A STUDY OF SYSTEMS TOOLS FOR ARMY PERSONNEL MANAGEMENT

Ulysses S. James, Wayne D. Ploger, and Paul Duffy
Arthur Young & Company

and

Douglas Holmes
Army Research Institute

D. Bruce Bell, Contracting Officer's Representative

Submitted by

T. Owen Jacobs, Chief
LEADERSHIP AND MANAGEMENT TECHNICAL AREA

and

Joyce L. Shields, Director
MANPOWER AND PERSONNEL RESEARCH LABORATORY

U. S. Army
Research Institute for the Behavioral and Social Sciences
December 1983

Approved for public release; distribution unlimited.
**REPORT DOCUMENTATION PAGE**

1. **REPORT NUMBER**
   Research Note 83-48

2. **GOVT ACCESSION NO.**
   AD-A136 741

3. **RECIPIENT'S CATALOG NUMBER**

4. **TITLE (and Subtitle)**
   A Study of Systems Tools for Army Personnel Management

5. **TREATY & PERIOD COVERED**

6. **PERFORMING ORG. REPORT NUMBER**

7. **AUTHOR(s)**
   James, Ulysses S., Ploger, Wayne D., Duffy, Paul, Holmes, Douglas

8. **CONTRACT OR GRANT NUMBER(S)**
   MDA-903-81-C-0398

9. **PERFORMING ORGANIZATION NAME AND ADDRESS**
   Arthur Young & Company
   1025 Connecticut Ave., NW
   Washington, DC 20036

10. **PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS**
    2Q6374A792

11. **CONTROLLING OFFICE NAME AND ADDRESS**
    Dr. D. Bruce Bell-U.S. Army Research Institute for the Behavioral and Social Sciences; Alexandria, VA 22333

12. **REPORT DATE**
    December 1983

13. **NUMBER OF PAGES**
    93

14. **MONITORING AGENCY NAME AND ADDRESS (If different from Controlling Office)**

15. **SECURITY CLASS. (of this report)**
    Unclassified

16. **DISTRIBUTION STATEMENT (of this Report)**
    Approved for public release; distribution unlimited

17. **DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)**

18. **SUPPLEMENTARY NOTES**

19. **KEY WORDS**

   - Unit Effectiveness
   - Combat Effectiveness
   - Cohesion
   - New Manning System
   - Stabilization
   - Organizational Change
   - Personnel Management
   - Cohort

20. **ABSTRACT**
(Continues on reverse side if necessary and identify by block number)
This study addresses the challenging issues of personnel management associated with implementing the Army's NMS.

In 1981, the Chief of Staff of the Army (CSA) directed the Army to begin a unit replacement system on a small scale, expanding it as the Army learns how to effectively support and manage such a system. This was a first step in implementing the CSA's vision that through stabilization, regimental affiliation, home basing and unit movement, Army combat units can achieve an improved steady-state characterized by mission-supporting cohesion and, thus, increased unit effectiveness. It is recognized that this steady-state will also require the development of improved, overall leadership, and a solid corps of Army noncommissioned officers (NCOs). Both are areas of special interest to the CSA and the Army.

The study examines current Army initiatives to develop the New Manning System (NMS) and concludes with these beliefs:

- That the need for and merits of the CSA's initiative are amply justified.
- That the CSA's vision of the NMS will not be achieved on schedule without decisive actions taken in the near future.

The monograph identifies theories, concepts and strategies which can be used to strengthen NMS unit level processes and associated large-system changes. There are three parts to the examination:

- Section I reviews currently available information which highlights, at the unit level, potential strengths and weaknesses of the emerging NMS. The study points out that some of the weaknesses which have been observed in the first nine units are recognizable, understandable, and preventable.

- Section II suggests an action plan to accelerate effective implementation of the NMS, particularly at the unit level.

- Section III identifies gaps in current implementation of the NMS, particularly at the unit level.

The foundation of the study is grounded in behavioral science perspectives, particularly those regarding unit development and organizational change issues. The study asserts that these issues are best dealt with explicitly and deliberately. Otherwise, problems are apt to accumulate and become serious obstacles to the effective implementation of the NMS.
TABLE OF CONTENTS

LIST OF FIGURES

ABSTRACT

SECTION I. INTRODUCTION AND PROJECT COHORT IN CONTEXT

I. INTRODUCTION
II. PROJECT COHORT
   A. Background and COHORT Evaluation
   B. Defining a Central Issue for This Monograph
   C. A Way of Looking at Unit Development
   D. Our Predictions About COHORT Results
   E. Preliminary Data
   F. Placing Preliminary Data in Context

SECTION II. ACCELERATION OF NMS IMPLEMENTATION

I. OPERATIONALIZING COHESION
II. ACTION RESEARCH
   A. A Plan of Action

SECTION III. THE NMS CHANGE IN THE LARGER ARMY CONTEXT

I. INTRODUCTION
II. THE LARGER CONTEXT AND PLANNED CHANGE
   A. A Model of Change
   B. The Change Model and the NMS
   C. A Practice Theory and Strategy for the NMS Change Implementation

III. CONCLUSION
LIST OF FIGURES

<table>
<thead>
<tr>
<th>FIGURE</th>
<th>DESCRIPTION</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Systems Model for Combat Units</td>
<td>I-7</td>
</tr>
<tr>
<td>2.</td>
<td>Tuckman Small Group Developmental Sequence</td>
<td>I-8</td>
</tr>
<tr>
<td>3.</td>
<td>Six Core Issues from the ARCOST Study and The Initiatives which Address The Six Issues</td>
<td>I-17</td>
</tr>
<tr>
<td>4.</td>
<td>Leadership Performance Shortfall</td>
<td>I-17</td>
</tr>
<tr>
<td>5.</td>
<td>Institutional Values</td>
<td>I-17</td>
</tr>
<tr>
<td>7.</td>
<td>Responses to the 1982 HRD Survey Question Identifying the Single Greatest Personnel Issue (Problem) in Your Organizational Element</td>
<td>I-22</td>
</tr>
<tr>
<td>8.</td>
<td>Initial Company Rotation for NMS</td>
<td>I-23</td>
</tr>
<tr>
<td>9.</td>
<td>Hypothetical Development of Vertical and Horizontal Integration</td>
<td>II-2</td>
</tr>
<tr>
<td>10.</td>
<td>Action Research Approach</td>
<td>II-4</td>
</tr>
<tr>
<td>11.</td>
<td>A Model of Organizational Change</td>
<td>III-2</td>
</tr>
<tr>
<td>12.</td>
<td>The Ideal Process Needed for Highest Level of Cohesion Combat Readiness</td>
<td>III-9</td>
</tr>
</tbody>
</table>

Appendix B FIGURES:

<table>
<thead>
<tr>
<th>FIGURE</th>
<th>DESCRIPTION</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Structural Framework of Organizational Effectiveness Criteria</td>
<td>B-6</td>
</tr>
<tr>
<td>2.</td>
<td>Four Effectiveness Models</td>
<td>B-7</td>
</tr>
</tbody>
</table>
ABSTRACT

In 1981, the Chief of Staff of the Army (CSA) directed the Army to begin a unit replacement system on a small scale, expanding it as the Army learns how to effectively support and manage such a system. This was a first step in implementing the CSA's vision that through stabilization, regimental affiliation, home basing and unit movement, Army combat units can achieve an improved steady-state characterized by mission-supporting cohesion and, thus, increased unit effectiveness. It is recognized that this steady-state will also require the development of improved, overall leadership, and a solid corps of Army noncommissioned officers (NCOs). Both are areas of special interest to the CSA and the Army.

In a context of learning how best to proceed, we examined current Army initiatives to develop the New Manning System (NMS). We concluded the examination with these beliefs:

- That the need for, and the merits of, the CSA's initiatives are amply justified.
- That the CSA's vision for the NMS will not be achieved on schedule without decisive actions being taken in the near future.

The monograph identifies theories, concepts and strategies which we believe can be used to strengthen NMS unit level processes and associated large-system changes. There are three parts to our examinations:

- Section I -- reviews currently available information which highlights, at the unit level, potential strengths and weaknesses of the emerging NMS. We believe that some of the weaknesses which have been observed in the first nine units are recognizable, understandable, and preventable.
- Section II -- suggests an action plan to accelerate effective implementation of the NMS, particularly at the unit level.
- Section III -- identifies gaps in current implementation initiatives and suggests remedies.

At the heart of our examination are behavioral science perspectives, particularly those regarding unit development and organizational change issues. We believe that these issues are best dealt with explicitly and deliberately. Otherwise, problems are apt to accumulate and become serious obstacles to the effective implementation of the NMS.
SECTION I. INTRODUCTION AND PROJECT COHORT IN CONTEXT
SECTION I: INTRODUCTION AND PROJECT COHORT IN CONTEXT

I. INTRODUCTION

The Army currently is engaging in major initiatives designed to improve cohesion by constituting combat companies with stable manning. This effort requires a massive organizational change from the Army's long-standing individual replacement system to a unit replacement system for combat units. The change is further complicated because large portions of the Army, particularly Table of Distribution Allowance (TDA) organizations, still will be manned through individual fill procedures.

This monograph provides one behavioral science perspective on the Army's attempts to institutionalize cohesion in combat units. It is based on preliminary information about nine of 21 units which were the forerunners of the Army's New Manning System (NMS). The 21 units -- known as COHORT (Cohesion, Operational Readiness and Training) units -- offer an early opportunity for learning how best to manage and lead NMS units. "COHORT units", as discussed in this monograph, refers to those units which were instituted prior to completion of planning for the NMS system during an early experimental phase preceding the NMS called "Project COHORT". "NMS units" refers to present and future units developed as part of the New Manning System.

The central theme of this monograph addresses how the Army can channel necessary knowledge-producing resources to successfully institutionalize cohesive, effective combat units. The major purposes of the monograph are to:

- Analyze current attempts to reshape the Army using cohesion as a basis.
- Identify potential pitfalls which may have caused similar attempts to fail in the past.
- Recommend research strategies which will enable all to learn quickly how best to proceed.
- Discuss the need for and suggest an overall implementation strategy which can strengthen the initiative.

In preparing the monograph, a large and diverse number of sources was used. These sources included:

- Informal interviews with recent battalion commanders, currently members of the HQDA staff.
- A number of formal coordinative and exchange meetings.
members of the Manning Task Force.

- Participation with ARI in a symposium on youth values at Catholic University (Boys Town), and on an informal data collection visit to Ft. Dix, N. J. concerning IET issues.

- A literature search which encompassed Army personnel and training policy, Army professionalism monographs/leadership studies, and a number of recognized sources from academia on the issue of organization life cycle theory.

- Participation with a Manning Task Force team which went to Ft. Lewis, Washington, (9th Inf. Div.) to assist units there as they planned for organizing their regimental/NMS units.

- Discussion/review with Army cohesion study sources including a recent Industrial College of the Armed Forces (ICAF) monograph (Advisor—Brigadier General [Ret] John Johns).

- Attendance at/participation in an ARI Seminar on Unit Performance Measurement.

- Specific data provided by ARI on the experience of experimental COHORT units.

Because of the nature of our information, we make no claims for the monograph's scientific rigor. We would note, however, that most useful social science contributions in the past have evolved from work such as this rather than from controlled experiments. In short, we believe the monograph has great potential value and can help the Army better manage cohesion in the future.

The monograph contains three sections. The first section provides a background for the new manning initiative. Then it describes data generated by the first units and interprets this information using relevant theory. The second section suggests a target for evaluation and a process which will strengthen the initial implementation stage of this ambitious Army project. The third section moves from the more constrained, pragmatic company-sized level, to that of the entire Army. It attempts, in very broad terms, to analyze the change process being employed to institutionalize cohesive, effective combat units, and makes recommendations which hopefully might improve the Army's overall strategy.
II. PROJECT COHORT

The purpose of this section is to:

- Describe initiatives being taken by the Army to improve cohesion in combat units.
- Present initial findings and interpretations of the results of the initiatives to date.
- Suggest ways which might improve the initiative.

