

Research Report 1357

12

DEVELOPMENT AND IMPLEMENTATION OF GARRISON MANAGEMENT INNOVATIONS

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performed, and identified sources of detractors to conducting combat training.

From the analysis conducted, major problem areas were identified and potential solutions were formulated.

The management alternatives were revised through an iterative process with military subject matter expert panels. Conducted from the lowest levels of command to the highest levels of command, this process was designed to validate the content of the recommendations and facilitate their adoption.

As the research proceeded, many of the recommendations were acted upon in various ways by the division. Actions by the division to take advantage of research findings were typically so rapid that the researchers were precluded from collecting the baseline data needed to conduct a formal evaluation.

A post hoc analysis revealed that the division chose which recommendations to implement based, to some extent, on a judgment regarding the relative costs and benefits of the innovations.



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FOREWORD

The Monterey Field Unit has as its primary mission execution of research to improve training in units. The Unit Training Programs (UTP) Team has concentrated over the past several years on the unit training environment.

Unit training is today governed by the Battalion Training Management System (BTMS). The UTP Team conducted the research and development underlying the BTMS for the Army Training Board (proponent for unit training management) during the period 1975 through 1978. A field test of the prototype BTMS held during 1978 demonstrated that a hostile training environment could easily frustrate any training management system. At the request of DCSOPS Training, FORSCOM DCSOPS, and the Army Training Board, research was conducted from 1979-82 to determine how to improve the unit training environment.

This report describes how the research program was designed, the innovations developed for improved garrison management, and the fate of the innovations in the Division which hosted this research program.



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DEVELOPMENT AND IMPLEMENTATION OF GARRISON MANAGEMENT INNOVATIONS

BRIEF

Requirements:

This report describes the development and implementation of alternative management procedures in a FORSCOM Infantry Division. The purpose of the alternative procedures was to reduce time spent at the company/battery level in performing garrison/administrative tasks, thereby increasing the time potentially available for combat training.

Procedure and Findings:

The research team analyzed unit and individual priorities as perceived by key company/battery personnel, examined actual time usage and tasks performed, and analyzed detractors to conducting combat training. From the analysis conducted, major problem areas and potential solutions were formulated.

The management alternatives were revised through an iterative process with military subject matter expert panels. The validation/review process was conducted from the lower levels of command to the higher levels of command. This process was designed to validate the content of the recommendations and facilitate their adoption.

Most of the major recommendations were acted upon in various ways by the division while the validation was underway, thereby precluding collecting the baseline data needed to conduct a formal evaluation.

A post hoc analysis revealed that the division chose which recommendations to implement based, to some extent, on a judgment regarding the relative costs and benefits of the innovation.

Utilization of Findings:

Most of the major recommendations were implemented in various forms within the division. The Division Commander stated that the research effort contributed to actions he has taken.

The results of this research were used in the FORSCOM Training Environment Study (1980-81) and the DA DCSOPS (Training) Study of Training Detractors.

DEVELOPMENT AND IMPLEMENTATION OF GARRISON MANAGEMENT INNOVATIONS

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I. INTRODUCTION

This report describes the development and implementation of innovative management procedures for performing garrison and administrative duties at the 7th Infantry Division, Fort Ord, California. The primary purpose of these innovations was to decrease the amount of time required to perform garrison and administrative duties, with the expectation that the additional available time could be used for combat training. The innovations also attempted to minimize the disruptive effects on training caused by personnel turbulence, shortage of qualified job-holders, and changes in support requirements and training schedules.

The in-depth research for this project took place at the 7th Division. Five additional FORSCOM Divisions were sampled in order to validate the issues and problems, and to collect innovative solutions to these problems.

This effort was conducted as part of a three-year project begun in 1979. Chapter I describes the background of this project. Chapter III describes the research procedures used to develop the management innovations. Chapter IV delineates the recommended management innovations, and Chapter V discusses the implementation process.

II. BACKGROUND

Project Objectives

Time is one of the most crucial resources needed by Army units to train for combat. It takes time to assess training needs, to select training objectives, to prepare trainers, and to conduct training. However, the training time available to units has been eroded over the years by an increase in the number and complexity of garrison and administrative duties. Additional causes for this increase include reductions in civilian support services which have required soldiers to be detailed to perform support functions, shifts of individual training from TRADOC schools to the units, and supplemental basic skills education which takes soldiers away from combat training.

The disruptive effect of garrison and administrative tasks on training resulted in a FORSCOM Human Research Need request to ARI to develop ways to increase the time available for combat training by designing innovative procedures for streamlining garrison management. A three-year research project was designed to meet this need. The project had nine specific objectives to be accomplished through this project. Three of these objectives were accomplished during the first year of the project:

- Determine the organizational policies from division, brigade, and battalion sources that influence company/battery organizational procedures; and to identify the policies and functioning of companies/batteries by reviewing standard operating procedures and other administrative documentation by conducting structured interviews, and by administering questionnaires.
- Identify the specific job responsibilities and tasks performed by company/battery commanders, their subordinate officers, and NCOs by observing job activities and by employing structured interviews and questionnaires.
- Determine the procedures and materials used to prepare company/battery commanders, their subordinate officers, and NCOs

in an operational FORSCOM infantry division by reviewing their job preparation/training programs.

During the second year, the following three objectives were accomplished:

- Formulate innovative management procedures which reduce the time spent on garrison/administrative tasks.
- Develop job aids to support implementation of the innovations, the performance of routine garrison/administrative tasks, and the acquisition of professional skills by company grade NCOs.
- Develop implementation plans, procedures, and materials for a field test of the second year's research.

The following three objectives were met during the third year of the project:

- Further develop and refine garrison/management innovations and implementation procedures. (Research plans called for a formal implementation/field test, but the spontaneous adoption of the proposed innovations or variations of them precluded a formal field test.)
- Evaluate and refine job aids designed to support efficient performance by company grade NCOs and officers.
- Evaluate and refine the draft ARI guideline which is to aid TRADOC school developers of small unit-battle drill training systems which are designed to integrate collective and individual training.

Overview of First Year Research

The first year of this project was devoted to the definition of this research problem, to the identification of sources of existing information, to gathering information, and to the identification of data which might only be developed

through new research. As information was collected and analyzed, the problem definition was refined and project planning updated. Information regarding unit requirements was initially gathered based on broad categories which were successively refined to very specific items. Department of Defense, Department of the Army, TRADOC, FORSCOM, and 7th Division publications were examined to compile lists of official requirements at the company/battery level. Instruments were then developed to survey unit members regarding how they actually spent time in relation to the required missions, activities, and tasks and their perceived importance. In addition to task data collected through questionnaires, observations were conducted to validate and supplement the task-level information.

This in-depth examination was done within a single division. However, to establish generality for the issues and problems, five additional FORSCOM Divisions were sampled. Innovative solutions to the pervasive problems were also collected during these visits.

While the development and refinement of the garrison management innovations during the second and third years of the project did not exclusively build upon the first year research, a brief review of the first year's findings will be helpful toward understanding this project's outcome. Information regarding unit missions will be presented first, then activity data, and, finally, task level information. The results of the data collection activity in the five additional divisions will then be discussed.

Unit Missions

Missions were defined as unit requirements or goals. Questionnaires were used to collect data regarding the time spent on and importance of unit missions from key personnel. In order to assist in focusing the research effort, these data were used to categorize missions in terms of research priority (see Table 1). Since the purpose of the project was to reduce time spent performing administrative and garrison duties, the time variable was given precedence over the importance variable when determining priority. Within the High and Average time categories, those missions of low importance were given higher priority

with the expectation that they might be able to be reduced or eliminated as a unit requirement. For the missions which take little time, those which were also unimportant were considered lowest priority for attention.

TABLE I
RESEARCH PRIORITY BASED ON COMBINATION OF
PERCEIVED TIME AND IMPORTANCE DATA

Research Priority	Time Spent Doing Mission/Activity	Importance of Mission/Activity
1	High	Low
2	High	Average - High
3	Average	Low
4	Average	Average - High
5	Small	Average - High
6	Small	Low

None of the missions were in the highest priority category (High Time - Low Importance). The missions in the second priority category (High Time - Average to High Importance) were divided into six distinct areas and examined in terms of differences between officers and NCOs. As can be seen in Table 2, officers and NCOs demonstrate noticeable priority differences in the three areas of a) tests/inspections/evaluations, b) schools, and c) training. These three areas were considered to have a good potential for streamlining through new management approaches, since areas which show large differences may indicate

problems in coordination of effort by unit staff, and thus bear further examination. Instruments, procedures, and additional results of this phase of the project are in Best, Elliott, Scott, and Hiller (1980), and Scott, Johnson, McCluskey, Tokunaga, Giesler, Whitmarsh, and Hiller (1980).

TABLE 2
 PERCENT OF MISSIONS WITHIN EACH AREA ASSIGNED A
 RATING OF HIGH TIME AND AVERAGE-HIGH IMPORTANCE
 BY OFFICERS AND NCOs

AREA DEFINITION (number in parentheses gives the number of missions in the area)	RATINGS OF HIGH TIME/ AVERAGE-HIGH IMPORTANCE	
	OFFICERS (N=15)	NCOs (N=52)
Administration: (N=36) Unit functions connected with requirements in a garrison environment.	33%	36%
Tests/Inspections/Evaluations: (N=16) Forms of assessment and evaluation for which a unit must be involved.	50%	75%
Taskings: (N=5) Tasks performed by a unit in response to higher echelons, commanders; special unit assignments.	60%	60%
Maintenance/Support: (N=2) All unit activities required to maintain unit equipment.	100%	100%
Schools: (N=3) All on duty military and civilian schools. Assignment of individuals to these schools is CO's responsibility.	66%	0%
Training: (N=64) Activities which are related to all training activities while in garrison.	47%	26%

Individual Activities

Additional information was obtained by examining activities. Activities are individual job responsibilities which fulfill a mission statement. Data on activities were collected using questionnaires with time and importance scales, and results were prioritized as in Table 1. Given their different duties (and thus different areas of responsibility), differences between officer and NCO ratings were expected for individual activities.

Approximately the same amount of time was spent on individual garrison activities as on combat activities. Only one activity, Combat Developments Experimentation Command (CDEC) support was rated High Time - Low Importance by officers. Twenty-nine percent (29%) of the garrison activities and twenty-six percent (26%) of the combat activities were rated High Importance. Both officers and NCOs found garrison maintenance and support to be primary activities in which they are frequently engaged.

