-2. FORT KNOX ARMOR SCHOOL
PHASE II MTT OPTION COSTS
(CONSTANT FY87 000$)

	FY87	FY88	FY89	FY90	FY91	Total
TRADOC COSTS:						
MISSION:						
Personnel - OMA	23.3	46.6	69.9	69.9	69.9	279.6
Personnel - MPA	228.2	268.9	391.1	431.8	537.9	1,857.9
Total	$ 251.5	$ 315.5	$ 461.0	$ 501.7	$ 607.8	$ 2,137.5
Instructor TDY	$ 85.5	$ 102.6	$ 153.9	$ 171.0	$ 205.2	$ 718.2
Total TRADOC Cost	$ 337.0	$ 418.1	$ 614.9	$ 672.7	$ 813.0	$ 2,855.7
FORSCOM COSTS						
MISSION						
Non Personnel	$ 12.5	$ 16.7	$ 26.7	$ 31.7	$ 34.2	$ 121.8
BASE OPS:	$ 28.7	$ 37.6	$ 58.4	$ 68.1	$ 76.4	$ 269.2
TOTAL FORSCOM	$ 41.2	$ 54.3	$ 85.1	$ 99.8	$ 110.6	$ 391.0
TOTAL COSTS						
TRADOC & FORSCOM	$ 378.2	$ 472.4	$ 700.0	$ 772.5	$ 923.6	$ 3,246.7

Table F-3. FORT SILL FIELD ARTILLERY SCHOOL
PHASE II MTT OPTION COSTS
(CONSTANT FY87 000$)

	FY87	FY88	FY89	FY90	FY91	Total
TRADOC COSTS:						
MISSION:						
Personnel - OMA	-	23.2	23.2	23.2	23.2	92.8
Personnel - MPA	39.1	141.7	39.1	78.3	141.7	439.9
Total	$ 39.1	$ 164.5	$ 62.3	$ 101.5	$ 164.9	$ 532.3
Instructor TDY	16.4	49.2	16.4	32.8	49.2	164.0
Total TRADOC Cost	$ 55.5	213.7	$ 78.7	$ 134.3	$ 214.1	$ 696.3
FORSCOM COSTS						
MISSION						
Non Personnel	16.3	27.2	20.0	23.6	25.4	112.5
BASE OPS:	14.4	25.9	16.4	21.3	24.4	102.4
TOTAL FORSCOM	$ 30.7	$ 53.1	$ 36.4	$ 44.9	$ 49.8	$ 214.9
TOTAL COSTS TRADOC & FORSCOM	$ 86.2	$ 266.8	$ 115.1	$ 179.2	$ 263.9	$ 911.2

DEPARTMENT OF THE ARMY
US ARMY TRADOC ANALYSIS CENTER
White Sands Missile Range, New Mexico 88002-5502

REPLY TO ATTENTION OF

ATCR-TDA

23 JUL 1986

SUBJECT: COHORT Cadre Training Cost Analysis

Commander
US Army Training and Doctrine Command
ATTN: ATTG-C (Dr. Stenson)
Fort Monroe, VA 23651-5000

1. Reference:

a. Letter, HQ DA, DACS-DMO, 19 Oct 83, subject: Responsibilities of Study Performing and Study Sponsoring Organizations.

b. Message, HQ TRADOC, ATTG-C, 071500Z Mar 86, subject: COHORT Cadre Training Evaluation.

2. In accordance with the requirements of reference a, the COHORT Cadre Training Cost Analysis is enclosed (Encl 1) for your review and retention. The document is in final draft form.

3. At the request of reference b, the FY85-86 historical phase I and phase II training costs and manpower for the COHORT test units are enclosed (Encl 2) for your use and retention. With the exception of military pay and allowance for military instructors and military support personnel, costs and manpower were derived by the US Army Infantry School, the US Army Field Artillery School, and the US Army Armor School.

4. Point of contact for this action is Mr. Douglas R. Johnson, AUTOVON 258-3290/4617.

FOR THE DIRECTOR:

2 Encl

FERNANDO PAYAN, JR.
Director, Special Studies Directorate

ACN 67587

TRAC-WSMR-CTEA- -86

COHORT CADRE TRAINING
COST ANALYSIS

JULY 1986

JANE L. REPKO

DEPARTMENT OF THE ARMY

US ARMY TRADOC ANALYSIS CENTER

WHITE SANDS MISSILE RANGE

NEW MEXICO 88002-5502

Encl 1

UNCLASSIFIED

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REPORT DOCUMENTATION PAGE

Form Approved OMB No 0704-0188 Exp. Date: Jun 30, 1986

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2b. DECLASSIFICATION/DOWNGRADING SCHEDULE	
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11. TITLE (Include Security Classification): Cohesion Operational Readiness Training (COHORT Cadre)

12. PERSONAL AUTHOR(S): Ms. Jane L. Repko

13a. TYPE OF REPORT	13b. TIME COVERED	14. DATE OF REPORT (Year, Month, Day)	15. PAGE COUNT
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16. SUPPLEMENTARY NOTATION: Study contributors for resource requirements were Directorate of Training Doctrine (DOTD) of the US Army Infantry School (USAIS), US Army Field Artillery School (USAFAS), US Army Armor School (USAARMS); Directorate of Resource Management of US

17 COSATI CODES			18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number)
FIELD	GROUP	SUB-GROUP	
14	01		active Army, personnel, training, CTEA, New Manning System, resource requirement, COHORT, Cadre, Armor, Infantry, Artillery
05	09		

19. ABSTRACT (Continue on reverse if necessary and identify by block number)

This document presents the resource requirements of two training alternatives for COHORT cadre training of infantry, field artillery, and armor units. Alternative 1 is defined as the unit cadre receiving phase I training at its home station. Alternative 2 is defined as the unit cadre receiving phase I training at its home station and phase II training at its branch school. "High" and "low" resource requirement estimates were developed for the alternatives. The "high" estimates were based on the resource data provided by the participating schools and the "low" estimates were based on the deletion of the two most uncertain resource requirements of the schools.

20. DISTRIBUTION/AVAILABILITY OF ABSTRACT	21. ABSTRACT SECURITY CLASSIFICATION
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Ms. Jane L. Repko	505-678-2651	ATOR-TDA

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SECURITY CLASSIFICATION OF THIS PAGE

UNCLASSIFIED

TRAC-WSMR-CTEA- -86
COHORT CADRE TRAINING

STUDY GIST

1. THE REASON FOR PERFORMING THE STUDY. HQ TRADOC directed TRAC-WSMR to perform a resource analysis on two COHORT cadre training alternatives for infantry, field artillery, and armor cadre. The results are to be incorporated in a comprehensive report on COHORT cadre training by HQ TRADOC.