A. Background and COHORT Evaluation

The idea of using stability to gain greater cohesion is not new. The history of foreign armies and our own shows that units can be organized, managed and led in ways that promote and sustain high cohesion. This results in units with enhanced effectiveness and survivability. In recent U.S. Army history, a number of attempts to enhance stability/cohesion have been made but have fallen short. Two examples are Project Gyroscope and, more recently, stable tank crews. In each case, extraordinary efforts failed when forces in the larger Army system overwhelmed the intent of the original planners.

The Army again is embarked on a cohesion building strategy. This time it is a far more ambitious effort. Thus far, it appears that the more intangible human aspects of this effort are being overshadowed by the immense logistical and operational complexities of going from an individual to a unit replacement system. Hopefully, the lessons learned about all aspects of such an effort from former smaller attempts will not be forgotten.

The Chief of Staff (CSA) is the major proponent of the current initiative which started with the accomplishment of the Army Cohesion and Stability Study Team (ARCOST, 1980). Based on this team's recommendations, the CSA directed the Army to begin a unit replacement system on a small scale, expanding it as the Army learns how effectively to support and manage a unit replacement system. This was a first step in implementing the CSA's vision that through stabilization, regimental affiliation, home basing and unit movement, Army combat units can achieve an improved steady-state characterized by mission-supporting cohesion and, thus, increased unit effectiveness. This steady-state would also require the development of improved, overall leadership, and a solid corps of Army noncommissioned officers (NCOs), areas of special interest to the CSA and the Army.

Project COHORT

The first step following stability studies was the implementation of Project COHORT.

To start, 21 units were initiated during a one year period.
Referred to as COHORT units, they entered the force at three installations. Armor, Field Artillery and Infantry units are represented. Half of the units received their initial entry training (four months) at a training base prior to joining their cadre. The other half of the units joined their cadre after two months of initial entry training, and received their final two months of such training from their cadre. Following initial entry training, all 21 units entered a phase of collective training (3-4 months). At completion of collective training, COHORT units were expected to be fully prepared to perform combat missions as an integral part of their battalion.

Questionnaires periodically were administered to COHORT soldiers and to comparison soldiers. Many of the questionnaire items related to potential cohesion in combat. Results are now available for nine of the COHORT and comparison units through the collective training phase. (Three from each of the three installations; one Armor, five Field Artillery, and three Infantry; four trained four months in the training base and five trained two months in the training base).

In addition to questionnaire results, information is available from site visits, reports from observers, and after action reports.

Preliminary Indications

A more detailed presentation of the results of the preliminary inquiry is included later. However, for introductory purposes, here is a summary:

. Favorable Indications:

- First-term soldiers in COHORT units are of good quality (AFQT scores, physical abilities, apparent personal values).

- Bonding among first-term COHORT soldiers in general is strong (horizontal integration).

- By the end of collective training, COHORT units display excellent teamwork and tactical proficiency "down-range" (within the known limits of experience).

. Unfavorable Indications:

- About one-half of first-term soldiers in COHORT units dislike the COHORT idea.

- Unit satisfaction of COHORT soldiers is no greater than that of non-COHORT soldiers.

- First-term COHORT soldiers experienced a dramatic downturn in favorableness of their attitudes during collective training.
The data on which these preliminary indications are based are limited. What is planned for future units in terms of the way in which they are handled may be different in many respects from what occurred with the first COHORT units. Nevertheless, soft and qualitative as it may be, the knowledge obtained from the COHORT experience to date should be regarded as having potential major utility in planning and implementing effective future actions.

B. Defining a Central Issue for this Monograph

The Army is obviously prepared and willing to commit itself as an institution to making current and future efforts successful. It recognizes that knowledge about prior and current experience is essential in making necessary adjustments to enhance chances for future success. Given the above, the central issue for the monograph is:

How the Army can channel the necessary knowledge-producing resources to successfully institutionalize cohesive, effective combat units.

C. A Way of Looking At Unit Development

In this section, some of the thinking and expectations about development of COHORT-type units is sketched, and information about the first nine COHORT units is provided. Our intention is to sensitize the reader about what we believe is likely to take place with NMS units unless remedial actions are developed and implemented. We believe that some of the negative outcomes which appear to have occurred with the first nine COHORT units through the end of collective training are recognizable, understandable, and preventable. If we are right, then the presentation in this section should facilitate recognition in future NMS units of recurrent patterns of development which may need to be corrected.

Based on our understanding of the Army and of organizational behavior, we had expectations about how COHORT units might develop. Two years ago, at a time prior to recruitment for COHORT units, Forces Command's (FORSCOM's) experience with stabilization was judged to be positive ("Recently initiated programs built on this [COHORT] concept at a platoon level have demonstrated clear advantages toward the creation of cohesive bonds" [CSA Weekly Summary, 1980]). About the same time, one of the authors and some colleagues observed nine such platoons (and nine comparison platoons) and reported that while the stabilized units looked good on questionnaire data, it was too soon to tell how they would compare with non-stabilized units once they had settled down. (At the time of observation, only six weeks had passed since completion of Advanced Individual Training [AIT] in FORSCOM.) It was suggested that the stabilized platoons were still undergoing a process of development, and more development was required before their "mature" steady-state level might be determined. It was not obvious to the observers at that time that all of the platoons would realize their potential as highly cohesive units. As it has turned out, that has
been the case for practically all units observed to date. What are the causes of this missed opportunity and how can it be remedied?

Criteria

The Army's peacetime task is to develop and sustain potential for cohesion in combat and to technically, physically and psychologically prepare soldiers and units to perform their combat missions. The literature on combat points to three components of combat cohesion (Shils and Janowitz, 1948; Etzioni, 1975):

- Horizontal integration, or bonding among buddies and immediate team members.
- Vertical integration, or bonding between soldiers and their immediate leader, and loyalty and commitment to leaders up the chain-of-command.
- Personal integration, or individual values and behaviors consistent with Army service (e.g., the professional soldierly qualities of commitment, competence, candor and courage).

These three components are what constitute the cohesion referred to by the Chief of Staff of the Army when he states that "The cohesion that matters on the battlefield is that which is developed at the company, platoon, and squad levels (CSA White Paper, 1980, p.12)". When all three components are present, units are able to withstand greater stress on the battlefield (Meyer, 1982; Marlowe, 1980). Cohesion equates to the will to fight, functions as a force multiplier and is not merely another factor to be summed in the combat effectiveness equation.

While the criterion of interest is combat performance, only potential for combat performance can be evaluated in peacetime. As discussed later, we believe that professional judgment (by combat veterans) provides the best source of information about potential combat cohesion. Any examination should, in part, consist of examining information about each of the three components for fault lines in structural integrity. For example, are entering first-term soldiers committed to or alienated from organized society (Wesbrook, 1980)? Do they trust one another? And, most importantly, do they trust their leaders (Gabriel and Savage, 1978). Barely discernible fault lines in the structure of combat cohesion during peacetime may presage breakdowns during wartime. The structure can only be viewed within a context of group or organizational stages of development.

Stages of Group Development

Horizontal and vertical integration develop over time. Their development depends on the kind and quality of interaction among soldiers and their leaders and on technical and task content. The quality of this interaction depends more on leadership processes and on variables such as intensity and duration of efforts than on the
nature of task activities themselves.

We believe that unit development can be managed to produce predictable outcomes in potential for combat cohesion. Such management requires timing and sequencing events in a manner which orchestrates naturally occurring individual and group development processes. Once fully developed (9-12 months after first-term soldiers enter the Army), an upper limit to cohesion in future combat may be set. A prescriptive model for unit development is needed if desired unit development outcomes are to be predictably attained.

Figure 1 presents a familiar three-part system model: inputs being processed as throughputs leading to outputs. Outputs include potential for combat cohesion as described above. Inputs in the model include first-term soldiers and cadre of a COHORT unit, and all associated factors which affect development of potential combat cohesion. Throughput in the model include unit development.

The concept, "unit development", requires elaboration. To do so requires the use of a "stage model". Stage models are frequently used to describe growth processes. Two characteristics of stage models are important here:

- Stages must be clearly defined by events taking place and by the passage of time. Each stage should be readily distinguishable from the others if the model is to have prescriptive utility.

- Movement from one stage to the next must be explained, so that both movement and blockage can be understood in terms of necessary and sufficient conditions.

Historically, the Army has managed stages of individual and unit development in the training base. What has been managed is now referred to as soldierization: "... the process of transforming a new recruit into a trained, motivated, self-disciplined, and committed soldier" (Training and Doctrine Command [TRADOC] Regulation 350-6). The TRADOC Regulation describes a three-phase soldierization model for IET which is used as a general guide by commanders in conducting their training program. The three phases can be briefly characterized as follows:

Phase I -- (Weeks One and Two) Introduction of Army standards, definition of expectations, and proper military behavior.

- Period of "total control"
- Extreme emphasis on conformity

Phase II -- (Weeks Three to Seven) Beginning of the development of self-discipline and a sense of commitment.

- Drill sergeants gradually reduce dependency on
themselves

Goals include "the development of self-discipline and cohesion within squads"

Phase III -- (Weeks eight to completion) Beginning of the trainee's understanding and acceptance of his role as a soldier.

Characterized by "solidifying skills and proper military attitude ... (trainees) indicate by their behavior that they have the proper attitude"

Focus shifts from squad to platoon

Since the first four months of unit development for first-term soldiers takes place in the training base, it is important to consider what predictable, developmental outcomes are orchestrated by the TRADOC model. For insight, the TRADOC model can be compared to research-based models of group development shown in Figure 2 (Tuckman, 1965). When this is done, one naturally occurring stage or phase of development appears to have been bypassed in the TRADOC model: a stage characterized by group conflict and an emotional response to a new and confining situation (storming in the Tuckman Model). Onset of this stage would be expected during Phase I, and working all the way through it would be expected to pave the way for an individual to develop a more realistically-based and enduring commitment to the group and to his role in the Army. While bypassing this stage may represent an oversight in model development, the Army's need to exert strong control in the early weeks of military indoctrination might not permit this stage to emerge.

Whether by oversight or by intent, the consequence of bypassing the stage of potential negative emotional response in the training base may have important consequences for continued unit development in FORSCOM. To the extent that research-based models of natural group development processes are accurate, there is a prediction to be made here: Expect the repressed emotion to emerge at a later stage because these negative feelings towards the Army are diverted rather than resolved early on ("Pay me now or pay me later"). That the diversion is intended is made clear by TRADOC documentation:

In Phase I, drill sergeants are advised to foster identification and commitment to the drill sergeant in part because that "makes the task of discipline -- and the trainee's accomplishment of goals -- easier".

Then, in Phase II, when signs of negative emotional response increase, drill sergeants are advised to divert it away from themselves and from the group to the task ("Increasing task difficulty prevents boredom and absorbs the stress which often exists at this point between the trainee and the drill sergeant, and places it squarely between the trainee and the task").
FIGURE 1
SYSTEMS MODEL FOR COMBAT UNITS

INPUTS

ARMY GOALS
- Missions
- Policy/Doctrine
- Training
- Resources
  - People (i.e., First-Term Soldiers and Cadre), Materials and Time

THROUGHPUTS

- Absorption/Integration of Resources
- Applying Resources in Performance of Mission and Tasks
- Leadership
- Followership
- Unit Development

OUTPUTS

COMBAT READINESS
- Ability of Personnel to Perform
- Willingness of Personnel to Perform
- Cohesion — Vertical and Horizontal
- Material Capability and Readiness
FIGURE 2
TUCKMAN SMALL GROUP DEVELOPMENTAL SEQUENCE

FORMING: Individuals in a group test one another to determine the way each person fits in relation to the task and one another. Most group members become dependent on their leader, some other group member or a pre-existing standard(s).