The High Time/Average to High Importance were categorized into six major areas and examined in terms of differences between officers and NCOs. The results of this analysis are shown in Table 3. Officers rated administrative activities high in time and importance more frequently than NCOs. The area of tests/inspections/evaluations also received a high percentage of Time-Importance ratings by officers and NCOs; both groups rated thirty-three percent (33%) of inspection/evaluation activities High Time - High Importance. The two areas of garrison activities which neither officers nor NCOs perceived as consuming a lot of their time were schools and taskings, e.g., guard duty. Maintenance/support activities were the prime time users, with High Time - High Importance ratings of one hundred percent (100%) for officers and sixty percent (60%) for NCOs. Though the percentages are smaller, the training activity data resemble the mission data. Officers found garrison related training to be a high priority mission, and they spend more time performing training activities (20%) than do NCOs (8%).

TABLE 3

PERCENT OF ACTIVITIES WITHIN EACH AREA ASSIGNED A RATING OF HIGH TIME AND AVERAGE-HIGH IMPORTANCE BY OFFICERS AND NCOs

AREA DEFINITION (number in parentheses is the number of activities in each area)	RATINGS OF HIGH TIME/ AVERAGE-HIGH IMPORTANCE	
	OFFICERS (N=20)	NCOs (N=87)
Administration: (N=70) Unit functions connected with requirements in a garrison environment.	35%	26%
Tests/Inspections/Evaluations: (N=21) Forms of assessment and evaluation for which a unit must be involved.	33%	33%
Taskings: (N=7) Tasks performed by a unit in response to higher echelons, commanders; special unit assignments.	14%	0%
Maintenance/Support: (N=5) All unit activities required to maintain unit equipment.	100%	60%
Schools: (N=4) All on duty military and civilian schools. Assignment of individuals to these schools is CO's responsibility.	22%	0%
Training: (N=55) Activities which are related to all training activities while in garrison.	20%	8%

Research focus appeared the most promising for those areas where a high percentage of individual activities was rated High Time - Average to High Importance, since an area where much time is expended was considered a potential area for streamlining. These areas are administration, maintenance and tests/inspections/evaluations. The instruments, procedures, and additional results are in Best, et al., (1980) and Scott, et al., (1980).

Individual Tasks - Questionnaire Data

Task level data were collected using both questionnaires and observations. Questionnaires were used as an easy and inexpensive method of collecting information while observations were used to check the accuracy of the questionnaire data. A sample of 163 jobholders, representing various types of combat units and key duty positions, responded to the questionnaire at the 7th Division. The objectives of the questionnaire were to determine (1) specific tasks performed by each jobholder, (2) the amount of time spent on each task, (3) the extent and nature of time spent on each task, and (4) those tasks or parts of tasks which could be performed by civilians in order to free soldiers for combat training. The questionnaire included 572 tasks. The questionnaire responses were used to produce lists of time-consuming job tasks. These rankings were based on the amount of time that key personnel in each of four key duty positions said they spent performing the tasks.

The 7th Infantry Division uses a "cycle" system to determine training priorities for units. Units are either in training cycle or support cycle. There were very few differences in task performance as a function of cycle. Although some tasks were found in all cycles, there were some changes in the time distribution across tasks in each cycle. Small shifts were noted for the Company/Battery Commander (CO/BC), Executive Officer (XO), and Platoon Leader (PL) among the tasks demanding the most time. The responses from the First Sergeants (ISGs), however, indicated that their jobs are relatively unaffected by post cycles.

In order to estimate the overall composition of each job, the amount of time spent on each task was averaged across cycles and percents were computed, by category, based on the total amount of time spent for each duty position (considering only the most time consuming tasks, *i.e.*, an average of 15 hours or more per cycle). The overall composition of the four senior duty positions are given in Table 4. For all four duty positions, administrative tasks accounted for most of the time spent.

TABLE 4
 MOST TIME CONSUMING TASKS BY
 CATEGORIES AND DUTY POSITION

CATEGORIES	Percent of Total Time Spent on All High-Time Tasks			
	Commander (N=13)	Executive Officer (N=11)	Platoon Leader N=16)	First Sergeant (N=11)
Administration	36	74	72	52
Supply	14	6	5	-
Tests/Inspections/Evaluations	22	15	10	46
Taskings/Support/Details	-	-	-	2
Training	28	5	13	-

The tasks of the Executive Officer and Platoon Leader were heavily oriented toward administration. The Commander's duties were relatively evenly distributed among the task categories. The First Sergeant's job responsibilities were found primarily in two of the categories, administration and tests/inspections/evaluations. In general, tasks concerned with training were not given a great deal of time. The Commander spent more of his time on training than any of the other three positions; this time was spent planning and conducting various kinds of training.

In terms of identifying areas for potentially reducing the requirements of the major duty positions, or increasing the efficiency of operations, the categories of administration and tests/inspections/evaluations appeared to have the highest potential for time savings and redistribution of efforts to training activities. See Best, et al., (1980) and Scott, et al., (1980) for a more complete discussion.

Individual Tasks - Observations

In an effort to estimate the accuracy of the questionnaire, information was collected by observation of unit personnel performing their jobs. While the questionnaire data are summaries of jobholders' perceptions, the observation data were considered to be more reliable estimates of actual job task behavior. However, the observations demonstrated that the questionnaire data was accurate regarding the relative distribution of time (Johnson, Tokunaga, and Hiller, 1980).

The positions observed were company/battery commanders, first sergeants, executive officers, platoon leaders, and squad leaders/section chiefs. These duty positions were considered most important because of their management, training, and supervisory responsibilities. In addition, these jobs represented major elements in the management alternatives to be developed.

An observation form was developed consisting of a matrix of job content and management function categories. (Table 4 shows the job content categories.) The observation periods averaged 4.2 hours. Each observation period was divided into ten minute recording segments. At the end of each ten minute period, the dominant behavior was entered into the appropriate cell.

During the observations, the total time spent on each task was recorded. In addition, the following information was also collected:

- Type of unit
- Time of day
- Post cycle
- Duty position

An analysis of the tasks revealed which take a long time to perform. An analysis of personnel management, for example, demonstrated that the First Sergeant expends a great deal of time with tasks related to the duty roster, meetings, and formations. Another area in which key personnel spend a great deal of their time is administration. The analyses revealed that the most time consuming tasks in administration are providing information, reviewing paperwork, inspecting, and planning.

Areas containing a high percentage of time consuming tasks were observed to vary little with the changes in cycles. More time was spent in the area of training during the training cycle than during mission support. Maintenance and supply are both areas in which more time was spent during mission support cycle than during the training cycle. Less time was spent inspecting and reviewing during the training cycle than during the mission support cycle. With the exception of training, maintenance, and the administrative areas of planning and providing information, the observational subdivisions which contain high time tasks tend to remain the same throughout the cycles. These consistently time consuming tasks, which have been organized into the subdivisions of administration, supply, tests/inspections/evaluation, maintenance and training, were of immediate interest.

Johnson, et al., (1980) categorized the questionnaire tasks into the content categories used for observations. The total percentage of time spent in each content category, by each duty position, was computed for both the questionnaire and observational data.

These totals are presented in Table 5. There are some noteworthy differences between the data on time collected through self-report and that which was observed. For example, questionnaire respondents consistently reported spending less time on individual training than what was observed. However, the correlation coefficients between the rank orders were significant at $p < .05$ for all positions except squad leader.

TABLE 5

PERCENT OF TIME IN EACH ACTIVITY AREA AS DETERMINED BY INVENTORY (I) AND OBSERVATION (O)

	CO/BC		XO		ISG		PL		SQ. LEADER/ SEC. CHIEF	
	I	O	I	O	I	O	I	O	I	O
Individual Training	7.15	14.77	3.71	10.35	2.07	5.70	7.49	16.52	.35	24.41
Collective Training	3.67	7.11	1.83	3.78	9.04	1.18	1.60	4.53	0.00	2.20
Mandatory Training	6.82	1.35	1.34	2.14	1.72	.50	.50	5.38	0.00	1.19
Miscellaneous Training	17.25	14.22	7.86	8.88	3.74	4.09	11.52	10.29	7.09	8.81
Logistics	1.00	.67	.85	1.48	.13	.87	.93	3.79	0.00	.34
Maintenance	11.34	3.37	19.79	12.83	.30	2.17	12.82	12.65	22.79	12.37
Supply	8.96	3.19	15.47	3.62	.95	1.98	8.09	7.56	.87	5.59
Details/Support	2.29	3.92	2.38	3.78	1.51	3.04	.97	1.23	3.88	5.25
Housekeeping	3.24	.49	.85	1.81	4.65	6.51	.47	.76	20.47	2.71
Personnel Management	19.35	16.12	18.94	11.68	27.97	39.53	19.41	12.37	21.12	6.10
Unit Administration Miscellaneous	18.92	22.86	26.98	26.32	47.93	27.94	36.22	11.80	23.43	21.69
Total*	99.99	88.07	100.00	86.67	100.01	93.51	100.02	86.88	100.00	90.66

*Values may not equal 100% due to rounding in the case of inventory; the observational data does not equal 100% because two categories, Personal Activities and Overall Miscellaneous were excluded as the inventory did not contain parallel tasks.

Training Detractors

The most significant source of first-year information for developing garrison management innovations was the study of training detractors in five additional FORSCOM Divisions (Funk, Johnson, Batzer, Gambell, Vandecaveye, and Hiller, 1980). The purpose of this aspect of the study was to:

- Expand the data base beyond the original division to enable identification of generic problems.
- Collect further information on garrison/administrative problems at the company/battery level in order to identify the most common detractors to combat training.
- Collect and document examples of apparently successful solutions to garrison management problems at the company/battery level.
- Estimate the utility of those solutions to the development of innovative management approaches for the 7th Infantry Division.

The data were collected through interviews at division, brigade, battalion, and company/battery levels. A content analysis was conducted on the data collected in 198 interviews. The composition of this sample is shown in Table 6.

Interview participants were asked to respond in two ways to the question of detractors. First, they were asked to name what they perceived to be the major detractors and describe them. Next, they were asked specific questions about the impact of the detractors on combat training and management methods used to cope with the detractors they had identified.

The most significant detractors reported in rank order, based upon the frequency with which they were cited in the five divisions, by level of command, are shown in Table 7.