2. THE PRINCIPAL RESULTS

a. Two ranges of costs were computed in FY87 constant dollars (000) for the alternatives as follows.

	Alternative 1		Alternative 2	
	High	Low	High	Low
TRADOC	663.8	663.8	23,240.1	11,139.0
FORSCOM	153.3	153.3	3,544.2	3,544.2
Total	817.1	817.1	26,784.3	14,683.2

b. For the alternatives, estimates designated as "high" estimates, are based strictly on the resource data (including school approved adjustments) provided by the US Army Infantry School (USAIS), the US Army Field Artillery School (USAFAS), and the US Army Armor School (USAARMS). Estimates designated as "low" estimates include the deletion of the two most uncertain resource requirements of the schools i.e., USAIS Tactical Leaders Course Complex (TLCC) and USAIS Other Procurement, Army (OPA) resource requirements. TRADOC alternative 2 costs decrease by 52.1 percent and total (TRADOC plus FORSCOM) alternative 2 costs decrease by 45.2 percent when the two previously mentioned resource requirements are omitted.

3. THE MAIN ASSUMPTIONS

a. Per guidance from proponent schools, phase I training for the cadre at the home station is a 2 week program for field artillery and armor units, and a 3 week program for infantry units.

b. Per guidance from HQ TRADOC, phase II training consists of a 2 week training course at the branch school.

4. THE MAJOR RESTRICTIONS included limited resource data and limited supporting rationale and methodology for derivation of cost estimates from the participating schools.

5. THE SCOPE OF THE STUDY was limited to providing a resource analysis of the following alternatives in the FY87-91 time frame:

- The cadre receives phase I training at their home station.
- The cadre receives phase I training at their home station and phase II training at the branch school.

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COHESION OPERATIONAL READINESS TRAINING (COHORT CADRE)

1.0 INTRODUCTION

1.1 Purpose. This report presents an analysis of the resource (cost and manpower) requirements of two training alternatives for infantry, field artillery, and armor COHORT (COHesion, Operational Readiness, Training) cadre training.[1] The results are to be incorporated in a comprehensive report on COHORT cadre training by the Headquarters Training and Doctrine Command (HQ TRADOC).

1.2 Background

a. The process by which the Army mans its table of organization and equipment (TOE) and table of distribution and allowances (TDA) organizations has changed over the past several years with the development and implementation of the New Manning System (NMS). The objective of the NMS is to reduce the personnel turbulence associated with the individual replacement system (IRS) by keeping soldiers together in units longer.[2] This, in turn, enhances the combat effectiveness of units through the development and sustainment of cohesive, thoroughly trained personnel.

b. Since its inception the NMS and its two subsystems, the COHORT Unit Movement System and the US Army Regimental System, have been evolving as a result of constant analysis and field evaluations designed to determine how best to sustain the NMS in Army-wide implementation. Currently, whenever possible, the COHORT Unit Movement System fills personnel requirements in OCONUS combat arms units by the scheduled deployment of units on a programmed rotation or replacement cycle between CONUS and OCONUS.

c. By keeping soldiers and their leaders together in units longer (the stability of a soldier is measured by tenure in the unit rather than tour length at a location), more in-depth training can be accomplished than is normally possible. Rather than having to spend time training frequent newcomers to the unit in basic skills, the cadre has the opportunity to develop and conduct progressive, long term, and challenging training programs.To take advantage of that opportunity, the cadre must be trained to be skilled leaders, competent technicians, and proficient trainers. Towards that end, the unit cadre undergoes a training program prior to formation of the COHORT unit.

d. In March 1985, General Sennewald, Commanding General, Headquarters Forces Command (HQ FORSCOM), requested that HQ TRADOC evaluate the Infantry School (USAIS), Field Artillery School (USAFAS), and Armor School (USAARMS)

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[1] Message, CDR TRADOC, ATTG-C, 190920Z Nov 85 subject: COHORT Cadre Training Evaluation.

[2] The use of the term units throughout this report refers to TOE organizations, usually at the battalion or company/battery level.

COHORT cadre training programs. HQ TRADOC responded by initiating a comprehensive study of COHORT cadre training involving several different analytical agencies (e.g., TRADOC Combined Arms Test Activity (TCATA); the Directorate of Evaluation and Standardization (DOES) of USAIS, USAFAS, and USAARMS; and TRADOC Analysis Center, White Sands Missile Range (TRAC-WSMR)[3].

1.3 Training Alternatives. The two COHORT training alternatives have been defined by the DCST, HQ TRADOC, to consist of either phase I training (alternative 1) or of phase I and phase II training (alternative 2).[4]

a. Phase I training orientates the cadre toward the COHORT unit concept and gives them refresher training in tasks specific to their military occupational specialty (MOS). This training is conducted at the unit's home station and consists of an exportable COHORT Leader Orientation Package[5] and an exportable branch package from the appropriate school i.e., USAIS, USAFAS, or USAARMS. Additionally, USAFAS provides a mobile training team to its units upon request.

b. Phase II training, designed by the branch schools, consists of a 2-week program of instruction (POI) and emphasizes how to train others in MOS-specific skills. This training is conducted at the appropriate branch school.

1.4 Ground Rules

a. Costs are presented in constant FY87 thousands (000) of dollars for the FY87-91 time frame. Costs incurred before FY87 are considered sunk.

b. Where necessary, HQ TRADOC, ATRM-R, inflation guidance of 14 Feb 86 was used in converting current dollars to constant FY87 dollars.

c. FORSCOM-TRADOC Resource Factor Handbook, Cost Planning Factors, Apr 86, VOL I, was used to estimate military pay and allowances.

d. TRADOC Resource Factor Handbook, Resource Estimating Relationships, Jul 85, VOL II, was used as necessary.

e. Cost and manpower estimates for phase I and phase II COHORT cadre training were based on the DCST, HQ TRADOC-provided document entitled, "COHORT Unit Chronological Listing by Training Date", dated 27 Jan 86 (hereafter referred to as ramp-up).

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[3]Formerly US Army TRADOC Systems Analysis Activity (TRASANA).

[4]Letter, HQ TRADOC, ATTG-C, 7 Mar 86, subject: Resource Data Requirements for the COHORT Cadre Training Evaluation.