STORMING: Group members respond emotionally to their peers, the leader and the assigned task(s). This often creates a situation in which there is conflict and members “choosing sides”. Through this conflict, individuals can resist group influence and task requirements.

NORMING: Resistance is overcome, cohesiveness develops, new standards evolve, and new roles are adopted.

PERFORMING: Roles become flexible and functional, and group energy is channeled into the task. Interpersonal issues have been resolved, and group members expend their efforts primarily on task performance.
A possible consequence is that negative emotional responses which are side-stepped by drill sergeants will re-emerge in FORSCOM and inhibit identification with unit leaders.

Following the major developmental process in the training base, where horizontal integration is developed, first-term soldiers must merge with their permanent unit cadre and begin collective training as a line unit. Three additional stages of unit development can be expected:

- **Absorbing:** a stage of assimilating all of the realities of unit life. This includes being led by their permanent cadre, and facing the need for tedious and repetitive work. It is a period during which soldiers individually face all that they have signed up for in a peacetime Army, and come to grips with their own abilities to adjust to and cope with the maturity-producing realities associated with "the real world" of Army life. It is a time when all segments of Army life exert influence, including pressures and temptations emanating from dissatisfied soldiers from other units. It is a stage during which the group norms developed earlier are likely to be inadequate and need to be further developed to prevent disruption of effective unit functioning.

- **Renorming:** a stage marked by development of emergent ways of thinking and behaving, ways which are appropriate to actual unit personnel, unit mission, and unit life. Successful completion of this stage is marked by development of effective ways of being well-organized as a unit to accomplish missions, with minimal conflict or foot-dragging.

- **Performing:** the end-point, where a cohesive unit has developed its full potential for accomplishing its peacetime and combat missions. Individual soldiers feel they are being treated fairly and equitably, and behave in ways which indicate commitment to task excellence, to each other, to their leaders, and to the Army.

If the intensity of the three components of cohesion can be measured (particularly horizontal and vertical integration) in relation to an expected intensity of a particular, identifiable stage, we believe a reliable predictor of cohesion will be available. We would postulate that such a prediction might be one of the most valid indicators of combat readiness yet devised.

D. Our Predictions About COHORT Results

Our predictions are based on information about the following:

- Soldierization processes and outcomes within the individual replacement system
How FORSCOM cadre prepare to receive incoming COHORT soldiers

How higher echelons view development of COHORT units

The make-up of first-term soldiers and of receiving cadre.

The basis for our predictions starts with the training base. Historically, in the training base the Army has transformed civilians into soldiers well. With the advent of the All Volunteer Army, some modifications were required. The Army met the challenge: drill sergeants continued to "win over" recruits to Army ways (Faris, 1975). More recently, drill sergeants have been trained within a philosophy of "positive leadership". The training strategy which was widely promulgated throughout the training base was expressly designed for leadership of today's soldier. Based on data which ARI has been collecting in all nine Army Training Centers, first-term soldiers in the individual replacement system continue to experience Initial Entry Training (IET) positively, with drill sergeants being described by trainees in highly favorable terms. Following IET, however, soldiers continue to experience a sharp downturn in favorableness of their Army-relevant attitudes (Motowidlo, Dunnette, and Rosse, 1980).

In COHORT units, possibilities for managing soldierization should be greatly increased. It should be easier for cadre to complete the process of soldierization initiated during IET because first-term soldiers in COHORT units are at the same stage of development. To do so may require development of specific guidance and training for cadre consistent with that provided in the training base by TRADOC Regulation 350-6 and associated Programs of Instruction. In the absence of such guidance and models, and in the presence of the following two conditions, we would not expect successful movement through stages of unit development:

- Cadre and higher echelon lack of awareness about group development stages which are naturally associated with stabilized groups
- An emphasis by higher echelons on rapid attainment of unit combat proficiency without being sensitive to the new, different development needs of intact COHORT units.

We would expect that doing "business as usual" in line units, which normally includes paying relatively little attention to developmental needs of first-term soldiers, would result in outcomes similar to those found with the individual replacement system: a sharp downturn in Army-relevant attitudes after arriving in the first unit of assignment.

Examining differences in the make-up of first-term soldiers and of cadres may provide a basis for understanding how to prevent the hypothesized sharp downturn in soldier attitudes. There probably is
a sharp discrepancy between what soldiers want from their leaders and what their leaders are prepared to provide. Effects of the discrepancy can be cast in value terms:

- Soldiers want leaders who act on military priorities: mission first, men next, and self last.
- Leaders want the same thing from their next-level leaders.
- Perceived reordering of these priorities i.e. self first, mission next, and men last, are taken personally, as disloyalty downward.

With regard to soldier and cadre personnel, available information indicates that there are shortfalls:

- NCO cadre shortfalls: the NCO Corps recognizes deficiencies in professionalism. Although there are many highly professional NCOs, some NCOs appear not to act characteristically in accord with a Mission-Men-Self value. Examples of Army recognition of such shortfalls include:
  - The NCO Development Program, directed by the SGM of the Army, actively strives to improve professionalism throughout the NCO Corps.
  - A study by Army professionals cited by CSA (Meyer, 1982), wherein it was determined that first-term soldiers in TO&E units perceived a lack of concern for the individual soldier on the part of their unit leaders. This perceived lack of concern was viewed by first-term soldiers as having pervasive negative effects, i.e., it impacts all aspects of the soldier's life (his work, his welfare, and his personal problems).

- Officer shortfalls: the Officer Corps recognizes deficiencies in professionalism. Although there are many highly professional officers, and the perceived proportion appears to be increasing, some officers' actions do not appear to be in accord with the Mission-Men-Self value. Examples of Army recognition of such shortfalls are included in:
  - The Army War College Officer Professionalism Studies (1970, 1979) which amounted to a highly critical self examination of Army leadership practices and results stemming from perceived shortfalls in professionalism during and following the Vietnam conflict.
  - Results from Army Sample Surveys from 1974 to 1980, (Human Resources Directorate, Headquarters, Department of the Army) which report company grade officers'
perceptions of field grade officers. While there has been much improvement during this period of time, in 1980 as many company grade officers as not reported that the primary focus of field grade officers was on promoting their career rather than on the welfare of their troops.

First-term soldier shortfalls: the primary shortfalls related to stages of unit development are those associated with youth and inexperience. For many soldiers, assimilating unit and Army life is embedded within a larger problem of adjustment -- that of living with consequences of one of the first major commitments made as an adult. Soldiers departing IET, while highly motivated and "high" on the Army, have little experience upon which to base their expectations for the future. Their commitments to Army leaders and to the Army as an institution lack the solid footing which comes from first-hand experience with operational Army life.

Based on the above discussion, and on an understanding of individual, group and organizational psychology, we can set forth our predictions about COHORT units.

COHORT soldiers will bond together during the four month IET period at least as well and probably better than non-COHORT soldiers.

COHORT cadre will display a variety of value orientations which reflect the actual variety of orientations in the force and the variety of interpretations placed on what COHORT units are supposed to be.

For example:

- Cadre in some units, through their own insight, training and motivation, will consistently apply Army values while molding the new unit.

- Cadre in other units will conduct "business as usual".

- Cadre in other units will be fragmented with the strong leaders rejecting the less able cadre, creating frustrating choices for the new soldiers.

- Cadre in other units will be over-zealous in their attempt to show how their new COHORT unit can/should/must outperform other non-COHORT units.

All but the first orientation can result in decreased vertical integration and less cohesion.

Although horizontal integration improves, COHORT soldiers will experience the same dramatic downturn in Army-relevant
attitudes as found in individual replacement system units. This downturn will probably come later but will be steeper, settling at the same low levels. It is caused by a lack of ability of cadre and the system itself to adequately nurture the development process started in IET. Most important, it will result in a unit not able to achieve its full potential.

If the three conditions listed above exist, then we would draw the following conclusions:

- Strong horizontal integration without similarly strong vertical integration will result in units able to perform critical missions only slightly better than individual replacement system units.

- More importantly, strong horizontal bonding can produce actions among soldiers which are not consistent with the Army's mission and values. If alienation occurs for many unit members at the same time, soldiers will act in concert, expressing their resentments. Actions can range from not performing on maneuvers to attempts at unionization.

The conditions resulting from stabilizing units provide the opportunity for greater cohesion. To realize the opportunity requires strong vertical cohesion. Strong vertical cohesion can only be attained if leaders are aware of and operate in ways that reinforce natural forces of group development and the Army's mission.

E. Preliminary Data

Data which are available come from three sources: questionnaires administered to first-term soldiers in nine COHORT and nine baseline units as part of Project COHORT; site visits by one of the authors to two of the three original FORSCOM installations with COHORT units; and, Project COHORT First and Second Interim Reports. These data, because of the small numbers of units involved and perhaps the unrepresentativeness of them, are insufficient to substantiate scientifically any of the above propositions. However, they are more than sufficient to consider within a test-fix-test evaluation philosophy being used with the NMS.

Cadre Heterogeneity of Values and Standards

Based on observations and discussions during site visits, the following appear to be true:

- COHORT cadre exhibit a wide range of diversity in regard to professional values and standards. (The point was repeatedly made by officers and NCOs that cadre were typical NCOs, ranging from highly dedicated professionals
to those with a three month "skate by" attitude."

In general, standards were maintained at a higher level in COHORT than in non-COHORT units. While soldiers expressed pride in unit levels of performance, they resented having to perform at higher levels than other non-COHORT units. Some interpreted the required higher performance as a continuation of training standards even though they had "graduated" to the "real" Army.

Some examples of how heterogeneity of cadre values and standards worked out were clear cut. At the time of the site visits:

- An estimated 80% of the cadre in one unit, because of a strong, determined Company Commander and First Sergeant team, maintained extremely high standards of professionalism. The remaining 20% or so of cadre were viewed by the unit as substandard misfits who belonged in a "regular" unit.

- Most cadre in another unit displayed relatively low standards of professionalism as judged by their commander. NCO cadre viewed the commander's standards as idiosyncratic, and not representative of the "regular" Army.

- In a third unit, the commander and senior NCOs seemed unconcerned about first-term soldier reactions to being in the Army, and judged their own leadership effectiveness primarily by mission accomplishments and by Article 15 and AWOL rates. Senior unit leaders viewed their unit as tactically more proficient because of stabilization, and easier to manage than a non-COHORT unit because the soldiers were younger and more tractable.

Downturn in Soldier Attitudes

As indicated by Appendix A, soldiers at the end of collective training display a similar fall-off in favorableness of attitudes to that observed in the individual replacement system. Typically, responses are not quite as low as baseline units, but far lower than at the end of IET.

Vertical Integration

At the end of collective training more than one out of five COHORT soldiers report that NCOs "seldom" look out for the welfare of soldiers in the unit and that officers in the unit don't care about what happens to the individual soldier. Only 40% agree that their squad leader (or equivalent) really understands the guys in the unit. (Only 30% of baseline soldiers agree that their squad leader really understands the "guys" in the unit.)
Horizontal Integration

First-term soldiers are reported both by cadre and by themselves as being "tight" with each other. They stick together when there is trouble or when there is a common cause. Enduring conflicts among some first-term soldiers are also reported, as is resentment towards COHORT corporals who are "just like us" but have gained a permanent reward. At the end of collective training, 58% of COHORT soldiers say on questionnaires that soldiers in the unit work "well" or "very well" together compared to only 12% who say "poorly" or "very poorly". (Comparable percentages for baseline soldiers are 51% and 16%.) The questionnaire responses comparing COHORT with baseline soldiers are relatively similar. They do vary in the expected direction. However, based on interviews and observations, we believe that the difference between COHORT and baseline soldiers may be larger than shown by the questionnaire results.