TABLE 6
INTERVIEW SAMPLE COMPOSITION

Level	Position	Number
Division	Commander	2
	Assistant Division Commander	4
	Chief of Staff	2
	G1	4
	G3	5
	G4	4
	AG	5
	OESO	4
Brigade/DIVARTY	Commander	7
	Executive Officer	4
	S1	7
	S3	7
	S4	7
Battalion	Commander	14
	Executive Officer	12
	S1	15
	S3	15
	S4 and Motor Officer	14
Company/Battery	Commander	24
	Executive Officer	21
	First Sergeant	<u>21</u>
		198

TABLE 7

MOST FREQUENTLY MENTIONED DETRACTORS TO
COMBAT TRAINING BY LEVEL OF COMMAND
IN FIVE FORSCOM DIVISIONS

Detractor	Company/ Battery N=66	Battalion N=70	Brigade/ DIVARTY N=32	Division N=30
● Low fill	1	1	1	1
● Individual performance	2	3	3	3
● Turbulence	3	4	2	1
● Installation support and taskings	4	2	2	2
● Lack of equipment and material	5			
● Lack of time	6			

Summary

The diverse types of data and amount of detail collected during the first year provided a variety of perspectives regarding the operations of the 7th Division. These data served as general background information which proved useful to protect staff for initiating discussions with Army personnel, for interpreting responses, and for designing appropriate innovative management procedures. The training detractor study provided more specific direction in regard to the problems which needed to be addressed and potential solutions.

Information from the first year was consolidated and utilized during the second year, as described in the following chapter.

III. PROCEDURE

The design, refinement and implementation of the management systems took place during the second and third years of the project. The following steps were planned:

- Review of first year findings.
- Identification of problem areas and design of possible solutions.
- Refinement of solutions through review by increasingly higher levels of command.
- Briefing to Commanding General.
- Implementation process/field test.

This process is discussed in this chapter.

Review and Consolidation of First Year Findings

The first step involved review of the first year research products. The information which was consolidated included:

- Perceptions of officers and NCOs regarding the percent of activities rated High-Time and Average-High Importance within various garrison/administrative areas (Best, et al., 1980, pp. 10-13).
- Percent of High-Time tasks within various garrison/administrative areas as reported by questionnaire (ibid, pp. 14-16).
- Observation data regarding how time is spent (ibid, pp. 17-20; Scott, et al., 1980).

- Summary of results of unit priority exercise (Johnson and Scott, 1980).
- Results of structured interviews in five FORSCOM Divisions regarding combat training detractors (Funk, et al., 1980).

This information was consolidated during the beginning of the second year of research. The project team reviewed the information in preparation for a two-day "brainstorming" session, which was designed to develop prototype management alternatives. The results of this session are described in the following section.

Identification of Problem Areas and Possible Solutions

Using the knowledge and experience gained during the first year of the project, as well as personal experience and knowledge, the nine members of the project staff held a brainstorming session with an ARI representative to generate a list of problem areas and issues within the 7th Division. This list of garrison/administrative problem areas was then used as a basis for generating management alternatives.

Each of the relevant reports was examined and, to the extent possible, rank orders were assigned to the problem areas based on the available data. This was done separately for each report. For example, maintenance was ranked first in priority based on time and importance activity data (Best, et al., 1980), third in importance based on time spent data (Best, et al., 1980), and second in importance based on the unit priority exercise (Johnson and Scott, 1980).

Taking this information into consideration, the project team members individually rank ordered the problem areas based on their personal judgment. They were asked to consider the:

- perceived extent of the problem;
- degree to which the problem detracts from combat training;

- probability of successful intervention by the researchers.

The individual rank orders were summarized and displayed. Large disparities in individual rankings were discussed in order to identify rationales in case important implications had been overlooked by other team members. A final rank ordering was then achieved (see Table 8). This hierarchy seemed to offer the highest probability of substantial improvement through intervention.

TABLE 8
RANK ORDERING OF TRAINING DETRACTORS
WITHIN THE 7ID

Problem Areas	Rank
Shortage of NCOs and Critical MOSs	1
Turbulence	2
Personnel Shortages	3
Characteristics of Incoming Personnel	4
Time Spent in Personnel Management	5
Taskings	6
Training Management	7
Information Management	8
Administrative Tasks	9
Maintenance	10
Supply	11
Inspections	12
Inprocessing/Outprocessing	13
Redundancy	14
Schools	15

A detailed description of each detractor and its impact is included in Appendix A of this report.

The project team then generated an array of potential solutions to the problem areas. In addition to information collected in five other FORSCOM divisions regarding actual and suggested methods of handling similar problems (Funk, et al., 1980), team members used their knowledge of management theory and experience with the military system. The project team hypothesized that there were three major ways to decrease the negative effects of time spent performing garrison and administrative tasks:

- Eliminate the requirement to perform certain tasks.
- Reduce the total time spent on a task by enabling the task to be performed more efficiently (e.g., automation, reduce learning time, frequency with which the task must be performed).
- Redistribute tasks so that the negative effects of performing the tasks are reduced (e.g., redistribute tasks among individuals and agencies in order to reduce the burden at critical places, redistribute when tasks are done so that there are fewer critical time periods).

The top four problem areas in Table 8 were determined to be outside of the control of the division. They were, therefore, not addressed in generating potential solutions. The potential solutions to the remaining problem areas in Table 8 were categorized into nine areas:

- Inprocessing/Outprocessing
- How taskings are selected and distributed
- Training management
- Personnel management
- Information management
- Maintenance administration
- Supply management
- Inspection procedures
- Installation school responsiveness

An extensive array of potential solutions was generated in each of these areas. A simplified example of the solutions suggested for the area of Inprocessing/Outprocessing is shown in Figure 1. Note that a variety of approaches are listed, some of them contradictory. Since the objective was to generate a wide variety of potential solutions, contradictory solutions were left for consideration by division personnel. Other solutions may impact across several problem areas.

Potential Approaches: Inprocessing
<ul style="list-style-type: none">● Conduct inprocessing testing before unit assignment (e.g., driver's test, ASVAB, BSEP)● Develop a replacement battalion● Develop procedures to more effectively process personnel on weekends● Use chain-of-command sponsors
Potential Approaches: Outprocessing
<ul style="list-style-type: none">● Batch process legal appointments● Examine and streamline the separation process● Design job aids for outprocessing procedures● Create JAG assistance teams for unit legal personnel● Have a system for outprocessing where an individual enters, is outprocessed, and leaves

FIGURE 1
EXAMPLE OF POTENTIAL SOLUTIONS INPROCESSING/OUTPROCESSING

Refinement Process

A series of military review and comment steps were scheduled to validate the problems, refine the alternative solutions, delete those which were not feasible, and to increase the probability of acceptance of the changes.

The review process included (see Figure 2):

- Review by panels of personnel from companies/batteries and battalions.
- Review by Division Staff and Major Commanders.
- Review by Chief of Staff and Assistant Division Commanders (ADCs).
- Information briefing to Commander, 7th Infantry Division.

In Cycle 1 of the military review process, the list was refined, and redundant and competing interventions were resolved. This process involved the participation of company/battery and battalion officers and NCOs. Four panels of six subject matter experts each discussed the suggested innovations, eliminating those which were already in operation at the 7th Division. Based upon these discussions, the innovations were revised to increase the feasibility of successful implementation.

During Cycle 2, written responses to the recommendations were collected from 27 NCOs and 21 officers at the major command and Division staff levels. A content analysis was performed on these responses and, again, the recommended alternatives were refined.

The refined list of alternatives was used to prepare a briefing for the Assistant Division Commanders and the Chief of Staff of the 7th Division. They determined that the alternatives should be presented to the Commanding General after additional division staffing. Prior to this briefing, personnel from staff sections which would be affected by the innovations worked with the project staff to further refine the alternatives. The version of the suggested changes presented to the ADCs and Chief of Staff is in Chapter IV.