[4] The Leader Orientation Package was designed by the US Army Soldier Support Center (USASSC).

f. Inherited asset acquisition costs were considered sunk, however, recurring costs for equipment and facilities were included in the analysis.

g. Cadre military pay and allowances were excluded since the end-strength levels of the Army are independent of the COHORT cadre issue.

h. Per guidance from proponent schools, phase I training for the cadre at the home station is a 2-week program for field artillery and armor units, and a 3-week program for infantry units.

i. Per guidance from USAFAS, costs for the training of each unit in the ramp-up by a mobile training team are included in phase I costs.

j. The cadre will be in temporary duty (TDY) status during phase II training at the branch school.

k. All estimates contained in this report are provided for cost analysis purposes and should <u>not</u> be used for budgetary purposes.

2.0 METHODOLOGY. The elements of the methodology were developing the data and determining resource requirements.

2.1 <u>Data Development</u>

a. During the course of the study, TRAC-WSMR, Resource Analysis Division, requested resource data from each of the three schools through HQ TRADOC.[6,7] Resource data requested included:

- Programs of instruction (POIs) for both phases of the school's training.
- The number of COHORT cadre to be trained each year by the school.
- The total resource impact of phase I and phase II training on the school.
- The total resource impact of the school's phase I and phase II training on FORSCOM.
- Detailed methodology and rationale to support the school's resource estimates.

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[6] Ltr, USATRASANA, ATOR-THB, 12 Nov 85, subject: COHORT Cadre Training Effectiveness Analysis Project Coordination Sheet (PCS).

[7] Ltr, HQ TRADOC, ATTG-C, 7 Mar 86, subject: Resource Data Requirements for the COHORT Cadre Training Evaluation.

To insure data consistency, forms requesting this data by phase, appropriation, and command were designed and included in the requests to each school. Examples of data requested and the appropriation under which they are classified are listed below.

Appropriation	Examples of Resources
Operation and Maintenance, Army (OMA)	Training related overhead, company and field supplies and small equipment, range and billet operation and maintenance, and base operations (including civilian personnel)
Procurement Ammunition, Army (PAA)	Pyrotechnics (e.g. artillery simulators and booby traps) and ammunition
Other Procurement, Army (OPA)	Compasses, radios, and M16A1 rifles
Military Construction, Army (MCA)	Classrooms, tactical leaders course complex, billets, and mess halls
Military Personnel, Army (MPA)	Salaries, food, and housing allowances

b. The ramp-up was the basis by which each school determined the number of FORSCOM cadre to be trained each year, where the cadre were coming from to receive training at the branch school, and approximately when the cadre would be trained. The resulting total number of FORSCOM COHORT cadre and companies/batteries to be trained in FY87-91, by school and fiscal year, are shown in table A-1 of the appendix. The number of cadre man-years that this training represents for FORSCOM is shown in table A-2 of the appendix.

c. Analysis of resource data provided by the schools revealed inconsistencies and ommissions; therefore, some adjustments were necessary to make the resource data submitted by the schools comparable.

- USAFAS indicated that they had omitted the phase II cost ($9.2K per year) for contractor instruction of 24 instructor classroom hours (ICHS) per year in their data submission; therefore, $9.2K per year was added to their phase II costs.

- Following a re-evaluation of the ramp-up, USAARMS made the determination that the resource requirements associated with one battalion (four companies) had been omitted in their data submission. These requirements were added to their phase I and phase II requirements and FORSCOM phase II requirements for FY88 and FY91.

o The cost of additional ammunition for FORSCOM Infantry units to carry out phase I training at their home station was added and was identified by the schools as the only cost for FORSCOM in phase I.

o FORSCOM phase II TDY costs for all three schools and the USAFAS phase I TDY costs were adjusted to reflect current TDY regulations for military personnel.

o MPA for military instructors and military support personnel was added to the cost of each school to reflect the increase in its requirements that would occur if it had to teach the number of companies/batteries projected by the ramp-up.

d. The schools were also requested to determine what the resource impact on their school would be if the number of companies trained each fiscal year were doubled. Insufficient data were received to complete this portion of the analysis.

2.2 Resource Requirements. During the review and analysis of the data submitted by the schools, several issues surfaced regarding the reliability of their resource requirement estimates. The two most significant issues centered around USAIS inclusion of 135 man-years for military instructors and military support personnel for a new 20-station tactical leaders course complex (TLCC) and its non-recurring OPA requirements ($5,859.6K) for hardware in their phase II requirements. Other issues centered around possible inconsistencies among the schools in estimating some of their phase I and phase II OMA resource requirements. Sufficient documentation and information were not provided by the schools to resolve any of the above issues. Follow-up coordination with the schools to try and resolve these issues has been unsuccessful; therefore, "high" and "low" estimates were developed to reflect the uncertainty associated with the two most significant issues and to show their impact on the resource requirement estimates. Detailed estimates for the alternatives and phases, shown in tables A-3 through A-5 of the appendix, reflect these two issues. Sensitivity analyses were performed on the OMA issues (i.e., on the total of the civilian support personnel requirements and the "other" requirements of the three schools for each phase of training) to determine what extent their variance would have on resource requirements. It was found that large variations in these resource requirements resulted in relatively insignificant variances in the total costs; therefore, it did not seem appropriate to include another column of variability in the tables. Sensitivity analyses were also performed on FORSCOM phase II TDY costs to reflect billeting and messing availability and nonavailability at all three schools. A most likely estimate for FORSCOM phase II TDY costs was used in the "high" and "low" estimates of total resource requirements. The most likely estimate reflected the availability of billeting and messing facilities at USAFAS and USAARMS and the nonavailability of facilities at USAIS. Detailed TDY estimates for FORSCOM are shown in table A-6 of the appendix.

3.0 RESOURCE ANALYSIS

3.1 Resource Requirements. Table 1 presents a summary of COHORT cadre training resource requirements for FY87-91 in constant FY87 dollars and man-years by alternative, by phase(s) within each alternative, and by command. Estimates, designated as "High" estimates are based strictly on the resource requirements data (including adjustments mentioned in section 2.1c) provided by the schools. Estimates, designated as "Low" estimates take into consideration the two most significant issues regarding the uncertainty of the schools resource requirement estimates (section 2.2).

Table 1. HIGH AND LOW COHORT CADRE TRAINING RESOURCE REQUIREMENT ESTIMATES FOR FY87-91
(FY87 CONSTANT DOLLARS (000) AND MAN-YEARS (MY))

	Phase I or Alternative 1			Phase II			Phase I & Phase II or Alternative 2		
Command*	T	F	Total	T	F	Total	T	F	Total
High Estimates									
Cost	663.8	153.3	817.1	22,576.3	3,398.9	25,987.2	23,240.1	3,544.2	26,784.3
(MY)	(12.8)	(163.2)	(176.0)	(226.3)	(128.0)	(354.3)	(239.1)	(291.2)	(530.3)
Low Estimates									
Cost	663.8	153.3	817.1	10,479.2	3,398.9	13,878.1	11,139.0	3,544.2	14,683.2
(MY)	(12.8)	(163.2)	(176.0)	(91.3)	(128.0)	(219.3)	(104.1)	(291.2)	(395.3)
Percent Decrease from High to Low Estimates									
Cost				53.6		46.6	52.1		45.2
(MY)				(59.7)		(38.1)	(56.5)		(25.5)

* T= TRADOC, F= FORSCOM, and Total = TRADOC plus FORSCOM.