Incomplete Soldierization and Unit Development

At the time of site visits, several of the COHORT units had been in existence well over a year. Discussions with soldiers suggested that the negative feelings generated during the period of collective training and the immediately following months had not been worked through. Instead, it appeared as if cadre had taken firm control at the outset and squelched signs of first-term soldier adjustment problems. Many soldiers expressed pride in their ability to perform as a unit "down range", and anger and dismay at the way their individual needs were not met in garrison. There was little indication of development of a feeling about the unit that "we're all in this together" as would be expected if more complete unit development had occurred.

Questionnaire data at the end of the collective training indicate that some first-term COHORT soldiers:

- Were experiencing adjustment problems (18% reported adjusting to Army life poorly, compared to 3-8% who so reported at the end of IET; 20% of COHORT soldiers reported that "I am usually in low spirits").

- Had taken a step backwards in maintaining a primary identification as a soldier (28% reported thinking of themselves as "just like any worker" when off post and not in uniform, compared to 10-12% who so reported at the end of IET).

- Most COHORT soldiers at the end of collective training, however, exhibit a good potential for continuing the process of soldierization through to completion:

  - 89% of COHORT soldiers (and 85% of baseline soldiers) agree that "Being thought of as a 'good soldier' by NCOs and officers is important to me".

I-15
95% of both COHORT and baseline soldiers agree that "It is the duty of each person to do his job the very best he can".

Interpretive Discussion

Consideration of the preliminary indications with COHORT units leads us to the following thoughts about expected development of combat potential in NMS units.

Development of horizontal integration appears to be a safe bet. We see no reason why stabilization within existing Army ways of doing business will not accomplish such cohesion better than in the individual replacement system.

Our concern is about the other two components of cohesion which determine the ends to which horizontal integration is employed. We do not believe that assuming there will be satisfactory levels of personal integration in combat situations is an entirely safe bet. Serious questions about socio-political alienation of entering soldiers raised by Wesbrook (1980) and others (Hauser, 1980) have not been adequately answered to the best of our knowledge. We think that Wesbrook's data fail to substantiate his thesis that levels of socio-political alienation among entering soldiers are cause for concern (Holmes, Macpherson and Fugita, in review; Macpherson, Holmes and Fugita, in review). We also think that recently raised entrance standards lessens the potential problem of alienated soldiers. However, we are impressed with the wide-ranging historical analyses of Wesbrook (1979). Although there is no cause for concern in the COHORT questionnaire data, and while commanders appear to be favorably impressed with the intellectual qualifications of COHORT soldiers, we are aware that questionnaire data and judgments by commanders provide far less adequate data about alienation than do in-depth professional assessments (Holmes et al, in review). Questions about the value structure of entering soldiers attain greater significance in NMS units (assuming that horizontal integration will be more pervasive and deep-rooted) because soldiers can be expected to act out their values in concert.

Assuming development of levels of vertical integration which in NMS units will stand the test of modern combat, also may not be a safe bet based on the preliminary indications. COHORT soldiers seem to be saying that "COHORT is good for the Army but bad for soldiers". They recognize that stabilization leads to superior tactical effectiveness, and they feel confident about their abilities to fight. However, if they do not believe strongly that their leaders care about them and will look out for their welfare in a peacetime context, we wonder about the strength of vertical integration under actual combat conditions. Especially as development of NMS units becomes routine, and the advantages for cohesion of conducting AIT in FORSCOM are dissipated, it would seem possible that NMS first-term soldiers might develop cultural beliefs that soldiers must look out for their own welfare because Army
leaders may not.

The ARCOST study identified six core issue areas which need to be addressed if NMS units are to achieve high levels of cohesion (Figure 3). The study recognized that while stabilization is necessary for development of high levels of unit cohesion, by itself stabilization is insufficient. In particular, leadership performance shortfalls (Figure 4) and inconsistent institutional values (Figure 5) were recognized by the ARCOST study as central detractors from unit cohesion. In light of the study, and assuming that our interpretations presented above are reliable -- subject to further verification -- we have two convictions:

At the NMS unit level, the potential for accomplishing Army objectives for leadership performance, institutional values, organizational climate and combat readiness is extraordinary.

NMS development is at a critical implementation point. Actions in the next year will determine future levels of accomplishment in the areas of leadership, institutional values, organizational climate, and most importantly, combat readiness.

How the preliminary indications about COHORT units are received, and the decisions that are made will determine much about the nature of the future of the Army. The remainder of this section elaborates on what we believe are some central considerations and places the preliminary indications in a larger Army context.

Before we attempt to place the preliminary data in context, there is a potential danger which should be noted. Early indications about the New Manning System represented by COHORT unit results are perceived in the context of Army expectations. For most Army decision-makers, two coexisting but quite different types of expectations can be identified. First, there are high expectations based on (a) recognition that elimination of personnel turbulence removes the single most detrimental factor in unit life and (b) hopes that an organizational change effort of the magnitude of NMS will succeed. Second, there are low expectations based on (a) the conventional organizational wisdom that 'the more things change the more they remain the same' and (b) realization that NMS aims at changing enduring "problems" in Army organizational life. Attempts to change these problems have failed before and are likely to do so again.

High expectations are illustrated by the most recent DCSPER report of Soldier Survey results:

"There should be marked improvements across all areas covered in the Soldier Survey in the near future. The initiatives of the New Manning System (NMS) to enhance combat effectiveness and promote unit cohesiveness will eventually be reflected in the improved attitudes and opinions of soldiers and officers."
Stabilization, unit rotation, home basing, and regimental affiliations all contribute to the creation of highly cohesive units in which soldiers and officers are committed to a common goal. The combination of better soldiers and the installation of pride of ownership in units (NMS) will most certainly improve the environment in which soldiers live and concurrently improve soldier/officer assessment of that environment. These initiatives will be reflected in future Soldier Surveys in more positive soldiers' and officers' assessments of their environment. (HRD, 1982, P.30).

Psychological theory predicts that when evidence (such as the preliminary indications with COHORT units) does not conform to high expectations, there will be a tendency to lower expectations towards actual findings. This phenomenon has been graphically illustrated in briefings where the preliminary indications with COHORT units have been presented. (For example, a few minutes after the discrepancy between high expectations and preliminary indications has been assimilated, it is not unusual to hear comments such as: "What's the problem? COHORT units look as good or better than other FORSCOM units.").

It would be a shame if such attitudes persist to the point that necessary remedial action is not taken, and the opportunity for stable combat units to reach a new level of readiness is not realized.

F. Placing Preliminary Data in Context

Vision

The Chief of Staff of The Army has outlined his vision in a White Paper (1980): A Framework for Molding the Army of the 1980s into a Disciplined, Well-Trained Fighting Force. He did so as an act of leadership: ".... I believe at this juncture in history I owe it to you to lay out my vision of the Army of the 80's. When you understand the big picture, you are far more likely to understand how important your particular role is in causing that vision to materialize." Themes developed previously in this paper flow from the CSA's vision for the 1980s. The following quotes summarize the essential elements in his vision:

"The cohesion that matters on the battlefield is that which is developed at the company, platoon, and squad levels." (p.12)

"Commitment on the part of the Army's personnel ... demands our reciprocal commitment to improved quality of life of the individual. Positive leadership, retention of the tie between the soldier and his leadership over time, concern for the individual, and improved quality of life offer the framework within which esprit and cohesion are built." (p.7)

"Cohesion is a product of policy and actions at all levels to establish strong interpersonal bonds which mold a unit into a
FIGURE 3
SIX CORE ISSUES FROM THE ARCOST STUDY (1980)

- Stability
- Leadership and Discipline
- Institutional Values
- Resources
- Decentralization
- Changing Composition of the Force

THE INITIATIVES WHICH ADDRESS THE SIX ISSUES ARE DESIGNED TO

- Balance Manpower - - Keep units together and provide a consistent purpose to them
- Understand soldiers and learn how to get the best from them
- Focus leaders and soldiers on those values that provide a core to the profession
- Distribute the resources to support unit climate and unit competence most effectively
- Improve the organizational climate by providing the standards, but allowing decentralized execution to encourage the development of initiative
- Attend to the changing composition of the force and the evolving implications and issues. Knowledge, sensitivity, education, openness, rationality, and leadership can enhance unit cohesion and competence.

Source: ARCOST Study, 1980
FIGURE 4
LEADERSHIP PERFORMANCE SHORTFALL

- LEADER TRAINING IS NOT SYSTEMATICALLY DESIGNED FOR PROGRESSIVE DEVELOPMENT OF LEADERS AT ALL LEVELS
- AUTHORIZED GRADE AND SKILL LEVELS DO NOT MATCH ASSIGNED (E-5s FILLING E-7) POSITIONS
- CRISIS MANAGEMENT AND OVERREACTION DUE TO MULTIPLE COMPETING TASKS AND PRIORITIES ADVERSELY AFFECT LEADER COMPETENCE AND PERFORMANCE
- DUE TO WAIVERS, COMMAND INTERVENTION, AND PCS REQUIREMENTS, MANY NCOS DO NOT ATTEND NCOES, ESPECIALLY ANCOC, AT APPROPRIATE TIMES, IF AT ALL
- MANY OFFICERS AND NCOS DO NOT KNOW OR ELSE DO NOT ENFORCE THE DUTIES, RESPONSIBILITIES AND AUTHORITY OF NCOS
- JUNIOR LEADERS ARE NOT PROVIDED JOB SPECIFIC TRAINING PRIOR TO HOLDING POSITION

Source: ARCost Study, 1980
FIGURE 5
INSTITUTIONAL VALUES

- INSTITUTIONAL VALUES HAVE NOT BEEN ESTABLISHED AND COMMUNICATED TO ALL RANKS/GRADES
- SOME POLICIES AND REGULATIONS STILL REFLECT A LACK OF TRUST AND CONFIDENCE
- INADEQUATE RESOURCES ARE NOT THE ONLY CAUSE OF "VALUE" CRUNCHES, "CAN DO", "ZERO DEFECTS"
- OPERATIONAL VALUES ARE NOT ALWAYS THE PROFESSIONAL VALUES
- THERE IS A BIG DIFFERENCE IN PERCEPTIONS OF LEADER BEHAVIOR BETWEEN ARMY DIVISIONS
- REWARDS AND PUNISHMENTS ARE NOT IN BALANCE, INITIATIVE MAY BE LESS IMPORTANT THAN AVOIDANCE OF FAILURE
- THERE IS A GREAT DEAL OF CONFUSION AS TO WHAT THE INSTITUTIONAL VALUES REALLY ARE

THUS
WE HAVE INCONSISTENT INSTITUTIONAL VALUES

Source: ARCOST Study, 1980
cohesive team. Officers must understand that loyalty downward breeds cohesion and must ensure that a climate of loyalty — upward and downward — is established. NCOs need to be developed to a higher degree than ever before and the NCO must train, lead, and care for his soldiers. We must focus on teamwork at the lowest level of our organizations where cohesion is most essential. We must begin to think, for example, in terms of increased unit training, emphasizing the individual as a member of the team." (p.8)

"Our success in manning the Total Force in 1980-82 will determine the base for the Army in the years beyond. The Army must compete successfully for, and judiciously apply, the required resources while examining alternatives to existing polices for future applicability. Developing cohesive units over time must be the central focus of such efforts. Leaders in the field must lead, motivate, and help mold our soldiers and civilians into cohesive units capable of accomplishing wartime missions under what may well be the most demanding circumstances any army has ever experienced. Recruiting and retention are everybody's business." (p. 8)

"The object of the individual training phase is to graduate motivated, disciplined, and physically capable soldiers who are equipped with those specific skills they need to survive in combat. Additionally, it must be a tough and challenging experience by which each new soldier gains an appreciation that unit success comes only from individual commitment to a team effort. Both the individual training effort and team-building demand a strong cadre of qualified trainers. These are the Army's non-commissioned officers. To ensure their effectiveness, we must provide comprehensive training and education equal to the complex nature of the Army of the 1980's. NCO development programs pointed to molding effective leaders and trainers have top priority, not only in formal courses, but in unit schooling under the tutelage of officers and experienced NCOs." (pp. 8-9)

This vision provides a number of key contextual elements: time — (the Army of the 80's); anticipated conditions — (demanding warfare); organization level of focus — (cohesion at the squad, platoon and company); the need for effective leadership — (understanding, care, loyalty, strong NCOs). We suspect that of all the elements involved in the CSA's vision, the last one (leadership) is the most important. Understanding of the vision at all Army levels precedes the host of correct leadership behaviors and strategies required to bring about his vision. Army leadership must be able to influence the development and sustainment of strong vertical bonding among leaders and subordinates to complement, guide and nurture horizontal integration among peers.