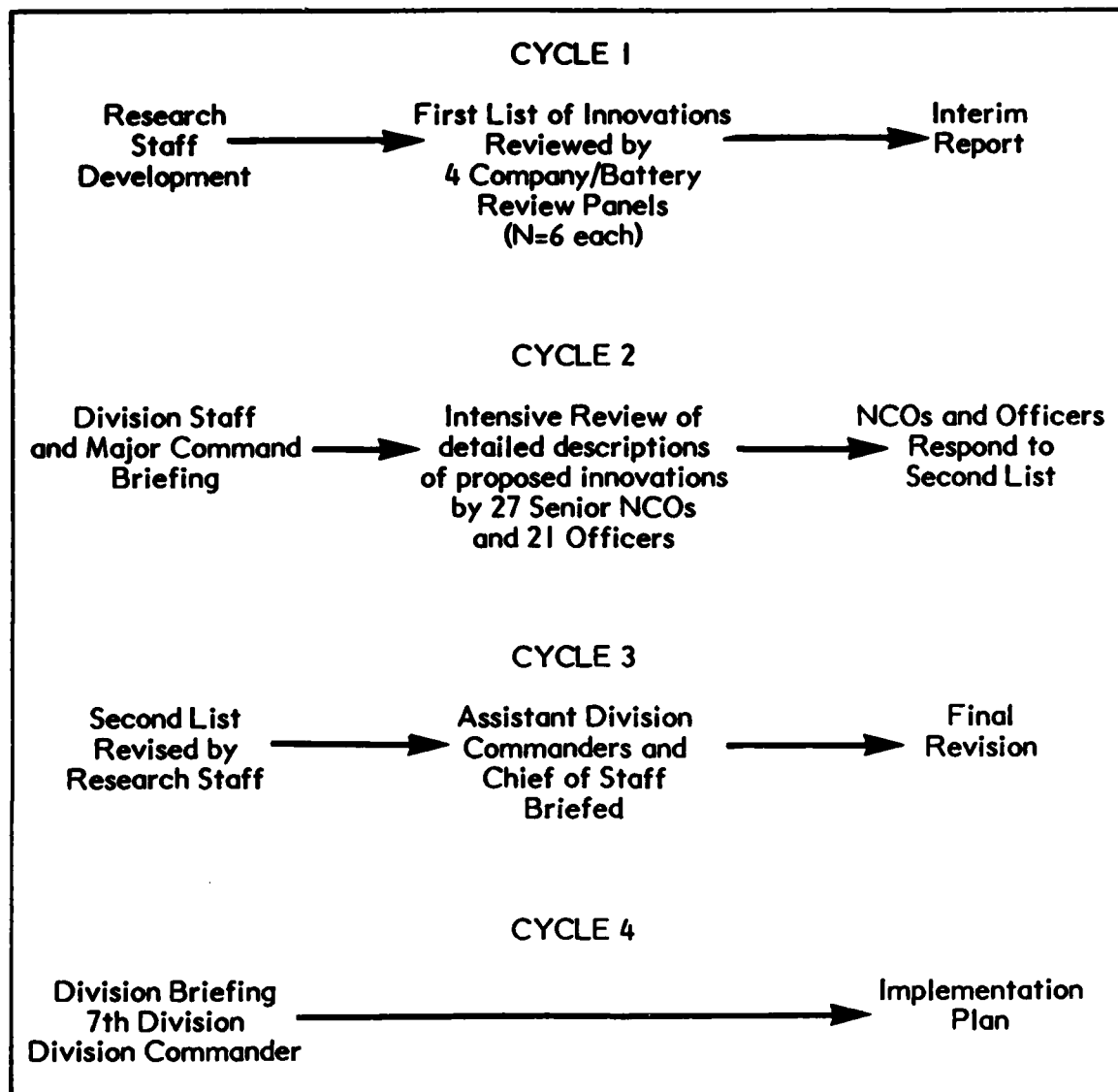


FIGURE 2
MANAGEMENT SYSTEM REVIEW PROCESS

IV. RECOMMENDED APPROACHES AND ISSUES

This chapter presents the refined version of the proposed management systems presented to the ADCs and Chief of Staff. The nine problem areas were supplemented with a proposed method of integrating individual and collective training. It is expected that this will provide a more efficient means of providing combat training in units.

Each of the ten areas are treated separately in the following format:

- A description of the problems which the systems are designed to impact.
- Objectives and recommendations.
- Issues which are anticipated.

During Cycle 2, a worksheet was given to 21 Officers and 27 Senior NCOs to obtain their comments and reactions to the alternatives. Their reactions were categorized as "concur," "nonconcur," or "no comment." The modal response is given in parentheses along with any other data from this process that appeared to have some significance.

Inprocessing/Outprocessing

1. Problem Description

The time spent performing and correcting the administrative tasks for inprocessing/outprocessing is excessive for both clerical personnel and the soldiers being processed.

2. Objectives and Recommendations

- (a) Reduce the time spent at company/battery level by shifting tasks to a central agency and by concentrating available expertise.

(1) Expand the number of functions to be performed by a central inprocessing unit, to include personal knowledge subjects. This will reduce the time spent at company/battery level on these tasks. (67% of Officers and 71% of NCOs concurred.)

- Administration of ASVAB for those eligible and trying to raise test scores.
- Conduct of individual knowledge skill classes (UCMJ, Code of Conduct, etc.).
- Install a quality control system for preparation of Personnel Readiness Folder (PRF).
- Administration of a driver's Battery II Test as required.
- Conduct of initial counseling to identify soldier problems and connect soldier with appropriate referral agency (e.g., pay, domestic problems). Units to which they are assigned will be advised of problem people (e.g., SM pending BCD).

(2) Implement a central outprocessing activity to reduce time spent by individuals to perform outprocessing, (possible proponent could be the Transfer Point). All grades and units would be processed. (67% of Officers and NCOs concurred.)

- Soldier would report to outprocessing unit with orders 30 days prior to departure.
- Outprocessing activity would take one week to determine what soldier must physically clear and to prepare the clearance form. For example, the names would be submitted as a batch to facilities such as the credit union, library, Red Cross, etc. Only those soldiers who had to physically clear a facility would have that put on the

clearance form; the outprocessing facility would validate all the others.

- Clearances would be reviewed to see if some can be eliminated (e.g., shoe repair).
- Three weeks prior to clearance, soldier would pick up clearance form. Soldier would still only receive the division SOP authorized time.
- The last five days prior to clearance, the soldiers would be scheduled by the outprocessing facility and be cleared similar to inprocessing. For example, ETS and retirees would receive appropriate counseling, CIF turn-in would be accomplished, records consolidated, pay adjusted.
- The unit (company/battery) commander/first sergeant would be the last sign-off entry on the clearance form.

3. Issues

(a) To add mandatory training to replacement detachment would require:

(1) One or two additional days of processing time.

(2) Each additional day would require:

- One additional barracks (45 person capacity).
- One classroom (60 person capacity).
- One E-5 for each barracks.
- Increased dining capacity.

(3) The use of special staff as instructors, e.g., current utilization of JAGs for special classes, etc.

- (b) Testing incoming personnel on administrative/light tactical vehicles (¼ ton, ½ ton, sedan, carry-all, 2½ ton) would require one or two additional days. Does DIO have testing capacity?
- (c) Consider physically consolidating all processing actions close together or in one complex. Currently, it is spread out (i.e., Martinez Hall, 7th AG Det, Transfer Point, CIF).
- (d) Centralized outprocessing may require additional staffing or change from military to civilian staffing.

Tasking Tracking System

I. Problem Description

The time consumed in requirements levied on battalions beyond their TOE mission detracts from combat readiness training. Examples of taskings include:

- Installation maintenance (e.g., post beautification, repair)
- Public relations (e.g., displays, parades, open house)
- Ceremonies (e.g., change of command, retirement, funerals)
- Support of other units (e.g., umpires, evaluators)

NOTE: Current procedures have the G-3 levying taskings. The G-3 considers such items as:

- a. Training Cycle
- b. Unit Strength
- c. Type of Task

2. Objectives and Recommendations

- (a) Make time used in taskings visible to top-level commanders. Provide a method for controlling detractors to TOE missions, and for setting priorities and making trade-offs.

- (1) Develop an administrative "Time Bank" for each battalion for each year. All non-Table of Organization and Equipment (TOE) missions (Mobile Training Teams (MTTs), post support, Special Duty (SDs), etc.) would be charged against this account. (54% of Officers and 57% of NCOs concurred.) The account would be determined by:
 - Considering the average strength of the battalion for the last year.
 - Calculating available time in person days (by taking average strength times the number of days available after deducting leaves and holidays).
 - Determining the training/tasking mix through command action. For example, the split may be determined through a negotiation process or assigned by the Division Commander (e.g., Infantry battalions 60% training and 40% support; or Engineer battalions 75% training and 25% support). There may even be differences between battalions of the same type because of major exercises or readiness level.
- (2) Maintain the G-3 as the single point of contact for tasking within the division. The G-3 would use the same considerations currently in use.
- (3) The time spent on these taskings would be reported to the G-3. The G-3 would program, record, and report expenditures against budget just as financial budget reviews are currently conducted.
- (4) Items chargeable to the administrative account would be determined within the command, but would include items such as:
 - SDs.

- Support cycle (perhaps at 50% rate if individual training is performed in this cycle).
 - Taskings (MTTs, Reserve Component (RC) support, Reserve Officers Training Corps (ROTC)).
 - Parades and public relations (including change of command and retirements).
 - Details (reports of survey officer, duty officer/NCO, Article 32).
- (5) During support cycles, duty companies and battalions would be designated. These organizations would be completely depleted before another unit was tasked.
 - (6) Taskings to units not in support cycle would be a reportable item.
 - (7) Taskings would specify skills and proficiencies required and avoid rank designation unless required. The unit would be responsible for satisfactory selection of personnel to perform the task.
 - (8) Command action would determine how sick call, in/outprocessing, schools would be charged.

3. Issues

- (a) The reporting system needs to be as simple as possible and still perform the task. The statistics would most probably be maintained by first sergeants and consolidated at battalion by S-1 or CSM and reported through the S-3. Statistics at division level would be maintained by the G-3 for each battalion.

- (b) The integrity of units in reporting what it took to perform the tasks needs to be maintained. For example, the time for a unit to perform in a parade should be reported back including time for planning, rehearsals, etc. The time used should not be inflated. Wide disparities between units in time spent might indicate inefficient planning or troop use.
- (c) The historical data that accumulates at G-3 over a year should be used for more accurate programming of administrative time on recurring tasks and used as a guide by new commanders and first sergeants.
- (d) What is considered administrative and mission related would need to be resolved by the division for each type of unit, and clear priorities would have to be established.
- (e) The number of additional personnel (if any) necessary to support/monitor the system should be considered.

Training Management System

1. Problem Description

The management of training time, priorities, and the administration associated with training changes is demanding and confusing. Considerable effort is spent in planning and developing plans which soon become obsolete. This condition reduces the effort available to prepare and execute the training plan.

2. Objectives and Recommendations

- (a) Improve reliability of training plans by reducing the number of changes.
 - (1) Adhere to scheduled cycles. Changing the length of the training or support cycle impacts on the quality of training for

other units (e.g., holding units in the field to act as ARTEP evaluators). (58% of Officers and 57% of NCOs concurred.)

- (2) Make support cycle and/or school lengths coincide. For example, if the Primary/Basic NCO Course (PNCOC/BNCOC) is going to be six weeks long, so should the support cycle so that: (1) the trained NCOs can be in their units during the training cycle, and (2) schooling can be completed in the support cycle. Long-term schools may be split between two support cycles. (75% of Officers and 67% of NCOs concurred.)
- (3) Lengthen Battalion Training Management System (BTMS) planning horizons so personnel can learn as they plan and arrange required support. (58% of Officers and 33% of NCOs concurred. No comment by 21% of Officers and 57% of NCOs.)

Proposed Planning Horizons

<u>Unit</u>	<u>Detailed</u>	<u>Conceptual</u>	<u>Major Events</u>
Company/Battery	4 weeks	3 months	6 months
Battalion	2 months	6 months	12 months
Brigade/DIVARTY	3 months	6-12 months	18 months
Division	6 months	12 months	18 months

- (4) Develop a systematic way to reward good training at all levels from squad leader level through battalion level, so that training is perceived as important as administration (e.g., reward tactical training with adventure training, mountaineering, survival training, rubber boat operations). (71% of Officers and 52% of NCOs concurred.)
- (5) Schedule routine medical and dental appointments only in the afternoon, leaving the morning for prime-time training. (58% of Officers and 71% of NCOs concurred.)