NOTE FOR PHASE II AND ALTERNATIVE 2:

a. High cost estimates for TRADOC and Total exclude MCA for the USAIS proposed TLCC. (MCA is identified as a requirement, but cost is unknown.)

b. Low cost estimates for TRADOC and Total exclude MPA for USAIS proposed TLCC and USAIS proposed OPA ($5,859.6K).

c. Low manpower estimates for TRADOC and Total exclude 135 MY for USAIS proposed TLCC.

NOTE:

a. TRADOC costs reflect military instructor and military support personnel MY.

b. FORSCOM costs do not reflect cadre MY.

a. USAIS identified the requirement for a new 20-station TLCC to solely support phase II COHORT cadre training by including: (1) 27 man-years of effort per fiscal year (The number of man-years/year required to instruct and maintain a 20-station TLCC.), totaling 135 man-years over the entire period, for military instructors and military support personnel and (2) military construction of the complex, for which a cost estimate was not available, in their resource requirements. USAIS did not provide any written supporting

requirements documentation to demonstrate the need for a new TLCC. They only indicated that a new TLCC would be required to solely support COHORT cadre phase II training, given the number of companies and battalions of cadre to be trained each fiscal year and that six additional (non-COHORT) courses are being added to their teaching requirements in FY87. Assuming, with certainty, that a new TLCC is required, it would not be used more than 18 out of 50 training weeks per fiscal year for the following combination of reasons:

- The maximum number of projected COHORT units (companies and battalions) to be trained by USAIS in any given fiscal year for FY87-91 is nine.

- The cadre from either one company or one battalion (3 companies) can be trained on the TLCC at the same time.

- Training on the TLCC is only one of four types of training to be covered in the 2-week program of instruction for phase II.

Thus, it would be highly questionable as to whether the total 135 man-years should be prorated against phase II COHORT cadre training in FY87-91. If the TLCC is needed, 48.6 man-years would be a more reasonable estimate (18/50 x 135). The possibility that the projected USAIS man-years with the TLCC might be excessive was also demonstrated by use of student-to-instructor-and-support-personnel ratios. As shown in table 2, the student-to-instructor-and-support-personnel ratio for USAIS with the TLCC was quite low in comparison to those of USAFAS and USAARMS, i.e., 0.36 to 3.42 and 1.41, respectively. Without the TLCC, the USAIS ratio would be more in line with the other schools. However, it might also be possible that USAFAS and USAARMS did not review their inherited assets to determine if they would need new assets and additional manpower to support the new requirements.

b. To insure consistency between the school estimates, given the uncertanties that are centered around the need for a new TLCC, the number of man-years needed for instruction and support of the TLCC, and the unknown cost of its construction, the "low" resource requirement estimates, shown in table 1, reflected the deletion of 135 man-years and $6,241.5K in MPA that was associated with the TLCC.

Table 2. PHASE II STUDENT-TO-INSTRUCTOR-AND-SUPPORT-PERSONNEL RATIOS FOR FY87-91

	IN	FA	AR
TRADOC			
Instructor & Support Personnel*			
W/TLCC	197.7	8.6	20
W/O TLCC	62.7	8.6	20
FORSCOM			
Students*	70.4	29.4	28.2
Ratios			
W/TLCC	0.36	3.42	1.41
W/O TLCC	1.12	3.42	1.41

*Man-years (MY) of effort.

c. USAIS included $5,859.6K in its OPA phase II requirements for procurement of hardware related items that may or may not be related to the TLCC. No supporting documentation was provided by USAIS to demonstrate the need for such a requirement. Therefore, the "low" resource requirement estimates in table 1 reflected the deletion of $5,859.6K for the OPA appropriation.

d. Allowing for the deletions of USAIS phase II TLCC and OPA requirements, as described in the preceding two paragraphs, the "high" resource estimates (shown in table 1) decreased significantly. TRADOC phase II estimated resource requirements decreased by 53.6 percent in terms of cost and 59.7 percent in terms of manpower. Correspondingly, TRADOC alternative 2 costs decreased by 52.1 percent and TRADOC manpower requirements decreased by 56.5 percent. FORSCOM resource requirements remained unchanged for phase II and alternative 2. Total (TRADOC plus FORSCOM) phase II costs decreased by 46.6 percent and total phase II manpower decreased by 38.1 percent. Total alternative 2 resource requirements decreased in similiar proportions to that of total phase II requirements. TRADOC, FORSCOM, and total phase I resource requirements remained unchanged.

3.2 OMA Sensitivity Analysis. Under the OMA appropriation, other issues of concern centered around possible methodological inconsistencies among the schools in estimating their civilian support personnel and "other" support resource requirements for phase I and phase II training. A discussion of each requirement, the results of the sensitivity analyses that were performed on these requirements and the rationale as to why an adjustment was not made for each of these requirements to the "high" and "low" resource requirement estimates in table 1 (section 3.1) follow.

a. Civilian support personnel phase I and phase II resource requirements varied significantly among the three schools. As shown in table 3, the civilian support personnel requirements for developing and updating exportable training packages for phase I were estimated to cost USAIS $172K. However, USAFAS and USAARMS did not have any estimates for civilian support requirements in phase I. The USAIS phase I cost estimate was derived by using: (1) TRADOC manpower estimating relationships (MERs) for the base operations and general skills categories of OMA, and (2) TRADOC Management Engineering Activity (TRAMEA) standards for the development and training category of OMA. For phase II training, the USAIS estimate ($1,501.2K) was derived in the same manner as the phase I estimate. The USAFAS phase II estimate ($25K) was based on a school MER and the USAARMS phase II estimate ($269.1K) appeared to be based on a HQ TRADOC base operations MER.