The ARCOST study began with the CSA's vision for the 1980s (Figure 6) and identified initiatives appearing to be required by the vision (Figure 3). What was not identified is what we believe
to be an essential requirement for successfully implementing NMS: the adoption of the vision itself throughout the Army. Davis has recently written an excellent article which is directly germane to implementation of NMS (Transforming Organizations: The Key to Strategy Is Context):

The implementation phase of a strategic plan first must re-create this new context (vision) in each employee. Only after this is done will each employee be able to provide the appropriate methods (content) for carrying out his or her job as an element in fulfilling the strategic plan (1982, p.67).

At the time of site visits, we concluded that the role of COHORT units in the vision of the 1980s had not been sufficiently comprehended or internalized at above the unit i.e., battalion, level. (For example, some commanders, by no means all, viewed COHORT units as only possessing advantages inherent in training stabilized units. They did not recognize the importance of developing cohesion or of the special nature of units built around a group of first-term soldiers who completed IET together.) At an operational unit leadership level, site visits revealed even less comprehension of what is required in routinely developing highly cohesive units in today's Army.

In our judgment, in developing units built around first-term soldiers, it is essential that cadre internalize the Army's vision for the 1980s. They must become cognizant of stages of unit development that they alone are in a position to manage, and must lead first-term soldiers into a realistic appreciation of the unit's potential in the context of the actual situation within which the unit functions. Elsewhere, (Holmes, in preparation) we have written about the general type of leadership approach which we believe is critical to routinely developing highly cohesive NMS units which are built around first-term soldiers:

"Followership - Recently there has been renewed research interest in followership. One type of formulation views organizational leadership as having three aspects: (1) whether successful or not, leadership is a social process defined through interaction, (2) successful leadership involves a process of reality-defining by the leader, (3) successful leadership involves a surrender of the power to interpret and define reality by followers to the leader. Of particular interest here are the formulations of Davis (1982) and of Smircich and Morgan (1982), which are perceptual in nature and which emphasize how organizational goals are achieved through creations of meanings by leaders. Creation of meanings by leaders is at the heart of management of soldierization. An aim of soldierization, from the present point of view, is to have soldiers perceive Army situations throughout their developmental/adjustment period in a manner conducive to development of firmly-fixed, favorable attitudes 9-12 months following entry into the Army. Leadership is central to developing perceptions of organizational climate by soldiers:

I-20
WHAT'S BEST FOR OUR ARMY

THE CHALLENGE

WHAT DO I NEED TO DO NOW TO ENHANCE READINESS FOR THE 80'S??

ACTIVE AND RETIRED MILITARY
CIVILIAN LEADERSHIP
SOCIETY
ARMY STUDIES
REPORTS
ASSESSMENTS
INTELLIGENCE
MINES
DOCTRINE

THE VISION

THE ARMY OF THE 80'S

DEVELOPMENT
THE THREAT

AVAILABE RESOURCES
SOCIETY
CONGRESS
leadership works by influencing the relationship between figure and ground, and hence the meaning and definition of the context as a whole. The actions and utterances of leaders guide the attention of those involved in a situation in ways that are consciously or unconsciously designed to shape the meaning of the situation. The actions and utterances draw attention to particular aspects of the overall flow of experience, transforming what may be complex and ambiguous into something more discrete and vested with a specific pattern of meaning. This is what Schutz (1967) has referred to as a 'bracketing' of experience, and Goffman (1974) as a 'framing' of experience and Bateson (1972) and Wieck (1979) as the 'punctuation of contexts'. The actions and utterances of leaders frame and shape the context of action in such a way that the members of that context are able to use the meaning thus created as a point of reference for their own action and understanding of the situation (Smircich and Morgan, p.261, 1982).

Note that Smircich and Morgan assume, along with the author, that leaders guide the attention of followers by design, whether with or without awareness on the part of the leader. If that is true, then it would seem that a reasonable Army goal would be to have face-to-face Army leaders deliberately lead first-termers in ways which result in better adjusted, more productive soldiers. (This is already done in the training base.) Skillful creation of meanings during the entire period of soldierization would benefit individual soldiers and the Army (readiness)."

When the ARCOST initiatives are cast in company-sized terms, conceptually they are bite-sized and potentially more manageable. As the cadre believe and act, so will an NMS company become. Unfortunately, COHORT first-term soldiers report that some cadre believe and act in ways consistent with negative as well as positive features of the Army's espoused values and standards.

Casting the ARCOST initiatives in company-sized terms leads to consideration of the social dynamics of units. While a stable unit may represent a microcosm of the larger organizational system, the dynamics at company level are highly personalized, unlike the dynamics in the larger Army organizational system. Resolution of value conflicts at the unit level are interpersonal in nature, and within the context of three stages of unit development in FORSCOM (absorbing, renorming, performing) are potentially programmable.

The main outlines of leadership and value conflicts at the unit level can be discerned from Soldier Survey results (HRD, 1982). Discrepancies between what first-term soldiers want from their leaders (namely, to be competent and to act on a prioritization of mission-men-self) and leadership performance shortfalls have already been discussed. Here, we should note that while only 30% of first-term soldiers in Army units report that morale is high, 65% report that soldier motivation is high. This finding implies not only that
there may be much room for improvement in morale, but that much of the energy needed for improvement exists in regular Army units.

Commanders and other officers in units see the following kinds of significant problems:

- Over three-quarters of such officers see problems in junior NCO leadership.
- One-half to three-quarters see significant problems in morale, motivation, discipline, and trainability of soldiers.
- Over one-half see significant problems with senior NCO leadership.
- Nearly one-half see significant problems with officer leadership.

Examination of Figure 7 suggests some of the interpersonal dynamics to be expected in line units. First-term soldiers and junior NCOs (E5-E6) tend to see the unit world the same way: primary unit problems exist in morale and motivation and in senior leadership. Unit officers see the primary problem as one of NCO leadership, presumably, in part, reflecting a wish that NCOs would better control first-term soldiers through effective leadership in ways more in accord with mission requirements. Senior NCOs (E7-E8) view officer leadership as a problem and may be caught in the middle in a role conflict. These kinds of interpersonal role dynamics, if manifest in NMS units, would be counter-cohesive. If not countermanded through cadre preparation, training, subsequent procedural checks and monitoring, they would be expected to form a major adverse framework for organizing unit norms and performance during the first several months of an NMS unit's existence in FORSCOM.

Cadre Preparation and Training

The preliminary data reported earlier were based on the first nine "pioneering" COHORT units. Cadre in these units were in a unique situation. Now that an experience base has been built, future cadres, in theory, can learn about what transpired in earlier units. They should be better prepared to avoid pitfalls, prevent risky outcomes, and continue proven procedures. We assume that in the ordinary course of events, new cadre will receive training which incorporates information about what to expect in developing an NMS unit.

Here, we want to emphasize our recognition that the Army has a unique opportunity with NMS units to improve the performance, consistency and coherence of leadership, institutional values, and combat readiness. First-term soldiers immediately following IET provide the Army with an enormous resource to employ for organizational improvement. When they are bunched, as in an NMS
FIGURE 7
RESPONSES TO THE 1962 HRD* SURVEY
QUESTION IDENTIFYING THE
SINGLE GREATEST PERSONNEL ISSUE (PROBLEM)
IN YOUR ORGANIZATIONAL ELEMENT

<table>
<thead>
<tr>
<th></th>
<th>Morale</th>
<th>Motivation</th>
<th>Senior NCO Leadership</th>
<th>Junior NCO Leadership</th>
<th>Officer Leadership</th>
</tr>
</thead>
<tbody>
<tr>
<td>E1-E4</td>
<td>17%</td>
<td>11%</td>
<td>11%</td>
<td>6%</td>
<td>8%</td>
</tr>
<tr>
<td>E5-E6</td>
<td>15%</td>
<td>11%</td>
<td>10%</td>
<td>3%</td>
<td>9%</td>
</tr>
<tr>
<td>E7-E8</td>
<td>6%</td>
<td>8%</td>
<td>5%</td>
<td>6%</td>
<td>10%</td>
</tr>
<tr>
<td>CDRs</td>
<td>1%</td>
<td>4%</td>
<td>12%</td>
<td>21%</td>
<td>3%</td>
</tr>
<tr>
<td>Unit Officers</td>
<td>5%</td>
<td>7%</td>
<td>10%</td>
<td>18%</td>
<td>5%</td>
</tr>
<tr>
<td>Non-Unit Officers</td>
<td>7%</td>
<td>5%</td>
<td>4%</td>
<td>3%</td>
<td>8%</td>
</tr>
</tbody>
</table>

NOTE: Percentages over 10% are boxed.

* Human Resources Directorate, Headquarters, Department of the Army
unit, they provide sufficient critical mass to create new standards of performance at the unit level: standards which place value on what the Army wants while acknowledging and reducing what the Army does not want.

By design, NMS is in a controlled, developmental period (Figure 8). Its purpose, prior to Army-wide ramp-up (FY86), is to learn how best to develop and manage NMS units. Thirty percent of the learning period has elapsed. If learning how best to develop units from scratch in today's real Army is to be accomplished, it is essential that systematic learning activities be implemented now. The next two major sections of this paper focus on implementation plans for NMS. The section immediately following this section presents a suggested way to improve cadre training. The concluding section examines the implementation of NMS in its total Army context.
FIGURE 8
INITIAL COMPANY ROTATION FOR NMS

Source: Manning Task Force, 1982
SECTION II: ACCELERATION OF NMS IMPLEMENTATION
SECTION II: ACCELERATION OF NMS IMPLEMENTATION

The previous section portrayed the current situation regarding the Army's experience to date in establishing stable and cohesive combat companies. Although findings to this point evidence no need for alarm, there are indications of underlying flaws in the manner with which this initiative is being implemented. These flaws are not so serious as to cause immediate reorientation of the basic initiative. Indeed, there are indications that stabilization is producing some of its desired and intended consequences. However, all is not bright and key issues are emerging as noted in the preceding section.

The purpose of this section is to outline a planned approach for the Army to address these emerging issues and to accelerate NMS implementation. This approach is based on a very flexible and sound methodology. The approach includes the following two elements:

. Action research methodology designed to capitalize on available expertise as efficiently and effectively as possible, and
. Training focused on vertical integration among troops and cadre.

Before proceeding to a description of the details of the approach, it will be useful to review briefly the matter of cohesion and its operationalization.

I. OPERATIONALIZING COHESION

Cohesion is fundamental to the NMS. Yet there exist no simple or agreed-upon measures of cohesion among troops and their leaders. Those measures which have been used tend to rely upon some type of direct response from a unit member about the degree to which that individual feels bonded to other unit members. These types of measures can be qualified in numerous different ways (e.g., bonded to other soldiers, to leaders, to unit), and they can be combined in a variety of ways. Nevertheless, no uniform or coherent procedure has been adopted for operationalizing cohesion.