- (6) Schedule routine administrative appointments during support cycle (e.g., not on birthdays) so personnel can be available for prime training. (58% of Officers and 76% of NCOs concurred.)
- (b) Streamline training management and execution.
- (1) Eliminate inappropriate requirements (e.g., Rape Prevention classes for all-male battalions). (68% of Officers and 57% of NCOs concurred.)
- (2) Conduct personal knowledge and mandatory subjects on a minimum required schedule (e.g., once per year) at unit level. If soldiers receive initial training during inprocessing, units can conduct classes a minimum number of times. (71% of Officers and 67% of NCOs concurred.)
- Utilize same instructor to present subjects to different units in battalion.
- (3) Consolidate mandatory make-up classes at battalion or brigade level, and have staff specialists conduct classes (e.g., JAG) to reduce time spent at company/battery level in preparation and conduct of classes. (42% of Officers and 57% of NCOs concurred. Officers nonconcurring felt it was a Commander's prerogative.)
- Utilize same instructor to present subjects to different units in battalion.
- (4) Move training down the chain of command. For example, have NCOs attend the convoy classes and conduct the troop movements to Camp Roberts and Fort Hunter Liggett. (63% of Officers and 57% of NCOs concurred.)

- (5) Reduce the number of people involved in job books and extend the time allowed to conduct corrective training from 24 hours to one week. Job books currently take up a lot of time of unit leaders and are of limited use to the soldier. (67% of Officers and 67% of NCOs concurred.)
- (6) Put training schedules on word processor in the Personnel Administration Center (PAC) so they can be easily updated and corrected. Do not have PAC do training schedules, just use the machines. (67% of Officers and 38% of NCOs concurred. 48% of NCOs no comment.)

3. Issues

- (a) Requires changing a variety of current division policies, e.g., current policies regarding quarantine, who must teach mandatory training, troop dispensary, and dental clinic procedures.
- (b) Requires accepting a higher rate of training failures and mistakes during initial implementation phase if tasks are actually pushed down to lower ranks.
- (c) Requires the appointment of 7th Division task force or internal study panels to work with ARI in order to develop programs and support materials (e.g., training reward system).

Personnel Management System

I. Problem Description

The time spent in personnel counseling and performing additional duties seems to detract significantly from effort that could be applied to planning and conducting unit missions. Part of this problem is attributable to the amount of

time that counseling and additional duties take, and part of it to personnel who are assigned to the jobs and lack the knowledge or skill to perform these tasks effectively.

2. Objectives and Recommendations

(a) Reduce the time spent in administration of personnel management by developing job aids that reduce the time spent searching for needed information.

(1) Develop a job aid that lists the most common soldier problems, and provides references, referral agencies, locations, and telephone numbers for handling common soldier problems. This could reduce the time spent by First Sergeants doing what squad leaders and platoon sergeants might be able to do. Note: ARI is collaborating with Community Services on a draft. (71% of Officers and 67% NCOs concurred.)

(b) Reduce recurring training needs by reducing internal turbulence.

(1) Stabilize assignments of key personnel (i.e., all officers, E-7s and above) for 18 months. (50% of Officers and 57% NCOs concurred.)

(2) Eliminate any additional duties not mandated by FORSCOM or DA, or any that represent SD positions. This would partially reduce internal turbulence and time spent in administration. (75% of Officers and 48% NCOs had no comment.)

- Officers' suggestions centered on DA/FORSCOM review of their mandated programs.

(3) Establish a policy which requires first sergeant to talk to SD supervisors on a regular basis. This will help determine if SDs are being properly used and looks out for the SD soldier. (50% of Officers and 52% NCOs concurred.)

(c) Reduce errors and time spent by improving individual performance.

(1) Assign assistant division staff officers from operational units so staff officers are sensitive to operational constraints in units. (42% of Officers and 52% NCOs concurred.)

- Officers' suggestions centered on having a mix of line and newly assigned officers to the division. NCOs felt that it would increase quality, and is critical that the officers have unit experience.

(2) Prorate NCOs and critical MOSs between headquarters elements and line battalions, so that all the talent is not at headquarters. For example, have division headquarters staffing of E-6s and E-7s be the same percent of fill as Infantry battalions. (71% of Officers and 38% NCOs concurred. 57% of NCOs did not comment. Also, there were no Officers nonconcurring.)

(3) Establish a post level school for newly assigned E-5s, to last 3-4 weeks. Attendance would be required before an E-4 could be an Acting NCO. (50% of Officers and 57% NCOs concurred.) The general constraint expressed was the inability to afford NCOs to staff the activity. It would include:

- Video tape on conducting Physical Readiness Training (PRT).
- How to maintain job books.
- Quality Assurance (QA) testing.
- BTMS.
- Responsibilities toward soldiers.

Brigade and battalion senior NCOs would be the faculty. A permanent faculty would not be established. PNCOC and BNCOC do not provide new NCOs with the immediate "survival skills" they need, resulting in actions being transferred to other leaders.

3. Issues

- (a) Need to survey units to determine training needs or critique current programs.
- (b) Must determine potential training load for new E-5s or acting NCOs. This would indicate how many trainers were needed and how they would be allocated to units.

Information Management System

1. Problem Description

Problems in this area basically focus on administrative aspects of information processing, including:

- Time spent preparing forms, letters.
- Time spent correcting documents.
- PAC processing takes too long.
- Lack of references available to units.
- Time spent gathering/reporting statistical data.

2. Objectives and Recommendations

- (a) Identify and eliminate redundancy in the policy and reporting system.
 - (1) Designate/direct Organizational Effectiveness Staff Officer (OESO) to head a project team to examine the reporting system to identify and eliminate duplication, and therefore, time spent

preparing additional reports. (50% of Officers and 57% of NCOs concurred.)

- Permit Company/Battery Commanders to state where they feel redundancies exist.

(2) Implement a policy and develop a procedure for changing DA and FORSCOM directives and regulations so that they do not have to be supplemented. Supplements cause additional training time for new personnel. (58% of Officers and 43% of NCOs concurred.)

(3) Program recurring reports on word processor at PAC (e.g., DA Form 638). (83% of Officers and 38% of NCOs concurred. No Officers and only 5% NCOs nonconcurred.)

(b) Reduce time spent on paperwork by simplifying responses and processing.

(1) Authorize a clerk and typewriter at company level; recognize it as an SD position. (54% of Officers and 76% of NCOs concurred.) Constraints of Officers were expressed as a step backward and dilution of PAC. (38% of Officers and 10% of NCOs nonconcurred.)

(2) Authorize key regulations at company/battery level:

AR 600-200

AR 635-200

AR 220-35

This will reduce the time spent by unit clerks to get information needed to do their job. (54% of Officers and 33% of NCOs concurred. 52% of NCOs did not vote for concurrence or nonconcurrence. Here again, a view was expressed by some of both groups on dilution of PAC.)

3. Issues

- (a) Need to experimentally track all reports from company/battery up through the system, including one-time reports over a period of time (e.g., 6 months).
- (b) Unit clerks and their references would need to be exempt from IG inspections (e.g., regulations).

Administrative Maintenance System

1. Problem Description

- High deadline rates.
- Inexperienced mechanics.
- Parts not available.
- Cumbersome administrative requirements.
- Restrictive maintenance scheduling (i.e., all requests must be in by noon).
- Personnel not MOS qualified or assigned out of MOS.

2. Objectives and Recommendations

- (a) Reduce time spent on administrative duties by reducing constraints.
 - (1) Extend the deadline for maintenance turn-in beyond noon. Current policy causes delays and interferes with morning operations. (58% of Officers and 52% of NCOs concurred. No one in either group nonconcurred.)

- (b) Reduce maintenance problems/time by improving training system.
- (1) Evaluate current centralized and decentralized motor pools at battalion level to determine which method works best.
 - (2) Increase local maintenance training.
 - Improve school system on post for mechanics and TAMMS/PLL clerks.
 - Use contract training team to conduct training at battalion level in maintenance, records, etc. (Use retired NCOs and Warrant Officers through the local community college system or funded from Division funds.) (63% of Officers and 52% of NCOs concurred.)
- (c) Reduce maintenance load by reducing maintenance requirements on tactical equipment.
- (1) Place equipment in administrative storage when units are zeroed out. Excessive time to maintain this equipment is eliminated. Equipment can be rotated quarterly or semi-annually. (54% of Officers and 62% of NCOs concurred.) The real question here is how severe are administrative storage maintenance requirements.
 - (2) Program recurring reports (e.g., DA Form 2406) in word processor at PAC. Do not have PAC prepare reports, just use their machine. Reduces preparation time. (79% of Officers and 43% of NCOs concurred. 52% of NCOs were neither for nor against.)
 - (3) Allocate TMP administrative use vehicles to battalion or brigade/DIVARTY for administrative/garrison tasks in lieu of using tactical vehicles, i.e., two trucks per battalion. (75% of

Officers and 71% of NCOs concurred.) A constraint raised is whether or not maintenance support from TMP can handle increased usage.

3. Issues

- (a) Would require reallocating administrative vehicles.

Supply Management System

1. Problem Description

- Time involved in reports of survey.
- Inexperienced supply personnel.
- Unit commander lacks knowledge of supply systems requirements, e.g., inventories.
- Resources concentrated at too high a level, i.e., DMMC.
- Supply availability cannot be projected far enough in advance.
- CIF issue is complex and time consuming.

2. Objectives and Recommendations

- (a) Reduce time spent correcting errors by providing learning and evaluation aids.
- (1) Develop a resource book with examples of supply procedures for officers and NCOs to reduce errors and learning time. Note: ARI is currently developing draft materials. (83% of Officers and 48% of NCOs concurred. 48% of NCOs found this item hard to interpret, or had no comment either way.)

(b) Reduce time spent performing administrative tasks by streamlining procedures.

- (1) Review of Fort Ord regulations and supplements for usefulness and necessity by project teams made up of Brigade/DIVARTY/Battalion supply personnel. The objective is the elimination of unresponsive or development of more responsive procedures. ARI will facilitate the process (e.g., training of project and review teams, development of process). (79% of Officers and 52% of NCOs concurred. Neither group had any nonconcurrency).
- (2) Review the Report of Survey process to reduce time spent investigating and processing.
 - Institute a centralized location for reports of survey at Division Material Management Center (DMMC). (50% of Officers and 43% of NCOs concurred.)
 - Use Government Property and Loss Damage (GPLD) more extensively for low-cost losses, e.g., under \$300. (50% of Officers and 43% of NCOs concurred.)
- (3) Have Post Laundry pick-up/deliver laundry at company/battery supply rooms. (62% of Officers and 67% of NCOs concurred. Main concern expressed was cost.)
- (4) Centralize high-priced items with low demand, and decentralize other resources to reduce response time and the number of administrative actions to get parts. (50% of Officers and 38% of NCOs concurred.)