Table 3. OMA - CIVILIAN SUPPORT PERSONNEL AND "OTHER" SCHOOL COSTS FOR FY87-91
(FY87 Constant Dollars (000))

	IN	FA	AR	TRADOC
Phase I				
Civilian Support Personnel	172.0	-	-	172.0
Other	34.0	-	-	34.0
Total	206.0	-	-	206.0
Phase II				
Civilian Support Personnel	1,501.2	25.0	269.1	1,795.3
Other	618.2	28.1	54.3	700.6
Total	2,119.4	53.1	323.4	2,495.9

b. The "other" support requirements, which basically consist of indirect support requirements like supplies and small hardware, were also estimated for different categories of OMA, using different methodologies. USAIS phase I and phase II cost estimates ($34K and $618.2K) were based on historical costs that support the base operations, general skills, and training and development categories of OMA. USAFAS and USAARMS did not have any estimates for "other" support requirements in phase I. However, the USAFAS phase II estimate ($28.1K) was based on a school cost estimating relationship (CER) for the general skills category of OMA and the USAARMS phase II estimate ($54.3K) was based on HQ TRADOC CERs for student support and base operations support.

c. As can be seen from the two preceding paragraphs, the variations in cost estimates for civilian support personnel and "other" support requirements might have been due to either inconsistent estimating methodologies, or to the contents of each school's training program, or a combination of both. Generally, sensitivity analysis showed that while a 50 or 100 percent change

in the total of these two OMA requirements for all three schools (i.e., the TRADOC cost in table 3) for each phase might have a significant impact on TRADOC resource requirements for phase I or phase II COHORT training, they did not have as significant an impact on total resource requirements for phase II and/or alternative 2. (This, of course, is because of the very definition of total resource requirements.) In most instances, changes in these two requirements affected total phase II and/or total alternative 2 requirements by less than 10 percent (table 4). Increasing or decreasing phase I civilian support personnel and "other" support requirements for the three schools by 100 percent affected total resource requirements for phase I or alternative 1 by 25.2 percent, but affected alternative 2 total resource requirements by only 0.8 to 1.4 percent. Adjustments were not reflected in either the "high" or "low" total estimates (table 1, section 3.1) because large variations in these OMA resource requirements had relatively insignificant impacts on total "high" and "low" resource requirements, as compared to those of the USAIS TLCC and OPA resource requirements. Therefore, it did not seem appropriate to include another column of variability in table 1 (section 3.1).

Table 4. PERCENTAGE CHANGE IN TRADOC AND TOTAL COSTS* AS A RESULT OF OMA SENSITIVITY ANALYSIS

	Phase I** or Alternative 1		Phase II		Phase I & II or Alternative 2	
	TRADOC	TOTAL	TRADOC	TOTAL	TRADOC	TOTAL
OMA Sensitivity						
Phase I ± 100%						
High	31.0	25.2			0.9	0.8
Low	31.0	25.2			1.8	1.4
Phase II ± 50%						
High			5.5	4.8	5.4	4.7
Low			11.9	9.0	11.2	8.5
Phase II ± 100%						
High			11.1	9.6	10.7	9.3
Low			23.8	18.0	22.4	17.0

*Percentage changes in "high" and "low" TRADOC and total cost estimates as presented in table 1 (section 3.1).
**The "low" and "high" estimates for phase I are the same; therefore, percentage changes are the same.

3.3 FORSCOM Phase II TDY Sensitivity Analysis. Both the "high" and "low" cost estimates in table 1 (section 3.1) included the same FORSCOM TDY cost estimate. This estimate, referred to as the most likely estimate, was based

on the availability of messing and billeting facilities for COHORT cadre students at USAFAS and USAARMS. FORSCOM phase II "high" and "low" estimates increased by 24 percent from the most likely estimate when messing and billeting facilities were assumed to be unavailable at all three schools and decreased by 33 percent when facilities were assumed to be available at all three schools (table 5). In comparison, the "high" cost estimate for total phase II resources only increased by 3.1 percent and the "low" cost estimate increased by 5.9 percent, when facilities were assumed to be unavailable at all three schools. The "high" cost estimate for total phase II resources decreased by 4.3 percent and the "low" estimate decreased by 8.1 percent, when facilities were assumed to be available at all three schools. Total alternative 2 "low" and "high" costs were affected in a similiar manner to those of total phase II costs.

Table 5. FORSCOM PHASE II TDY SENSITIVITY ANALYSIS FOR FY87-91

TDY	Costs (FY87 K$, 000)	Percentage Change*
w/Facilities	$2,263.1	
		-33.3
Most Likely	3,390.9	
		+24.0
w/o Facilities	4,203.1	

*From most likely TDY costs.

4.0 CONCLUSIONS

a. Conclusions can not be drawn as to whether the TLCC and OPA requirements are valid for USAIS. The exclusion of USAIS TLCC and OPA requirements significantly decreases TRADOC resource (cost and manpower) requirements for phase II and alternative 2 training by over 50 percent. Correspondingly, total (TRADOC plus FORSCOM) resource costs for phase II and alternative 2 decrease by approximately 45 percent. Total manpower estimates decrease by approximately 38 percent for phase II and 26 percent for alternative 2.

b. Based on data provided, conclusions can not be made as to whether USAFAS and USAARMS reviewed their recurring costs of inherited assets to determine, if any additional assets would be required for phase II training. If additional assets are required, total resource requirements are going to be greater than the "high" and "low" total resource requirement estimates provided in this study.

c. Variations in civilian support personnel and "other" support requirements under the OMA appropriations may or may not have a noticeable impact on TRADOC resources for phase I and phase II training.

d. Minimum and maximum allowances for TDY costs have a noticeable impact on FORSCOM phase II costs.

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GLOSSARY OF TERMS AS USED IN THIS REPORT

Cadre -

All personnel in a unit less the combat MOS first timers. This includes all non-commissioned and commissioned officers of a unit and the support MOS personnel of all grades.

Cohesion -

The bonding together of soldiers with their leaders in such a way as to sustain their will and commitment to each other, their unit and the mission.

COHORT Unit Movement System -

This system integrates all manning functions, policies, procedures, and regulations as modified to stabilize soldiers together in units and to rotate these trained units from CONUS home stations to OCONUS areas and back or replace these trained units in an OCONUS location, while still providing for the professional development of the soldier. Units and soldiers will be linked together through the bonds of regimental heritage, traditions, colors, and a CONUS home station.

Combat Arms Branches -

Branches of the Army whose officers are directly involved in the conduct of actual fighting. They are Infantry, Field Artillery, Air Defense Artillery, Armor, and Corps of Engineers.

Individual Replacement System (IRS) -

A personnel management system which has been used (and is still being used) to fill Army requirements, defined at the grade and MOS level of detail by individually selecting soldiers from the Army at large.

New Manning System (NMS) -

A personnel management system designed to increase combat effectiveness in the Army by stabilizing individuals in a unit thus enhancing cohesion in combat arms units (either company or battalion) and developing a greater sense of esprit among all soldiers. Coupled with the stabilization of the units is the movement of these units overseas within designated regimental pairings. Composed of two subsystems: COHORT Unit Movement System and the US Army Regimental System.