The earlier portions of this monograph suggested that horizontal integration (i.e., bonding among peers) and vertical integration (i.e., bonding between leaders and followers) are key components of cohesion. All preliminary indications suggest that horizontal integration among COHORT soldiers is relatively high compared to their counterparts in non-COHORT units. The IET experience by its nature produces a great deal of horizontal integration and this process is continuing in COHORT units. However, horizontal integration, by itself, cannot be relied upon to supply the combat readiness outcomes and institutional values which are sought through a new way of manning combat units.

Complementing horizontal integration is the phenomenon of
vertical integration between those who lead and those who are led. Once merged, a unit's soldiers and its cadre have the opportunity (indeed, the responsibility) to develop vertical integration. Drawing upon some of the research-based propositions advanced previously (as well as common sense) regarding unit life cycle development, we would argue that over time the extent of integration (both horizontal and vertical) can be guided and managed in more purposeful ways. We further presume that a central purpose of the NMS is to enhance both horizontal and vertical integration.

Conceptually, therefore, we propose that one strong indicator of cohesion is the relative balance between horizontal and vertical integration. Figure 9 shows the possible imbalances that can occur between horizontal and vertical integration over initial unit life cycle stages. The curves presented in Figure 9 are purely hypothetical but altogether reasonable in the sense that horizontal integration almost certainly will exceed vertical integration in the earlier stages of unit life cycle development. Also, it is quite possible that vertical integration can supercede horizontal integration over time as a function of the exercise of leadership. Two other important insights can be gained through consideration of Figure 9. First, too much vertical integration relative to horizontal integration could signal a flaw in the overall cohesion of a unit since it is likely to denote a situation in which subordinates are too dependent on their leaders. This could mean the subordinates do not have an investment in the unit's performance, and the leader has created the situation through a strategy such as a "conquer and divide" way of leading. Conversely, too much horizontal integration relative to vertical integration is likely to denote a situation which lacks effective connection with the Army's and unit's mission.

The actual measurement of both vertical and horizontal integration is likely to require a series of individual measures. Initially, horizontal and vertical integration can be measured in terms of loyalty and commitment among grade levels (e.g., troops, junior NCOs, senior NCOs, and officers) as is currently being done. The most expedient course would be to rely on simple self-report questions.

In any case, various measures will need to be derived, operationalized, and validated in practice. It is entirely likely that different measures will be required for different unit development life cycle stages. The action research approach described subsequently in this section includes the use of various experts, and these experts will be excellent sources of candidate measures and measurement procedures. For instance, since there exist virtually no equivalent examples in previous Army experience about the degree of cohesion to anticipate (i.e., the level which any given measure would achieve under either ideal or actual conditions), then the experienced judgment of these experts is the only mechanism available to establish reasonable expectations.

Measures such as those discussed above, along with the
FIGURE 9
HYPOTHETICAL DEVELOPMENT OF VERTICAL AND HORIZONTAL INTEGRATION
functional relationships between them, are among the types of management tools which are needed in support of accelerating NMS implementation.

The next portion of this section describes the details of a suggested action research approach including the manner in which the above cohesion measures are applied and how additional management tools are developed.

II. ACTION RESEARCH

The current implementation schedule for the NMS provides relatively few cases (i.e., in terms of numbers of units) from a research and measurement standpoint. This relatively small number of units means that major emphasis must be placed on maximizing what is learned in each instance. A broad approach developed in the behavioral sciences for dealing with this type of situation is referred to as action research. The central premise of action research methodologies is that the only way to understand something is to try to change it. In the current situation (i.e., NMS), there is a wide array of additional changes which could and probably should be undertaken.

Another principal feature of action research is heavy reliance upon empirical assessment (i.e., research) regarding that which is to be changed and the impacts resulting from any given change. In simplified terms, the action research methodology typically proceeds through the following process:

- Data Gathering
- Assessment
- Action
- Data Gathering
- Assessment
- etc.

This approach means that no action is undertaken without the benefit of research into the situation to be acted upon, and no research is conducted which is not tightly focused on the actions taken.

Another feature which is often included in the action research approach is the use of highly qualified experts to conduct the procedure. Such experts are drawn from particular subject and content areas of direct relevance to the situation at hand. Use of relevant experts is the most appropriate way to assure both the accuracy and efficiency of the overall action research procedure.

Above we proposed the conceptual basis for the operationalized
measurement of cohesion. A fully operationalized measurement procedure will require extended development and validation. This comprehensive development process can be carried out by relevant experts who also are conducting the action research approach. Thus, certain of the experts who are involved in conducting the action research approach also would be involved in completing the operationalization of cohesion measurement.

A. A Plan of Action

In the case of the NMS, we suggest that there is no need to await the results which will be produced by the NMS Field Evaluation in order to begin the "fix-as-you-go" process. Specifically, we suggest that a sound action research approach should begin virtually immediately which is directed at apparent areas in need of attention. Further, this action research approach can be designed in a manner to be entirely compatible with the NMS Field Evaluation. The following paragraphs describe the elements of this action research approach and how it is to be applied to the NMS.

There are five steps:

1. Establish the working guidance within which the action research method will be conducted.

2. Select teams of qualified experts.

3. Conduct a survey guided development procedure in three selected NMS units to corroborate and enrich the initial assessment.

4. Provide training to the next three NMS units to be established.

5. Continue the action research approach with additional NMS units on matters identified in the course of performing the preceding steps.

This step-by-step approach actually understates the extent of interrelationship among the various steps. A more complete portrayal of this approach is presented in Figure 10. The various interconnections noted in Figure 10 are described in the following paragraphs.

1. Establish Working Guidance:

The first step is to formulate the framework within which the action research approach will be conducted. This working guidance is a form of policy document which guides the operation of the action research.

It must address three major areas:

a. A clear statement of the mission of the action research.
FIGURE 10
ACTION RESEARCH APPROACH

- Establish Working Guidance
- Select Action Research Teams
- Survey 3 NMS Units
  - Feedback
- Identify Comparison Units
- Assessment/Training Design/Measurement Development
- Train Additional NMS Units
  - Feedback
- Assessment/Comparison/Measurement Development
  - Comparison
- Continue Action Research Approach
  - Comparison
For expository purposes, we suggest that the mission of the action research approach is units to accelerate implementation of the NMS through application of sound behavioral science methods. This approach must recognize both the vision set forth for the NMS (e.g., objectives) as well as practical constraints imposed by the realities encountered by a change of such magnitude in the Army.

b. The criteria and support needed for the research. For instance, it should include:

- Assurance of access to NMS units on a low-interference basis for both assessment and action purposes.
- Selection criteria for the teams of experts which will conduct the process.

c. The operational characteristics of the action research approach also must be specified. For example, the working guidance would specify that the action research teams cooperate as much as possible with local commanders and assure that the team’s activities cause minimal disruptions to a unit’s normal operations. At the same time, it would provide a basis for access to relevant information gathering and action opportunities. The guidance also would specify that teams would respect the anonymity of specific items of information gathered in the course of their work. The teams would have the responsibility of summarizing their assessment findings across the units in which they work, but the identities of specific units and findings would remain confidential.

2. Select Action Research Teams

The utility of the action research methodology hinges greatly on selection of highly qualified experts for the action research teams. We suggest that a principal team (supra-team) be established to conduct that portion of the research which cuts across NMS units, and that subordinate action teams be established within NMS units. The NMS Field Evaluation has established local data collection teams, and these teams should be considered as resources to the action research approach outlined here. There would be direct links between the principal team and the action teams. However, we do not conceive of this as a "stovepipe" sort of organizational arrangement. Local command authority would be respected and reinforced. In addition, the principal team must be afforded access to NMS units with the clear understanding by all that the lessons learned across all NMS units will serve as the basis for recommended actions in other to accelerate NMS implementation.

The principal team would be attached to the Combined Arms Center (CAC) because CAC’s proponent for leadership is of direct relevance for the entire NMS initiative. Periodic summary findings generated through action research will obviously benefit the CSA Headquarters, Department of the Army (HQ DA). The teams also will require relatively modest amounts of resources such as administrative support, temporary duty funds, and possible contract
monies depending upon the final design of team composition and approach.

It is vital that team members (the principal team especially) be selected on the basis of demonstrated individual skill and expertise and not merely on the basis of organizational affiliation. Selection of fire safety officers is a parallel type of procedure. This also means that rank or grade level considerations may not be appropriate selection criteria. Specifically, the principal team must include representation from the following categories of expertise:

- Current NMS thinking and initiatives
- Company and Battalion command
- Leadership theory and practice
- Life cycle and group development theory and applications
- Personnel management practices
- Individual and organizational values
- Assessment and measurement techniques
- Training development and design
- Organizational socialization of new members
- Action research practitioners
- Information processing methodology

This list is likely to represent the core of capabilities which are necessary. Additional categories of expertise also may be necessary once the research phase begins. The categories noted above are those which are most likely to assure the quality of the research activities undertaken as well as the actions which are implemented. An appropriate mix of qualified organizational researchers and practitioners along with experienced commanders and those who are intimately familiar with situational conditions is the best way to proceed.

3. Survey Guided Development in Three Selected NMS Units

Once the working guidance has been reviewed and approved as the way to proceed, then the action research approach can begin.

The preliminary evidence based on data from COHORT and comparison units reviewed in the previous section of this report can serve as the preliminary assessment stage. Based on this information, we would recommend that vertical integration training is the primary area in need of attention. Since this preliminary assessment can only point to the general need for vertical
integration training, this training should not be designed in detail without further refined assessment in a few NMS units. Therefore, the first step for the action research team would be to conduct survey guided development in three NMS units at a reasonable time after they have completed collective training. The focus of the survey would be to learn as much as possible about what the unit had experienced in merging with its cadre, and about collective training. Information gathering should occur approximately two to four weeks after completion of collective training so that unit personnel can view the collective training experience with a more rational perspective, yet still remember events with reasonable accuracy.

The survey and information gathering process should be designed to include measures such as those suggested above regarding vertical and horizontal integration. The specific data gathering instruments and procedures would be designed and guided by the principal action research team. Of particular importance would be the discovery of those specific behavioral and situational factors that contribute to, or detract from, the various components of cohesion, and to relate those factors to their associated cohesion component. For instance, two areas of inquiry, which already have been suggested by preliminary assessment, deal with how the conceptual basis of the NMS is understood by unit members responsible for its execution, and cadre motivational issues. As these or other factors are identified, they can be used to develop training and to help restructure the situation where it is possible.

In particular, it might be possible for the action research team to select a number of measurement episodes at levels as low as the squad. A measurement episode could be some form of semi-structured interview which could be videotaped. The episode would be designed to elicit as much relevant information as possible about vertical and horizontal integration. Collection of sufficient numbers of such episodes then would provide a rich data base for determining the components of cohesion. For instance, a panel of expert judges or assessors (i.e., experienced combat veterans) could be assembled to view these videotapes. Their task would be to assess the relative cohesion exhibited in the various episodes and to identify the indicators leading to their judgments. In this regard, this panel of experts would be conducting an assessment in the scheme of the assessment center methodology which has been documented elsewhere (Holmes, 1977). The assessment center method also is included in our discussion of the matter of effectiveness measurement in Appendix B. The rationale for this recommendation is that the best assessment of cohesion can be gained from those who are most experienced with it. Thus, this panel of assessors would be the source for further refinement to the operational measures of cohesion.

The results of the survey guided development process would serve three purposes: first, to support the detailed design and development of training for subsequent NMS units (discussed below); second, to suggest immediate areas for improvement in the units from
which the data are gathered (In doing so, the survey data would be fed-back in appropriate, facilitative ways to key leaders in the units, and additional work, instruction, or assistance would be given); and third, to serve as the source of data for further refinement to the measures of vertical and horizontal integration (i.e., cohesion).

4. Train Three NMS Units

The results of the refined assessment conducted in the preceding step would be used to design training for three additional NMS units. The training would focus on vertical integration. The actual program of instruction (POI) would be formulated by both the principal and unit action research teams, and other Army training experts.