(c) Reduce error rates by augmenting/restructuring staff.

(1) Add positions to MTOE for supply personnel at company/battery level to reduce training time.

- One position for Armorer.
- One position for Supply Clerk.

(67% of Officers and 52% of NCOs concurred.)

3. Issues

(a) Require a request for change to MTOE or internal SD authorization to have an Armorer and Supply Clerk authorized.

Inspection Procedures

1. Problem Description

Inspections detract from unit operations in the following ways:

- Time spent responding to a maintenance inspection.
- Time spent responding to a Physical Training (PT) inspection.
- Too many people involved in SQT administration.
- Too few people to conduct ARTEPs at company level.
- Time spent preparing for Inspector General (IG) inspections.

2. Objectives and Recommendations

(a) Reduce disruption and improve readiness for inspections by improving communications.

(1) Develop and disseminate all inspection checklists (including IG) in a tabbed notebook form to

company/battery level. This will reduce disruption of training programs for last minute preparation. Note: ARI is currently developing draft materials. (79% of Officers and 67% of NCOs concurred.)

- (2) Direct inspection teams to provide technical advice and assistance during inspections to increase skill in units and reduce leader involvement in administrative tasks. (58% of Officers and 62% of NCOs concurred.)
- (3) Have COMET and IG use same criteria for inspections. This will reduce training and preparation time in units. (71% of Officers and 67% of NCOs concurred.) Combine the teams?

3. Issues

- (a) IG and COMET inspection teams would have to have same standards and interpretation for their checklist items.
- (b) Would require Division policy to disseminate checklists.

Installation School System

1. Problem Description

While schools impart needed knowledge and skills for unit performance, sometimes problems are encountered:

- In some cases, school subject content is inappropriate for unit needs.
- Poor performers are sent to schools to get them out of the units.
- The "wrong" people are sent to the schools to fill required quotas.
- Schools do not match cycle length.
- Soldiers keep recycling through BSEP.

2. Objectives and Recommendations

- (a) Reduce time and errors on administrative tasks by improving soldier proficiency.
 - (1) Implement division policy to ensure that school cycles coincide with length of support cycle and that NCOs are not sent to school during the training cycle. This will ensure that key leaders are in position at critical times. (75% of Officers and 57% of NCOs concurred recognizing that scheduling will be different.)
 - (2) Implement a program to ensure that school content and graduate proficiency is responsive to changing unit needs. Any shortfall in responsiveness by schools must be compensated for by unit leaders. (79% of Officers and 52% of NCOs concurred.)
- (b) Ensure that units support the school system and use the schools for consulting expertise.
 - (1) Implement division policy which allows graduates to call or visit schools for consultation or technical advice. This reduces demand on unit leaders. (63% of Officers and 38% of NCOs concurred.)

3. Issues

- (a) 7th Infantry Division needs to determine the number of personnel who can attend schools during support cycle without requiring SDs or tasking units in the training cycle.
- (b) Development of a feedback system to determine how well post schools are fulfilling unit needs (e.g., requiring The Army Mainte-

nance Management System/Prescribe Load List (TAMMS/PLL) clerks to be competent in a manual system when 7th Infantry Division uses a machine system).

- (c) Would require structuring schools to fit support cycle, perhaps by having multiple phases for long programs (e.g., NCOES schools).

Integrated Individual and Collective Training System

I. Problem Description

- The quality and quantity of individual and fire-team/squad level skills training in operational units is reduced due to shortage of qualified trainers, administrative/garrison requirements, and turbulence.
- Current tactical scenarios for collective exercises call for the use of a bare minimum of individual skills.
- Individual soldiers generally receive little feedback about their performance of individual skills in collective exercises.
- Successful integration of individual and collective (team) training would provide a more efficient means of providing combat skills training in units.

2. Objective and Recommendation

- (a) Improve individual soldier skill training using an integrated individual/collective training model (see Table 9).
- (1) Develop a variety of "battle drills" for fire teams and squads that integrate critical and frequently used individual skills, and provide feedback. Note: ARI and the Army Training Board (ATB) are developing prototypes. (54% of Officers and 67% of NCOs concurred. No one in either group nonconcurred.)

TABLE 9

CHARACTERISTICS AND ADVANTAGES OF THE ARI/ATB BATTLE DRILL CONCEPT

Characteristic	Goals
<p>1. A Battle Drill Task is defined as a brief unit activity which has a natural starting and finishing point.</p>	<p>Provide drill-like practice of unit skills.</p>
<p>2. A Battle Drill covers a restricted portion of the collective tasks used in an ARTEP mission. (The ARTEP mission "movement to contact/hasty attack" covers collective tasks related to assembly area procedures, movement, and engaging the enemy, while a specific Battle Drill might cover only the movement portion of the mission.)</p>	<p>Makes it easier for inexperienced junior leaders to plan, prepare, and conduct training by using less complex tactical exercises.</p>
<p>3. The group of tasks covered in a particular Battle Drill would usually be common to more than one ARTEP mission. (For example: A Battle Drill called "Move" might cover collective tasks which are common to the movement portions of a number of ARTEP missions.)</p>	<p>A few Battle Drills could be used to prepare a unit to perform all of its ARTEP missions.</p>
<p>4. Both individual tasks and collective tasks are trained/evaluated during Battle Drills.</p>	<p>Soldiers are required to use their individual skills in response to realistic cues.</p> <ul style="list-style-type: none"> - Helps soldier to learn the importance of the individual skills to unit performance. - Most individual skills could be trained/evaluated during Battle Drills thus reducing the overall amount of time required to conduct individual plus collective training.

TABLE 9 (Continued)

Characteristic	Goals
<p>5. Exercises are interrupted to provide immediate corrective action (when necessary).</p>	<p>Immediate feedback facilitates learning.</p> <ul style="list-style-type: none"> - Prevents soldiers from practicing bad performance habits. - Makes it easier for trainer/evaluator to control the tactical situation within an exercise (by preventing units from taking courses of action which alter the tactical situation.)
<p>6. One set of Battle Drills will be developed around Fireteams.</p>	<ul style="list-style-type: none"> - It is less costly to interrupt a Fireteam exercise to provide training (in comparison with a Squad exercise). - Squad Leaders can more easily serve as trainers during Fireteam exercises (in comparison with a Squad exercise).

- These "battle drills" will be different than those previously used and will be more supportive of successful ARTEP performance than the current Battalion Training Management System (BTMS) interface concept used by itself. (The Interface identifies all SM tasks used in each specific ARTEP mission.)
- Once these drills are developed, they will need to be tested in order to select the best of the experimental approaches used and to determine the best methods for managing integrated training.
- The results of these tests potentially could modify the content of SQTs and the squad ARTEP system.

V. RESULTS AND CONCLUSIONS

Results

Most of the recommended changes were implemented, in whole or in part, by the 7th Infantry Division. The approach used to refine and review the recommendations (i.e., bottom to top of the organization) facilitated adoption. That is, if a recommendation was considered to be necessary and beneficial, it was acted upon even prior to the next level of review.

The actions taken made it impossible to conduct a formal evaluation. There was no possibility of collecting before/after data or establishing experimental and control groups. However, while it is not possible to document the extent to which changes were a function of the project, the Division Commander has stated that it was instrumental. It is clear that one of the goals of the project was accomplished in that many changes designed to increase efficiency did, in fact, occur. This chapter documents the actions taken regarding the various recommendations.

In addition to these actions, the division decided to field test the job aids (see Elliott, Harden, Van Hoose, Barron, and Hiller, 1982), and the battle drill training package (see Barron, 1982) developed by ARI.

The results of this project also substantially contributed to the FORSCOM Training Environment Study (1980-81) whose focus was to reduce distractors and to develop initiatives to enhance the combat effectiveness of FORSCOM units. It also provided information to the DA Deputy Chief of Staff for Operations (Training) Study on Training Detractors (1980-81).

- The following recommendations were implemented, in whole or in large part, by the 7th Infantry Division:

Centralize inprocessing including housing soldiers. (Recommendation partially implemented by 7ID. Letter dated 21 August 1980 describes procedures as including: Immunization, Issue of TA-50 field equipment, Defensive Driving Course, Administration of BSEP screening tests, Orientation of Fort Ord and surrounding area, Chaplain orientation, Educational opportunities.)

Make time used visible by establishing a "time bank." (Similar system adopted by 7ID approximately August 1980.)

Move training down the chain of command. For example, have NCOs attend the convoy classes and conduct the troop movements to Camp Roberts and Fort Hunter Liggett.

Adhere to scheduled cycles. Changing the length of the training or support cycle impacts on the quality of training for other units (e.g., holding units in the field to act as ARTEP evaluators). (Adopted upon assumption of command by new Division Commander.)

Schedule routine medical and dental appointments only in the afternoon, leaving the morning for prime-time training.

Schedule routine administrative appointments during support cycle (e.g., not on birthdays) so personnel can be available for prime training.

Eliminate inappropriate requirements (e.g., Rape Prevention classes for all-male battalions).

Reduce the number of people involved in job books and extend the time allowed to conduct corrective training from 24 hours to one week. Job books currently take up a lot of time of unit leaders and are of limited use to the soldier. (Job books are no longer formally inspected, but are used by platoon personnel.)

Stabilize assignments of key personnel (i.e., all officers, E-7s and above) for 18 months.

Develop job aids for preparation of the OER, SEER, and EER.

Develop a job aid that lists the most common soldier problems, and provides references, locations, and telephone numbers of referral agencies handling common soldier problems. (Developed by DPCA.)

Allow each battalion commander a quota of courtesy inspections from division. Inspection teams would provide results to the battalion commander and function as an MTT. (Courtesy inspections are available.)

Reduce time spent acquiring support from other units.

Direct inspection teams to provide technical advice and assistance during inspections to increase skill in units and reduce leader involvement in administrative tasks.

Have COMET and IG use same criteria for inspections. This will reduce training and preparation time in units. (COMET eliminated 2 Apr 81.)

Institute an unannounced IG with lower standards. (Unannounced IGs implemented 15 Jan 81.)

Restructure maintenance standards.