Replacement Cycle -

A cycle used in the COHORT system which depicts a one way movement of a unit from a CONUS location to replace a unit in an OCONUS location. At the end of the OCONUS phase, the unit disestablishes and its personnel are reassigned via the individual replacement system. The disestablished unit is replaced by a unit arriving from CONUS which has just completed the CONUS phase of the cycle.

Rotation Cycle -

A cycle used in the COHORT system that depicts the two way movement of units which exchange places between CONUS and OCONUS. The two units replace each other "on the ground".

Table of Distribution and Allowances -

A table which prescribes the organizational structure, personnel and equipment authorizations, and requirements of a military unit to perform a specific mission for which there is no appropriate table of organization and equipment.

Table of Organization and Equipment -

A table which prescribes the normal mission, organizational structure, and personnel and equipment requirements for a military unit, and is the basis for an authorizations document.

Unit -

Any military element whose structure is prescribed by competent authority, such as a table of organization and equipment; specifically, part of an organization.

US Army Regimental System -

The concept by which the Army is striving to achieve recurring assignments for its soldiers. With the initial implementation of this system, each of the Army's combat arms branches is organized into regiments, each of which is simply a grouping of like-type CONUS and OCONUS battalions. Each combat arms soldier is then affiliated with one of the regiments of his branch, i.e., each soldier in CMF 19 (armor) is affiliated with one of the armor regiments. Affiliation with a regiment means that a soldier will, under normal circumstances, serve all of his unit assignments with the battalions of his regiment. Through the implementation of the US Army Regimental System and the affiliation of soldiers with specific regiments, individual soldiers are assured of experiencing recurring assignments with a relatively small circle of peers and leaders. This close association encourages the development of a cohesiveness and esprit within that group of individuals affiliated with each regiment.

APPENDIX

COMCORT COMPREHENSIVE COSTS AND MANPOWER ESTIMATES

Table A-1. [illegible]
[illegible]

	FY87			FY88			FY89			FY90			FY91		
	[illegible]	PA	AR	[illegible]	PA	AR	[illegible]	PA	AR	[illegible]	PA	AR	[illegible]	PA	AR
Completion/Extension	10	10	4	15	7	12	9	4	3	11	15	4	16	6	12
Officer	50	25	16	75	16	48	45	35	12	55	25	16	80	17	48
Enlisted	250	135	80	375	101	204	225	100	51	275	135	85	400	100	204
Total	300	160	84	450	115	252	270	201	63	330	160	84	480	125	252

*Based on the [illegible] provided by HQ TRADOC. The number and type of cadre per company for USAIS and [illegible] were based on a representative company. USAFAS used actual TOEs.

Table A-2. [illegible]
[illegible]

	FY87			FY88			FY89			FY90			FY91		
	[illegible]	PA	AR	[illegible]	PA	AR	[illegible]	PA	AR	[illegible]	PA	AR	[illegible]	PA	AR
Phase I															
Officer	3.5	1.1	0.8	5.2	0.8	2.3	3.1	1.6	0.8	3.8	1.1	0.8	5.5	0.8	2.3
Enlisted	13.8	5.1	2.4	20.8	3.8	7.4	12.5	6.1	1.8	15.2	6.2	2.4	22.2	4.1	7.4
Total	17.3	6.2	3.2	26.0	4.6	9.7	15.6	7.7	2.4	19.0	7.3	3.2	27.7	4.9	9.7
Phase II															
Officer	2.3	1.1	0.8	3.5	0.8	2.3	2.1	1.6	0.8	2.5	1.1	0.8	3.7	0.8	2.3
Enlisted	9.2	5.1	2.4	13.8	3.8	7.4	8.3	6.1	1.8	10.2	6.2	2.4	14.8	4.1	7.4
Total	11.5	6.2	3.2	17.3	4.6	9.7	10.4	7.7	2.4	12.7	7.3	3.2	18.5	4.9	9.7

*Phase I training is two weeks long for [illegible] and three weeks long for USAIS.
Phase II is two weeks long for all three schools.

Table A-3. [illegible] FOR COMBAT CREW TRAINING
BY ALTERNATIVE AND SCHOOL IN FY07-01
(FY07 $) (000)

Alternative	FY07				FY08				FY09			
	[illegible]	PA	AR	[illegible]	[illegible]	PA	AR	[illegible]	[illegible]	PA	AR	[illegible]
TRADOC												
Alt 1	68.6	60.6	0.0	128.2	65.8	67.8	2.6	136.2	47.1	87.1	0.7	134.9
Alt 2 - High	8,804.6	100.4	500.5	9,405.3	2,200.1	150.3	1,830.8	4,236.2	2,202.8	170.0	693.9	2,844.9
Alt 2 - Low	906.5	100.4	500.5	1,007.4	900.8	150.3	1,830.8	2,900.9	853.7	170.0	683.9	1,598.6
FORSCOM												
Alt 1	25.1	0.0	0.0	25.1	37.7	0.0	0.0	37.7	22.8	0.9	0.0	22.8
Alt 2	453.0	90.6	40.9	584.5	602.3	65.2	176.1	841.6	382.8	150.3	35.0	577.1

Table A-3. (Cont'd) [illegible] FOR COMBAT CREW TRAINING
BY ALTERNATIVE AND SCHOOL IN FY07-01
(FY07 $) (000))

Alternative	FY10				FY01				FY07-01			
	[illegible]	PA	AR	[illegible]	[illegible]	PA	AR	[illegible]	[illegible]	PA	AR	[illegible]
TRADOC												
Alt 1	47.2	69.8	0.0	128.0	48.3	86.7	2.6	135.6	232.9	423.2	7.7	663.8
Alt 2 - High	2,271.6	100.4	611.5	3,043.5	2,300.6	151.2	1,000.4	4,312.2	17,002.7	808.3	5,356.1	23,260.1
Alt 2 - Low	1,023.3	100.4	611.5	1,795.2	1,052.3	151.2	1,000.4	3,063.9	4,981.6	801.3	5,356.1	11,139.0
FORSCOM												
Alt 1	27.7	0.0	0.0	27.7	40.2	0.0	0.0	40.2	153.3	0.0	0.0	153.3
Alt 2	485.9	35.7	40.9	530.5	642.2	70.2	176.1	885.5	2,574.2	487.0	483.0	3,544.2

Table A-4. [illegible]
[illegible]
([illegible])