At this point, it is not possible to specify the exact POI, but it is reasonable to surmise that it would include an initial portion focused on cadre development and preparation which would be delivered prior to actual merging of the unit and cadre. The NMS itself is not a new situation for the troops. Rather, the entire experience of the Army is new to the troops, and their training and development up to the time of merging appears to be fully consistent with the premises of the NMS. However, the NMS is novel to cadre members whose experience is based on the former individual replacement system. Of particular importance in this initial training would be matters such as:

- Building awareness of life cycle development stages.
- Identifying various indicators of both cohesion (i.e., horizontal and vertical) and life cycle development.
- Demonstrating the rationale for balancing horizontal and vertical integration as a developmental process.
- Assuring a firm and complete understanding of the vision underlying the move to the NMS and its implications.
- Identifying creative ways of conducting day-to-day operations which support longer-term unit development.
- Providing the skills and competencies for the cadre to act on the matters noted above.

Beyond this initial cadre training, the data-based POI will likely specify one or more additional training opportunities which focus on the complete unit after it has merged and at appropriate points up through its mid-sustainment period. As noted, it would be premature to specify these training details at this time since that is exactly why the action research (i.e., survey guided development) is to be conducted.

Assessment and evaluation data would continue to be gathered in
concert with the training resulting from the first assessment. This additional, more refined information would be used to further improve the vertical integration training and identify additional areas in need of revision.

These additional training iterations also will provide the opportunity to test out the refined measures of integration and cohesion. In other words, the assessment panel would have developed refined measures and indicators in the preceding step. Depending on the form of those refined measures, they can be administered in conjunction with the data gathering in this step. The ultimate purpose is to transform the judgmental process used by the expert assessors to a more convenient though equally accurate procedure for use by unit members. Therefore, these additional training iterations will serve as the first validation opportunity for the refined measures. If the measures prove valid (i.e., accurately reflect the judgments of trained experts), then the measures can be adopted. If they do not validate, development will continue into the subsequent steps of the action research approach.

5. Continue the Action Research Approach

Vertical integration training resulting from this intense test-fix-test approach would be applied to all successive NMS units. During this time, the principal action research team would be available to work with unit teams. They could assist by making required modifications to fit local circumstances as well as assisting in training delivery. The training experiences also will provide opportunities for further data and information gathering to identify any additional areas in need of study and change.

As noted in Figure 10, the action research design includes systematic follow-up with those units involved in the research, and it includes comparisons with other non-NMS units. This general design is intended to build grounded knowledge and channel it into action rapidly and completely.

In all of their efforts, the action research teams will focus primarily on cohesion as it relates to the development of combat readiness. This requires that those involved use the concepts outlined in Appendix B, COMBAT READINESS IN DEVELOPING UNITS. The team will use the various models presented in this monograph, but additional, grounded and more practical models will be developed through action research.

Summary

In essence, much is already known in a general fashion about how to develop stabilized units and how to measure their performance in a developmental process. For instance, many different ways of measuring combat readiness are available and they almost certainly vary by life cycle stages. Appendix B contains a more complete discussion of the matter of effectiveness measurement. It is also known, or at least is readily accepted, that with all other things
being equal (e.g., training and skill proficiency, logistics and equipment availability, etc.) the will to fight is the major determinant of actual combat effectiveness. The move to the NMS fundamentally is directed at creating the conditions for developing and insuring that the will to fight exists (i.e., combat cohesion). However, preliminary indications suggest that there are gaps in the specifics of this overall process. What appears to be most lacking are grounded actions for creating these particular conditions in light of what is known in the behavioral sciences as well as validated measures which can both assess and guide the overall process. We do not presume to know the exact elements which are needed to assure the success of the NMS effort, but we are confident in advancing the action research approach described above as the manner in which such elements can be determined.
SECTION III. THE NMS CHANGE IN THE LARGER ARMY CONTEXT
SECTION III. THE NMS CHANGE IN THE LARGER ARMY CONTEXT

I. INTRODUCTION

In the first section, we examined the COHORT/NMS to date. We described the discrepancy between desired and actual outcomes, and discussed probable causes. We indicated that horizontal integration had improved, but vertical integration appeared to be no stronger (and relatively weaker) than it has been in the past. At NMS implementation levels, there appears to be an overall lack of awareness about factors which contribute to unit development and cohesion.

The second section stated that there was a need for action research, particularly at the point where cadre acquire the company. We presented a design for that research action approach. Most importantly, it suggested new measurement concepts. First, a way of measuring cohesion by considering the relationship between vertical and horizontal integration and the intensity of both. Second, a way of viewing readiness measures themselves -- that readiness measures are connected to and should be used to reinforce unit development (see Appendix B). We believe that these two measurement concepts are needed in order to successfully manage the NMS.

Sections I and II provide concepts and plans related to the initial stages of the NMS. We would be remiss if we stopped here, however. There are large system implementation issues which also must be addressed.

II. THE LARGER CONTEXT AND PLANNED CHANGE

The Army's conversion to a unit replacement system is one of the largest institutional changes that any modern organization could attempt. It requires change in all core philosophies and functions of the Army including values, norms, operations and logistics. The entire Army is being affected by this change.

We believe that it is very useful to view the overall effort from a more global perspective. We will do this by examining the intended change in relation to a change model developed in previous research for the Army. This model comes from an evaluation of the Army's organizational effectiveness (OE) program in which 35 separate organizations using OE were examined in detail to determine the factors leading to the success of the operation. The model is based on the principle that the change process involved in OE requires subordinate or lower level commitment to succeed. The change to a unit replacement system also requires commitment of lower levels to succeed. Although the model grew out of research of planned changes of much smaller magnitude than the NMS initiative, it was based on Army change operations. Thus, we believe that the model, in a general but basic sense, can be applied to the NMS effort.

III-1
A. A Model of Organizational Change

The model is displayed in Figure 11 and consists of six major related elements. The first major element is the leader's vision and goal orientation. Vision refers to the leader's ability to define a future state, one which the organization can strive to attain. Vision can be measured qualitatively by noting the clarity of the "picture" the leader communicates to others. Vision, while necessary, is not sufficient to bring about change. A leader also must possess what is referred to as goal orientation. Goal orientation consists of both the willingness and ability to undertake a change process that can generate subordinate commitment to a vision. Obviously, the leader's willingness is the motivational component of goal orientation and it relies primarily on conviction and courage. Ability refers to the knowledge, skills and competencies required to take action which can bring about the change. Together, vision and goal orientation are the most important of all of the elements in the change model. Leader vision and goal orientation affects three other elements in the model: 1. practice theory and strategy, 2. structure and 3. outcomes.

A practice theory usually includes one or more tested theoretical concepts which allow persons to better understand a process. When a practice theory is adopted as the logical basis for a change strategy, it permits the leader and lower levels to collaborate in mutually reinforcing ways. If the practice theory chosen is correct, the change process can be accelerated. The converse is also true, i.e. if the chosen practice theory is incorrect for any reason, the change process will be hindered or even obstructed. The strategy is a broad action plan which bridges the gap between the current state and desired future state.

Structure as employed in the model represents both the tangible organizational mechanisms normally thought of as organizational structure, and the design of the processes employed in these organizational structures. Every change process employs structure of both types. For example, the purpose of training is usually to create change. The structure used in training includes the way in which the people and groups are organized (organizational structure), and the process chosen to communicate information (process design).

Outcomes are the changes which distinguish the two states, present and future, and are attributed to the change effort. Outcomes include changes in:

- Hard outcomes - those outcomes which can be measured through changes in tangible indicators such as labor hours, equipment readiness rates, inspection results, etc.
FIGURE 11
A MODEL OF ORGANIZATIONAL CHANGE

Leader Vision and Goal Orientation
- Willingness
- Ability

Practice Theory and Strategy

Structure
- Organization
- Process

Diffusion

Outcomes
- Hard
- Behavioral
- Learning
- Reaction

Support Staff
- Behavior - distinct changes in the way people act. Persons concerned do and say things differently than they did prior to the change.

- Learning - the knowledge or skill acquired through a learning process which can be measured by pre and post tests.

- Reaction - the emotional response to the change process.

While the most impactful and therefore desirable change involves hard outcomes, all of these categories are important to consider in a change process. Further, they do constitute a taxonomy. Thus, to realize hard outcomes, behavior, learning and reaction changes must all have taken place. This concept is particularly important in a change such as that represented by the conversion from an individual to an unit replacement system. The purpose of the change is to achieve greater combat readiness through personnel stability. The cohesion that can result is the best readiness measure of the willingness to fight. Willingness to fight is the most important combat effectiveness variable. In addition, cohesion contributes to all aspects of readiness - psychological, physical, technical, and material.

Cohesion is primarily a behavioral issue. If it exists, with intensity, in conjunction with the correct mission, it can result in improved combat readiness. Combat readiness indicators are in the hard outcome category. Thus, hard outcomes which represent combat readiness and behaviors representative of cohesion both should be monitored in relation to the desired future state during the change process. As we indicated previously, these can only be monitored if appropriate concepts for measurement can be used. We believe that we have generated appropriate concepts for these measures in the previous section (Figure 9) and in Appendix B.

For a change process to succeed, the leader's vision and goal orientation must be implemented through practice theory and strategy, structure, and outcomes.

The model contains two additional elements, diffusion and staff support:

Diffusion is a process wherein information about the change process is communicated to those affected by it. Methods and information chosen to be communicated are determined in the structure steps of the process. Diffusion occurs regardless of whether those involved in the change make a deliberate effort to disseminate change information. When
this process is managed so that persons affected by the change understand the strategy, purpose and actions being taken to bring about desired results, they tend to view the process more positively. When they are not so informed, those same persons naturally form their own opinions. In the absence of positive, supportive and purposeful information, they typically substitute negative perceptions. A change process can fail unless structure is designed and implemented which explicitly addresses diffusion.

Staff support is that portion of the organization having the responsibility to assist the leader in developing, designing and implementing the practice theory and strategy, as well as the structure needed to attain the desired state. The Manning Task Force and Soldier Support Center constitute the primary staff support for the CSA in implementing the NMS.

To succeed in a change effort according to the model, the following must occur to the greatest possible extent:

. Clearly communicated leader vision and high leader goal orientation.

. A clearly communicated strategy based on a reliable and appropriate practice theory.

. Structures in place, executing processes reflective of the strategy chosen and diffusing information about these actions to all who are affected.

. Diffusion which overcomes ignorance in those who are to be affected by the change by providing them with positive, relevant and easily understood information about the change.

. Outcomes specified in such a way that those involved in managing the change process can determine whether the correct decisions about strategy and structure are being made - and whether the desired change is occurring.

B. The Change Model and the NMS

Using the preliminary information presented in Section I and the above criteria we can begin to assess the NMS change effort in relation to the larger organizational context:

. The leader's vision is very clear and his goal orientation is very high. The CSA has clearly stated his view of the desired future state and has shown the willingness to implement the required change.

. While a strategy has been chosen, it does not appear to be
sufficiently clear about the behavioral aspects of the concept. The only underlying practice theory we are aware of addresses the complex problem of constituting units and getting them through a training pipeline. People involved have a vague notion of cohesion, and assume that if a unit has stable personnel, cohesion will occur naturally and with the desired intensity. As we have indicated, there are considerable dangers in such a strategy. While it is necessary to constitute and train units, that is not sufficient to achieve the quality of mission related cohesion intended by the change to the unit replacement system. A practice theory which addresses the behavioral issues of cohesion and unit development is missing in the strategy now being used.

Structure is in place; it is the chain of command. Diffusion is occurring. Much of it is negative because most involved lack the information they need to understand the purpose and progress of the change process.

The support staff is concentrating on those operational/logistical problems which must be resolved simply to get people in the right place with the proper training. They do not appear to be paying sufficient attention to the behavioral issues noted above.