Develop and disseminate all inspection checklists (including IG) in a tabbed notebook form to company/battery level. This will reduce disruption of training programs for last minute preparation. (Unannounced IG policy eliminates preparation time. Guidance handbook has been prepared by IG for dissemination.)

Develop a resource book with examples of supply procedures for officers and NCOs to reduce errors and learning time.

Assign assistant division staff officers from operational units so staff officers are sensitive to operational constraints in units. (Current 7ID policy.)

- The following recommendations received a positive response with the noted actions taken:

Centralize outprocessing. (There is currently a Central Clearance Roster; AG recommended no changes from current procedures.)

Put training schedules on word processor in PAC so they can be easily updated and corrected. Do not have PAC do training schedules, just use the machines. (Under consideration - dependent upon acquisition of additional word processors.)

Authorize a clerk and typewriters at company level; recognize it as an SD position. (FORSCOM has made a formal request to DA to change MTOE to provide clerk to units.)

Authorize key regulations at company/battery level: AR 600-200, AR 635-200, AR 220-35

This will reduce the time spent by unit clerks to get information needed to do their job. (AG agrees, no action taken.)

Program recurring reports on word processor at PAC (e.g., DA Form 638). (AG agrees, no action taken.)

Examine reporting system to identify and eliminate duplication. (AG agrees, no action taken.)

Develop a procedure to make it easier for unit commanders to award or change soldiers' MOSs. (Being examined at DA and FORSCOM level.)

Implement division policy which allows graduates to call or visit schools for consultation or technical advice. This reduces demand on unit leaders. (DPT agrees, no action taken.)

Extend the deadline for maintenance turn-in beyond noon. Current policy causes delays and interferes with morning operations. (G-4 agrees, no action taken.)

- The following recommendations were deleted based on input from various levels of command:

Control the number of training schedule changes.

Develop structured OJT programs for critical MOSs (e.g., 76D, 76Y, 63B, 71L).

Develop standardized ARTEP scenario for frequently used ARTEP terrain (e.g., intel briefing, enemy situation, friendly forces, etc.).

Enforce TC-21-5-7 (e.g., examine whether training schedules reflect time to train for each level of command through squad).

Schedule time for corrective training after ARTEPs.

Use BTMS director and OESO with BTMS certification as BTMS consultants.

Develop standard job aids/work plans for mandatory training.

Establish an "Enlisted Week" every 6 months, in which NCOs and soldiers go to the field to conduct individual training under the command of the CSM. While the NCOs and soldiers are in the field, officers attend classes, conduct TEWTS for future training, etc.

Develop a trainer resource book that identifies training sources, materials, and services available at company/battery level; and the location and telephone numbers of Fort Ord training resources. This book would identify request procedures, special kinds of requests, and services available (e.g., construction of training aids, repositories for publications, etc.).

Put TEC trainer at CQ station with SQT tapes related to classes CQ must prepare.

Develop a training-event back-planning chart that identifies when requests must be made.

Perform all critical MOS training at post schools. Include evaluation of individual training as one day of a week long IG inspection. The IG inspection would include:

- 3 days - traditional IG stressing administration and equipment maintenance
- 1 day - mobilization test (e.g., perform three of ten major tasks for an EDRE)
- 1 day - mini-SQT with an abbreviated written test and three or four HOC stations conducted by NCO Academy.

Provide TEC trainers in barracks after normal duty hours with tapes related to SQT or subjects to be used in T-week.

Develop a master chart that identifies the individual skills required for each skill level of each ARTEP task (e.g., taken from platoon leaders and company commander training management books).

Schedule ARTEPs in the middle of training cycle.

Institute an on-post nuclear training program for artillery.

Make support cycle and/or school lengths coincide. For example, if PNCOC/BNCOB is going to be six weeks long, so should the support cycle so that: (1) the trained NCOs can be in their units during the training cycle, and (2) schooling can be completed in the support cycle. Long-term schools may be split between two support cycles. (DPT says not feasible.)

Lengthen BTMS planning horizons so personnel can learn as they plan and arrange required support. (ADC(M) says not feasible.)

Develop a systematic way to reward good training at all levels from squad leader level through battalion level, so that training is perceived as important as administration (e.g., reward tactical training with adventure training, mountaineering, survival training, rubber boat operations).

Develop competitions between units in battalions that consider performance of all sections (e.g., maintenance and supply as well as line platoons or crews) and that include training performance in addition to administrative task performance.

Develop a job aid for handling administrative discipline/administrative discharge procedures.

Examine the First Sergeant's Course to determine if it is responsive to unit needs and recommend changes to the POI and/or teaching methods, if appropriate.

Develop policy to ensure that personnel counseling is part of the junior NCO professional development program.

Eliminate any additional duties not mandated by FORSCOM or DA, or any that represent SD positions. This would partially reduce internal turbulence and time spent in administration. (AG says not feasible.)

Establish a post level school for newly assigned E-5s to last 3-4 weeks. Attendance would be required before an E-4 could be an acting NCO. (AG says not feasible.)

Prorate NCOs and critical MOSs between headquarters elements and line battalions, so that all the talent is not at headquarters. For example, have division headquarters staffing of E-6s and E-7s be the same percent of fill as Infantry battalions. (AG says not feasible.)

Authorize a civilian secretary for the Battalion Commander. (Deleted on basis of senior staff input.)

Develop internal SD document specifying internal SD authorizations at all levels of command. (Deleted on basis of senior staff input.)

Prorate NCOs and critical MOSs. (Deleted on basis of senior staff input.)

Establish a "survival skills" course for new E-5s and acting NCOs. (Deleted on basis of senior staff input.)

Restrict copies of correspondence to those who need them.

Develop division correspondence format books and distribute them to unit level. Provide several copies so that all who prepare drafts will have formats readily available.

Implement policy to use informal correspondence as much as possible, (e.g., handwritten memos, telephone calls).

Implement a policy and develop a procedure for changing DA and FORSCOM directives and regulations so that they do not have to be supplemented. Supplements cause additional training time for new personnel. (AG says not feasible.)

Preprint response format for required actions. (Deleted on basis of senior staff input.)

Develop a quarterly Division Update Packet. (Deleted on basis of senior staff input.)

Explore possibility of using CETA employees in maintenance jobs.

Develop JPPs for training DMMC computer operators.

Conduct Routine DA Form 2406 review at brigade.

- Review would be attended by:
 - Brigade Commander
 - S-4s
 - BMDs
 - Shop Chiefs
 - Battalion Commanders
 - DISCOM Commander
 - DS Co Commander
 - FASCO
- Battalion commanders would brief 2406 status and problems or rationale.
- Priorities would be determined for DS Company support and tasks to be performed by units and DISCOM.

Use CETA personnel at GS and higher levels. (Deleted on basis of senior staff input.)

Track requests, due-outs, vehicle status, etc., on word processor or micro-computer.

Require battalion commanders, S-4, BMO and maintenance NCOs to meet with DISCOM-DS support personnel (e.g., DMMC, FASCO) on a regular basis (e.g., monthly/quarterly).

Use CETA employees in supply at consolidated installation activities. (Deleted on basis of senior staff input.)

Add positions to MTOE for supply personnel at company/battery level. (Deleted on basis of senior staff input.)

Include individual training in the IG inspection as one day of a week-long inspection.

Develop job aid that can be used in post schools and taken from the schools back to the job by graduates.

Establish MOS producing schools on post. (Deleted on basis of senior staff input.)

Implement a program to ensure that school content and graduate proficiency is responsive to changing unit needs. Any shortfall in responsiveness by schools must be compensated for by unit leaders. (DPT says not necessary.)

Evaluate current centralized and decentralized motor pools at battalion level to determine which method works best. (G-4 does not agree. Both systems are currently being used based upon commander perogatives.)

Increase local maintenance training. (G-4 does not agree.)

Improve school system on post for mechanics and TAMMS/PLL CLERKS. (G-4 does not agree.)

Use contract training team to conduct training at battalion level in maintenance, records, etc. (Use retired NCOs and Warrant Officers through the local community college system or funded from Division funds.) (G-4 does not agree.)

Program recurring reports (e.g., DA Form 2406) in word processor at PAC. Do not have PAC prepare reports, just use their machine. Reduces preparation time. (G-4 does not agree.)

Place equipment in administrative storage when units are zeroed out. Excessive time to maintain this equipment is eliminated. Equipment can be rotated quarterly or semi-annually. (G-4 does not agree.)

- No action was taken on the following recommendations:

Allocate TMP administrative use vehicles to battalion or brigade/DIVARTY for administrative/garrison tasks in lieu of using tactical vehicles, e.g., two trucks per battalion.

Review Fort Ord regulations and supplements for usefulness and necessity by project teams made up of Brigade/DIVARTY/Battalion supply personnel. The objective is the elimination of unresponsive or development of more responsive procedures. ARI will facilitate the process (e.g., training of project and review teams, development of process).

Review the Report of Survey process to reduce time spent investigating and processing.

Institute a centralized location for reports of survey at DMMC.

Use GPLD more extensively for low-cost losses, e.g., under \$300.

Have Post Laundry pick-up/deliver laundry at company/battery supply rooms.

Centralize high-priced items with low demand, and decentralize other resources to reduce response time and the number of administrative actions to get parts.

Conduct personal knowledge and mandatory subjects on a minimum required schedule (e.g., once per year) at unit level. If soldiers receive initial training during inprocessing, units can conduct classes a minimum number of times.

Utilize same instructor to present subjects to different units in battalion.

Conclusions

A review of the recommended innovations was conducted in an attempt to determine if there were any patterns evident in the implementation decisions made by the division. It appeared during this review as though there had been an "intuitive cost/benefit analysis" performed by the division. Recommendations which appeared to be relatively low cost and easily integrated into the current system seemed more likely to be adopted.

In an attempt to discover if this were, indeed, the case, three members of the project staff (a retired Army NCO, a retired Army officer, and a research psychologist) independently evaluated a preliminary version of the recommendations on their "costs" in terms of: a) extra people/time, b) extra money, and c) degree of disruption or change required in the current system. This panel

also evaluated each recommendation for "benefits" in terms of: a) time/ personnel saved, b) money saved, c) degree of improved efficiency, and d) potential improvement in combat training.

The raters used a five-point scale to independently rate the innovations on each of the above factors. The ratings for costs and the ratings for benefits were averaged for each recommendation. Each innovation was then assigned a "+" or a "-" depending upon whether the majority of the raters considered the benefits or the costs as higher.