	FY87				FY88				FY89			
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]												
Civilian Personnel												
Instructors	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(MY)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Support	34.4	0.0	0.0	34.4	34.4	0.0	0.0	34.4	34.4	0.0	0.0	34.4
(MY)	(1.1)	(0)	(0)	(1.1)	(1.1)	(0)	(0)	(1.1)	(1.1)	(0)	(0)	(1.1)
Reproduction/ Postage & Handling	0.5	0.1	0.0	1.5	0.7	0.1	2.0	3.4	0.5	0.1	0.7	1.3
TDY to Units	4.8	16.7	0.0	21.5	3.0	19.1	0.0	23.0	5.4	18.4	0.0	23.8
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total OMA	40.5	16.8	0.0	64.2	45.0	19.2	2.0	67.0	47.1	18.5	0.7	66.3
MPA												
Instructors/Support	0.0	64.0	0.0	64.0	0.0	60.0	0.0	60.0	0.0	60.0	0.0	60.0
(MY)	(0)	(1.4)	(0)	(1.4)	(0)	(1.5)	(0)	(1.5)	(0)	(1.5)	(0)	(1.5)
Total Phase I	40.5	80.8	0.0	128.2	45.0	87.0	2.0	134.2	47.1	87.1	0.7	134.9

Table A-4. (Cont'd) [illegible]
[illegible]
([illegible])

	FY90				FY91				FY87-91			
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
OMA												
Civilian Personnel												
Instructors	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(MY)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Support	34.4	0.0	0.0	34.4	34.4	0.0	0.0	34.4	172.0	0.0	0.0	172.0
(MY)	(1.1)	(0)	(0)	(1.1)	(1.1)	(0)	(0)	(1.1)	(5.5)	(0)	(0)	(5.5)
Reproduction/ Postage & Handling	0.5	0.1	0.0	1.5	0.7	0.1	2.0	3.4	2.9	0.5	7.7	11.1
TDY to Units	5.5	16.7	0.0	22.2	4.4	18.0	0.0	22.4	24.0	88.9	0.0	112.9
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34.0	0.0	0.0	34.0
Total OMA	47.2	16.8	0.0	64.0	46.3	18.1	2.0	67.0	232.9	89.4	7.7	330.0
MPA												
Instructors/Support	0.0	64.0	0.0	64.0	0.0	60.0	0.0	60.0	0.0	333.0	0.0	333.0
(MY)	(0)	(1.4)	(0)	(1.4)	(0)	(1.5)	(0)	(1.5)	(0)	(7.3)	(0)	(7.3)
Total Phase I	47.2	80.8	0.0	128.0	46.3	86.7	2.0	135.0	232.9	423.2	7.7	663.8

Table A-5. PHASE II TRAINEE REQUIREMENTS (COST AND MANPOWER)
FOR CURRENT CREW TRAINERS BY APPROPRIATION AND SCHOOL IN FY87-91
(FY87 $) (000) AND MAN-YEARS (MY)

	FY87				FY88				FY89			
	IN	PA	AR	TOTAL	IN	PA	AR	TOTAL	IN	PA	AR	TOTAL
OMA												
Civilian Personnel												
Instructors	0.0	9.2	0.0	9.2	0.0	9.2	0.0	9.2	0.0	9.2	0.0	9.2
(MY)	(0)	(.2)	(0)	(.2)	(0)	(.2)	(0)	(.2)	(0)	(.2)	(0)	(.2)
Support	288.5	5.0	24.5	318.0	318.0	3.4	97.8	418.1	289.3	6.8	24.5	318.4
(MY)	(10.3)	(.3)	(1.0)	(11.6)	(11.6)	(.2)	(4.0)	(15.8)	(10.2)	(.4)	(1.0)	(11.6)
Supplies												
POL/POL	27.0	0.0	46.4	73.4	30.1	0.0	180.8	211.1	27.9	0.0	42.2	70.1
AR/OE	0.6	0.0	33.0	33.0	0.0	0.0	134.4	134.4	0.0	0.0	30.9	30.9
Other (Supplies, & Equip. Etc)	123.4	5.0	0.3	135.8	131.4	4.2	18.8	154.2	111.8	7.5	4.5	123.8
Total OMA	438.9	20.1	111.1	570.1	479.8	16.8	431.8	927.8	429.8	23.3	102.1	550.2
MPA												
Instr/Spt w/TLCC	1,330.8	50.5	30.0	1,430.3	1,330.8	45.7	117.0	1,502.5	1,290.8	68.6	30.0	1,401.6
(MY)	(20.0)	(1.3)	(1.0)	(31.3)	(20.0)	(1.0)	(3.0)	(33.0)	(28.0)	(1.5)	(1.0)	(30.5)
Instr/Spt w/o TLCC	91.5	50.5	30.0	190.0	91.5	45.7	117.0	254.2	45.7	68.6	30.0	153.3
(MY)	(2.0)	(1.3)	(1.0)	(4.3)	(2.0)	(1.0)	(3.0)	(6.0)	(1.0)	(1.5)	(1.0)	(7.5)
PAA												
Ammunition	370.6	0.0	429.5	800.1	370.9	0.0	1,288.6	1,668.5	436.1	0.0	322.1	758.2
MCA*	X	0.0	0.0	X	X	0.0	0.0	X	X	0.0	0.0	X
TLCC												
OPA												
Hardware	5,858.6	0.0	0.0	5,858.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Phase II	8,017.9	70.6	570.6	8,077.1	2,188.3	62.5	1,837.2	4,088.0	2,154.9	91.9	463.2	2,710.0
Total Phase II w/o OPA & w/o MPA-TLCC	910.6	70.6	570.6	1,588.2	958.0	62.5	1,837.2	2,849.7	908.6	91.9	463.2	1,461.7

*USAIS was not able to provide a cost estimate for the construction (MCA) of the TLCC.

Table A-5. (Cont'd) [illegible]
[illegible]
[illegible]

	FY88				FY89				FY87-91			
	[illegible]	[illegible]	AR	TOTAL	[illegible]	[illegible]	AR	TOTAL	[illegible]	[illegible]	AR	TOTAL
OMA												
Civilian Personnel												
Instructors	0.0	9.2	0.0	9.2	0.0	9.2	0.0	9.2	0.0	60.0	0.0	60.0
(MY)	(0)	(.2)	(0)	(.2)	(0)	(.2)	(0)	(.2)	(0)	(1.0)	(0)	(1.0
Support	280.9	5.0	24.5	310.4	320.6	5.0	97.0	422.6	1,500.2	25.0	200.1	1,726.3
(MY)	(10.4)	(.3)	(1.0)	(11.7)	(11.2)	(.3)	(4.0)	(15.8)	(53.7)	(1.5)	(11.0)	(66.2
Supplies												
POL/PLL	30.1	0.0	64.2	94.3	33.3	0.0	192.6	225.9	140.0	0.0	538.2	678.0
[illegible]	0.0	0.0	47.1	47.1	0.0	0.0	143.2	143.2	0.0	0.0	300.5	300.5
Other (Supplies, & Equip. Etc)	118.6	5.9	6.3	130.8	133.2	4.6	18.6	156.4	618.2	28.1	54.3	700.6
Total OMA	438.6	20.1	142.1	600.8	487.1	18.0	452.2	958.1	2,280.0	90.1	1,230.1	3,600.2
MPA												
Instr/Spt w/TLCC	1,330.0	50.5	30.0	1,410.3	1,330.0	65.7	117.0	1,512.5	6,653.2	279.0	351.0	7,283.2
(MY)	(20.0)	(1.3)	(1.0)	(22.3)	(20.0)	(1.0)	(3.0)	(33.0)	(100.0)	(6.1)	(9.0)	(154.1)
Instr/Spt w/o TLCC	91.5	59.5	30.0	180.0	91.5	65.7	117.0	254.2	411.7	279.0	351.0	1,041.7
(MY)	(2.0)	(1.3)	(1.0)	(4.3)	(2.0)	(1.0)	(3.0)	(6.0)	(9.0)	(6.1)	(9.0)	(24.1)
PAA												
Ammunition	446.0	0.0	429.5	875.5	427.4	0.0	1,280.6	1,710.0	2,000.0	0.0	2,758.3	5,027.3
MCA*	X	0.0	0.0	X	X	0.0	0.0	X	X	0.0	0.0	X
TLCC												
OPA												
Hardware	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5,850.6	0.0	0.0	5,859.6
Total Phase II	2,224.4	79.6	610.6	2,914.6	2,254.3	64.5	1,857.0	4,176.6	16,840.0	378.1	5,340.4	22,578.3
Total Phase II w/o OPA & w/o MPA-TLCC	976.1	79.6	610.6	1,666.3	1,006.0	64.5	1,857.0	2,928.3	4,748.7	378.1	5,348.4	10,475.2

*USAIS was not able to provide a cost estimate for the construction (MCA) of the TLCC.

Table A-6. [illegible]

[illegible]

[illegible]

	FY87				FY88				FY89			
	[illegible]	PA	AR	TOTAL	[illegible]	PA	AR	TOTAL	[illegible]	PA	AR	TOTAL
Phase I												
OMA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PAA	25.1	0.0	0.0	25.1	37.7	0.0	0.0	37.7	22.6	0.0	0.0	22.6
Total Phase I	25.1	0.0	0.0	25.1	37.7	0.0	0.6	37.7	22.6	0.0	0.0	22.6
Manpower (MY)	(17.3)	(6.2)	(3.2)	[illegible]	[illegible]	(4.4)	(9.7)	[illegible]	(15.0)	(7.7)	(2.4)	(25.7)
Phase II												
OMA (TDY):												
Travel	170.0	[illegible]	31.0	[illegible]	[illegible]	[illegible]	117.3	342.2	132.5	114.2	20.8	267.5
Low Per Diem	67.1	35.7	18.0	121.7	100.6	25.4	56.8	[illegible]	[illegible]	45.1	14.2	119.7
High Per Diem	227.8	117.1	52.6	397.5	341.7	[illegible]	157.9	583.6	[illegible]	147.3	39.5	391.0
Local Travel	25.2	14.9	7.0	47.1	37.8	10.5	21.0	[illegible]	22.7	17.9	5.3	45.9
Most Likely (ML) TDY	427.9	[illegible]	[illegible]	574.4	504.6	[illegible]	174.1	[illegible]	[illegible]	150.3	35.0	554.5
Low TDY	242.0	[illegible]	[illegible]	[illegible]	205.7	[illegible]	174.1	525.0	182.9	150.3	35.0	367.2
High TDY	427.9	[illegible]	[illegible]	711.4	504.6	134.3	238.2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Total (ML) Phase II	427.9	[illegible]	[illegible]	574.4	504.6	[illegible]	174.1	[illegible]	[illegible]	150.3	35	554.5
Manpower (MY)	(11.5)	(6.2)	(3.2)	[illegible]	(17.3)	(4.4)	(9.7)	(31.4)	(10.4)	(7.7)	(2.4)	[illegible]

Table A-5. (Con't) PHASE I AND PHASE II FORECON RESOURCE REQUIREMENTS (CORP AND HEADQUARTERS) FOR CORNET CARRE TRAINING BY APPROPRIATION AND SCHOOL IN FY87-91 (FY87 ES (000) & MAN-YEARS (MY))

	FY90				FY91				FY87-91			
	IN	PA	AR	TOTAL	IN	PA	AR	TOTAL	IN	PA	AR	TOTAL
Phase I												
CRA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PAA	27.7	0.0	0.0	27.7	40.2	0.0	0.0	40.2	153.3	0.0	0.0	153.3
Total Phase I	27.7	0.0	0.0	27.7	40.2	0.0	0.0	40.2	153.3	0.0	0.0	153.3
Manpower (MY)	(10.0)	(6.2)	(3.2)	(20.7)	(20.4)	(4.9)	(9.7)	(42.3)	(105.6)	(29.4)	(28.2)	(163.2)
Phase II												
CRA (TDY):												
Travel	190.1	60.0	31.0	285.1	197.2	42.5	117.3	357.0	883.8	317.4	317.4	1,518.6
Low Per Diem	73.8	35.7	18.9	128.4	107.4	27.7	56.8	191.9	400.3	189.6	185.6	744.5
High Per Diem	244.4	117.1	52.6	414.1	364.5	91.8	157.9	613.4	1,383.4	556.5	460.5	2,400.4
Local Travel	27.7	14.4	7.8	49.1	40.3	11.4	21.8	72.7	153.7	60.1	61.3	284.1
Most Likely (ML) TDY	466.2	95.7	49.9	611.8	602.8	70.2	174.1	846.3	2,420.9	487.8	483.8	3,390.9
Low TDY	267.8	95.7	49.9	413.5	304.8	70.2	174.1	549.8	1,283.1	487.8	483.8	2,283.1
High TDY	466.2	191.5	90.6	748.3	602.8	144.9	296.2	1,043.1	2,420.9	943.8	839.2	4,203.1
Total (ML) Phase II	466.2	95.7	49.9	611.8	602.8	70.2	174.1	846.3	2,420.9	487.8	483.8	3,390.9
Manpower (MY)	(12.7)	(6.2)	(3.2)	(22.1)	(18.5)	(4.9)	(9.7)	(33.1)	(70.6)	(29.4)	(28.2)	(128.8)