Table 10 shows how these cost/benefit judgments related to the actions taken by the division.

As can be seen in the table, 83% of the recommendations which were implemented, in whole or in part, had benefits which outweighed the costs. In addition, 71% of the recommendations which received a positive reaction but which have not yet been implemented, had higher benefits than costs. However, only 36.5% of the recommendations which were deleted were rated higher on benefits. A Chi-Square test of these results resulted in $\chi^2=9.39$, $p<.01$. It should also be noted that the majority of the innovations at this stage of the development process were considered to have greater benefits than costs.

TABLE 10
COST/BENEFIT RATING RESULTS FOR INNOVATIONS

	Recommendations			TOTAL N
	Implemented	Positive Response, No Action	Deleted	
Benefits > Costs	83% (15)*	71% (5)	37.5% (9)	29
Costs > Benefits	17% (3)	29% (2)	62.5% (15)	20

*Numbers in parentheses are the number of recommendations rated. The total in each column varies from the number of recommendations in Chapter V due to the version rated.

Several cautions on these findings are called for. The nature of the post-hoc analyses allows for a possible bias of these results. The staff which rated the innovations had general familiarity with the changes which had occurred in the division. It would have been preferable to have conducted this analysis with data collected from "naive" subjects. In addition, although the raters were fairly familiar with the impact of various recommendations, a more stringent analysis of the full range of impact could be done through collecting more objective data.

Nevertheless, it appears that the decision regarding whether or not to implement a given recommendation appears to be related to a judgment regarding the relative costs and benefits. This implies that future research of the kind conducted here may benefit from application of this evaluation technique as a component in the development research plan.

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APPENDIX A

DESCRIPTION OF TRAINING DETRACTORS
AND
THEIR IMPACT

DESCRIPTION OF TRAINING DETRACTORS AND THEIR IMPACT

Shortage of NCOs and Critical MOSs

1. **Description:** There are shortages in the combat battalions of NCOs in all MOSs, and shortages of trained support personnel in the following MOSs:
 - Supply (76Y)
 - PLL/TAMMS (76D)
 - Mechanic (63C)
 - Clerk (71L)
 - FDC (11C, 13E)

2. **Results:** The effects of these shortages as reported by the leadership in several FORSCOM divisions are:
 - Burnout and attrition of overloaded qualified NCOs
 - MOS mismatch because personnel must be used outside their MOS
 - Lack of first line supervision for soldiers which results in:
 - Discipline problems
 - Ineffective use of time; downtime
 - Low quality or failure to conduct individual training
 - Things don't get done
 - Requires more time checking and inspecting

- Higher crime rate
- Low levels of collective training

Turbulence

1. Description: Turbulence is caused by Army transfers into and out of the division (external) and by transfers and personnel actions within the division (internal). Turbulence is caused by actions such as:

- Cross unit transfers at all levels
- SDs and taskings
- Promotion/demotion
- New duty MOS
- Schools
- Reassignment
- Reenlistment
- Discharges
- Levies
- Hospitalization/problems

2. Results: Some of the reported effects of turbulence are:

- Need to conduct mandatory training more frequently

- Need to conduct/repeat other training more frequently
- Ineffective OJT programs
- Improper use of equipment
- Dissatisfied soldiers working outside their MOS
- Increased time to perform tasks
- Decreased unit cohesiveness
- Poor planning
- Wasted time
- Crisis management

Personnel Shortages

- I. Description: There are shortages of total numbers of personnel. These shortages may last for varying lengths of time and exist for a variety of reasons. Some of the reasons are:
 - Soldier does not arrive
 - Taskings
 - Special duty
 - Outprocessing/inprocessing/appointments
 - BSEP
 - Schools

- Leaves
 - AWOL
2. **Results:** The reported results of lack of sufficient numbers of personnel are:
- Cannot staff weapon systems
 - Cannot fill positions with authorized and skilled personnel
 - Cannot maintain unit assigned equipment adequately
 - Cannot perform taskings and TOE missions
 - Cannot perform certain types of training to desired standards
 - "Burn-out" of capable personnel doing multiple jobs
 - Personnel used out of assigned MOS

Characteristics of Incoming Personnel (New Soldiers)

1. **Description:** Newly assigned soldiers are unable to learn quickly and perform adequately under current conditions (e.g., with little supervision). Some of the reasons cited by field leaders are:
- **Literacy problems:** Soldiers are unable to read Army publications
 - Soldier expectations are not met by reality
 - Soldiers are unable to self-train or self-supervise, either from lack of motivation or lack of knowledge
2. **Results:** These characteristics result in:

- Poor work habits
- Discipline problems
- Decreased safety in the barracks and in the field
- Low levels of maintenance
- Low morale
- Low levels of training

Time Spent in Personnel Management

1. Description: The time spent in personnel counseling and performing additional duties seems to detract significantly from effort that could be applied to planning and conducting unit missions. Part of this problem was attributed to the time which counseling and additional duties take, and part of it to personnel not having the knowledge or skills to perform effectively.
2. Results: The major effect of this situation is that time is not available for:
 - Performing their primary job
 - Training subordinates and peers

Taskings

1. Description: This area included requirements levied on battalions beyond their TOE mission. Examples of taskings were:
 - Installation maintenance (e.g., post beautification, repair)
 - Public relations (e.g., displays, parades, openhouse)

- Ceremonies (e.g., change of command, retirement, funerals)
- Support of other agencies (e.g., Reserve Components, ADTC)
- Support of other units (e.g., umpires, evaluators, experiments)

2. Results: The impact of taskings includes:

- Disruption of plans
- Crisis management
- Removal of key individuals from units
- Reduction in time and troops available for primary missions
- Use of personnel outside their job area

Training Management

1. Description: The management of training time, priorities, and the administration associated with training are sometimes confusing or change rapidly. This prevents adequate time to plan, prepare and execute the plan. Considerable effort is spent in planning and developing plans that are soon rendered obsolete.

2. Results: The impacts of various aspects of training management reported by unit leaders are:

- Frequent changes in training schedules requiring administrative time and disruption of previous training plans and preparations
- Cycle lengths and school lengths not being synchronized deprives units of key personnel during prime-time training
- Cycles not enforced

- Make-up training must be performed more frequently
- Job book procedures unwieldy
- Unable to use full day (e.g., maintenance must be to shops by noon)
- Unable to forecast training far enough in advance to coordinate training equipment and resources
- Training support not available (e.g., all vehicles deadlined if there is an accident; problems are caused if a vehicle breaks down)
- Maintenance turn-around time is too long to support training
- Taskings do not coincide with soldier day (e.g., work call may start at 1100 hours)

Information Management

1. Description: Problems in the information area basically focused on administrative aspects. Among them were:
 - Time spent preparing forms, letters
 - Time spent correcting documents
 - PAC not responsive to units, it takes too long
 - References not available to units
 - Time spent gathering/reporting statistical data
2. Results: As a result of this administrative problem, the following occur:

- First Sergeant does not get to spend much time with troops or training NCOs
- Units require at least one unit clerk assigned out of MOS
- Preparation and submission of documents takes a long time and must be handled several times
- Administrative actions are delayed
- Suspenses are jeopardized
- Unit commander must spend additional time as editor

Administrative Tasks

1. Description: In addition to information management requirements, the performance of other administrative functions detracts from unit effectiveness. Some of the problem areas are:
 - Differences between units and installations in performing a task (e.g., preparing a form)
 - Time management: allowing and training people to use their time where it is most productive
 - People do not know what is going on, and their part in it
 - OJT is not structured or supervised. Units frequently rely on OJE

2. Results: The effects of these conditions include:
 - Soldiers must relearn how to perform similar tasks from unit to unit which wastes time

- The variety of meetings consumes personnel time unnecessarily
- Meetings get off the track, take too long, and are unproductive
- Morale is lowered when people do not know what to do or what they have accomplished
- Individual performance levels stay low because there is no established testing method and training progression for new soldiers

Maintenance

1. Description: The most frequently mentioned maintenance problems were:

- High deadline rates
- Inexperienced mechanics
- Parts not available
- Cumbersome administrative requirements
- Restrictive maintenance scheduling (e.g., all requests must be in by noon)
- Personnel not MOS qualified or assigned out of MOS
- Maintenance criteria too restrictive

2. Results:

- Critical equipment is non-operational
- More frequent breakdown rate

- Equipment not available for training
- Equipment not available for administrative/garrison use
- Personnel frustration
- Poor inspection results
- Reduced unit effectiveness

Supply

1. Description: Problems associated with supply included:

- Time involved in reports of survey
- Inexperienced supply personnel
- Unit commander lacks knowledge of supply system requirements (e.g., inventories)
- Resources concentrated at too high a level (e.g., DMMC)
- Supply availability cannot be projected far enough in advance
- CIF not responsive to troop needs

2. Results:

- Delays getting individual uniforms and equipment
- Support not available when needed
- Creates downtime
- Sensitive/high value items are not used
- Units borrow from each other to get by

Inspections

1. Description: Inspections detract from unit operations in the following ways:
 - Time spent responding to a maintenance inspection
 - Time spent responding to a PT inspection
 - Too many people involved in SQT administration
 - Too few people to conduct ARTEPs at company level
 - Time concerned preparing for IG inspections
2. Results: The effects of preparing/responding to inspections include:
 - Time waste
 - Low morale/high morale

Inprocessing/Outprocessing

1. Description: The time spent performing/correcting the administrative tasks for inprocessing/outprocessing is excessive for both the clerical personnel and the soldiers being processed.
2. Results:
 - Soldiers are taken away from the unit
 - Soldiers are delayed in joining their unit
 - Catch-up individual mandatory subjects divert unit effort and resources

- Takes longer for soldier to prepare to assume duty (e.g., have field gear)
- Unwanted soldiers are retained in units
- Paperwork has to be redone

Redundancy

1. Description: Frequently several people in the chain of command perform the same task which may waste time. This was reflected in both questionnaire and observation data.

Schools

1. Description: While schools are needed to impart needed knowledge and skills for unit performance, sometimes problems are encountered:
 - School subject content inappropriate for unit needs
 - Poor performers sent to schools to get them out of unit
 - Wrong people sent to schools to fill required quota
 - Schools do not match cycle length
 - People keep recycling through BSEP
2. Results:
 - Wrong people are trained
 - Soldiers are not prepared to perform jobs
 - Soldiers are not present during prime time training
 - Schools become a burden rather than a solution