Outcomes thus far are mixed. Units are being formed, trained, and are performing their mission - a hard outcome indicating that a change is occurring. Initial behavioral outcomes are as presented in Section I. Very few people have clarity about the future desired state or how to confidently verify improved cohesion or combat readiness. No new indicators or guides, doctrine, POIs, etc. exist to help leaders and managers bring about the desired future state.

Given the above we would predict that the NMS initiative will not succeed as envisioned by the CSA (see page I-1 for key elements of his vision.) It cannot, primarily because of the lack of a strategy driven by an appropriate practice theory. Without this strategy, appropriate structuring and diffusion cannot take place, and outcomes resulting in cohesion cannot be defined.

We believe that the CSA's vision is of greatest importance, is timely, and achievable. We anticipate that unless the implementation process changes in particular ways, the existing Army unwittingly will cause the failure. Clearly, the change is too complex and far reaching to be dictated by the CSA. To succeed, the change will require that decisions be made throughout the Army at all levels to revise and eliminate regulations, policies, procedures and even traditions which were designed for, or resulted from, the individual replacement system. The decision makers must have the freedom to make these necessary decisions and a well formed concept of what they are changing and why. Again, they must understand, and
to the extent possible, be committed to a strategy which reinforces cohesion and unit development concepts which are wedded to the mission of combat readiness.

C. A Practice Theory and Strategy for the NMS Change Implementation

Most of the serious flaws in the current NMS implementation are driven by the lack of what we will call an overarching strategy. With it, the needed decisions can be made so that the change process becomes a collaborative, synergistic, and exciting process. Structuring can occur vigorously throughout the Army with a confident sense of purpose. The thousands of opportunities for positive diffusion about the change's purpose and what is being accomplished will not be lost. The outcomes can be defined in relation to an achievable set of predictable results based on solid theory.

Assuming the above is true, what is the overarching strategy, and how can it be communicated?

A Practice Theory

The practice theory we suggest is composed of several elements requiring description:

. A concept of unit development
. A concept of a way to assign tasks.

A Concept of Unit Development. In converting to a system composed of stable units in order to achieve greater cohesion, the theoretical base which becomes paramount is that which describes growth or development. There are many models which do this, e.g. Tuckman's (1965) which was adapted for use in Section I. It may be recalled that the words describing the development stages were:

. Form
. Absorb
. Storm
. Renorm
. Norm
. Perform
. Perform

To begin, this theory, or any other which can describe the development process adequately, must become the central theory underlying the change strategy. In addition, we would augment this theory with our concept of how unit readiness develops in relation to the growth process. It is important that the chosen indicators and measures used reinforce the natural growth process as noted in Appendix B.

Assignment of Tasks. Next we would connect the growth theory with a second concept which relates to the way in which unit tasks are assigned. We believe that the type, sequence and duration of tasks assigned to a developing unit enhance or
detract from its growth process in the same way chosen measurements of readiness do. Truly competent leaders know this intuitively, and they assign the tasks under their control in a way which encourages their units to peak at selected times - i.e. for an ARTEP. In moving to a system where growth and cohesion suddenly become paramount, the notion of reinforcement of long-term growth in order to peak for a point in a unit's life suddenly becomes a new, exciting, and highly desirable possibility. It is like a professional football team peaking for the Super Bowl both mentally and physically. The planning for the "peak" in performance begins the year prior to the big game, and is considered routinely every day of every week.

The individual replacement system had no need for such concepts. With roughly 100 percent annual turnover in combat companies, a growth or peaking concept was inappropriate. Now such a concept is not only feasible, it necessarily becomes a part of the practice theory. As an analogy it might be useful to describe briefly a typical football team's task assignment sequence.

- **Pre Season:**
  
  - This period begins with tasks assigned to individuals to condition themselves and concentrate on individual skill development - throwing, running, receiving, etc.
  
  - After a period of time, players are assigned plays to learn and functional subunits begin to practice together with light contact. The tasks of rigorous conditioning and skill development continue.
  
  - At the end of the period, the task assigned is to scrimmage as a team, practicing tactics and test conditioning and skills. Physical contact builds to game intensity.

- **Season:**
  
  - Tasks are assigned each week to improve performance for the long term and win the weekly game. In this context, there is a complex plan which hopefully enables the team to peak physically and mentally at game time. Such a plan may be something like:
    
    - Assignment of feedback sessions using films/tapes and low contact drills to correct game deficiencies early in the week. The objective is to mentally correct past weaknesses and to physically recover from the strenuousness of the previous game.
    
    - Midweek assignments might be to scrimmage and test the progress of players correcting past weaknesses - and to test and refine the tactics.
for the next game. Heavy conditioning work would be assigned as well.

End of week assignments would include drills which concentrate on execution and require moderate conditioning so that the athletes are not overly tired or strained but are at peak preparedness—that is, they are confident, physically rested, and mentally prepared for game time.

As the season progresses, the sequence, duration, and intensity of a well-coached team peaking for weekly games and the Super Bowl changes as the players and functional units improve and become cohesive. A less capable coach can, however, obstruct such a peaking process in ennumerable ways. These can include improper conditioning schedules, choosing the wrong tactics, not using feedback sessions to prevent errors in the future, choosing the wrong drill process so that players practice in fragmented subgroups instead of as a team or vice versa, etc. In such instances, on game days the team might be tired, injury prone, may not execute properly, and players may show their frustration by missing assignments, arguing with teammates and ignoring coaches.

In leagues with keen competition, teams that win have leaders who manage the team's growth and peaking process. The actions they take result in predictable outcomes and determine the team's ability to perform. The many choices they make result in success.

We assert that the leadership of combat units is analogous. The combat unit or team develops and peaks at intermediate points with the overall objective of absolute peak performance over the long term. The way tasks are assigned determine when peak performance will occur and its intensity.

What are the criteria one uses to make the assignments which facilitate the highest levels of performance in the shortest period -- and continue such a process over the long haul? We would cite three, and readily agree that there may be others.

First, tasks which are perceived by soldiers to relate most directly to combat readiness will enhance growth in the desired way. Tasks which are perceived by soldiers as being unrelated to combat readiness will slow desired growth. For example, practicing another sport such as baseball is probably not conducive to winning football games. Most certainly, sweeping the locker room or cleaning the stands would be detrimental.

Second, tasks which employ persons who are functionally
related and mutually interdependent in their combat mission context will tend to enhance growth. Even though the tasks themselves may be unrelated to the primary combat mission, the more roles are defined through having to work together in many contexts, the more those involved will have acquired a flexible, adaptive ability to work with one another. Conversely, assignments which fragment the unit in seemingly meaningless ways deter unit growth.

Finally, tasks which provide opportunities for soldiers to build on previously acquired knowledge, skills and competencies at a reasonable but challenging rate will encourage growth. Tasks which are either too difficult or are simply repetitive, and not especially challenging, even though connected with the combat mission, will result in frustrated, stale, disinterested soldiers -- and detract from growth and performance.

While the above criteria can be stated with confidence, putting the criteria to work is not as easy, particularly at the company level. Most assignments which have a significant unit impact originate at levels above the company, and even above the battalion. Consequently, to capitalize on the performance possibilities offered through the stable units of the NMS, all levels of command must be sensitive about the impact they have on unit growth and thus cohesion, combat readiness, and ultimately, peaking for actual deployment and/or combat.

Combining All Elements of the Practice Theory

Figure 12 combines the concepts we discussed up to this point. The Unit Development dimension represents a naturally occurring growth process. The speed of development and level of performance is determined by a myriad of other factors which either nourish and reinforce, or detract and block. They include:

- The degree to which appointed leaders are able to interpret and take appropriate action in relation to the growth stages.
- The way tasks are assigned.
- The indicators chosen for measurement of performance and the method of measurement.

Leadership - The Overriding Requirement

Of these three factors, leader interpretation and action taken to reinforce unit development stages and behavior is the most important -- and not just the leadership in the NMS combat company. Since the company is tasked from the battalion and above, and the performance measurement system is designed and implemented at higher command levels, the company cadre have very limited control over many and perhaps most of the significant factors.
essential for development and cohesion. It is as if the coach and coaching staff has the Conference Headquarters assigning workout tasks, and the League Headquarters measuring team effectiveness.

We are not implying that the levels at which task assignments are made are incorrect. We are asserting that in such a complex, interdependent organization as a combat arms organization, leaders at all levels must understand how they influence and can obstruct unit development, cohesion and combat readiness. Decisions at the cadre level, no matter how enlightened, will not be sufficient to overcome the obstacles of higher level taskings and policies which detract from unit growth.

We propose, therefore, that the practice theory underlying the successful implementation of the NMS is that of unit growth and development. The overarching strategy is one which must convey that theory in such a way that leaders can choose indicators of performance and methods of measurement, and assign tasks in ways that reinforce combat company cohesion and company readiness. If this overarching strategy is implemented, the many decisions needed throughout the army structure can be made with the confidence, purpose and vigor mentioned earlier. Positive diffusion about the change can be achieved. Everyone can concentrate on the same, explicit outcomes. If this strategy is not adopted, and implementation continues in its present form, we would predict that the most likely outcome would be a combat organization that performs slightly better than the individual replacement system of the past. However, morale will be no better and perhaps worse, and units rather than individuals, will rebel over perceived inequities or poor leadership. The worst outcome would be the above plus disturbing pressure from soldiers to unionize.

The Strategy

To successfully implement this strategy, there are five obvious, key steps which must be taken. First, the underlying practice theory must be adopted and refined. This refinement can begin with the action research approach described in Section II. Second, existing organizations which have key roles in structuring and diffusing the change such as training centers, Major Commands (MACOMs), Division Headquarters Staffs, and the operational chain of command should be identified. Third, the leaders in those organizations should be educated in the practice theory and its ramifications, i.e., unit readiness measures and task assignment concepts. This education must occur rapidly, and be implemented from the top down in those organizations that have the most immediate effect on NMS units. Fourth, policies which are based on the practice theory and are developed in the education process should be drafted and issued. Lastly, outcomes must be sampled objectively using the test-fix-test or action research approach to be sure they are those desired by the Army, and if necessary, to refine or redirect the practice theory and/or overarching strategy.
FIGURE 12
THE IDEAL PROCESS NEEDED FOR
HIGHEST LEVEL OF COHESION/COMBAT READINESS

Leadership understands unit development process and is committed to reinforcing it to produce highest level of cohesion/combat readiness

ARMY STRUCTURE
Department of the Army
Major Command
Division
Brigade
Battalion

Mission and Task Assignments which Reinforce Development

Indicators and Measurement Methods Chosen to Reinforce Development

Company Cadre

Soldiers and Natural Development Process

High Rate and Intensity of Unit Development
FORM STORM NORM PERFORM
ABSORB RENORM PERFORM

HIGHEST LEVELS OF COHESION AND COMBAT READINESS
Obstacles

If this overarching strategy is adopted and vigorously implemented, it will result in superior combat readiness. It will also be a difficult undertaking. There will be a substantial emotional reaction to the strategy and it will require great patience, perseverance and a willingness to work large issues through to resolution. In a very real sense, the Army as a whole will be going through the second stage of unit development -- STORM.

Those who learned how to obtain short-term, "look good" results through the autocratic leadership so often required in the rapid turnover situation of the individual replacement system will have to change. These short-term strategies will not work in units where member expectations are based on long-term development goals and increased mutual interdependence. Many will resent being educated as a part of the change process, and will have concerns about new policies and ways of operating. They will perceive that they have built their own power and prestige on values which are now shifting.

Career paths will be affected. There will be fewer opportunities than previously to lead combat troops - still the most desirable reward the Army can give, and likely to intensify if the NMS succeeds. Many will view this as a much less equitable career situation.

Finally missions and priorities of individuals and organizations will shift, and some missions may be eliminated. Productivity, in general, will temporarily decrease as the chain of command realigns itself to support the changes in values, education, policies, missions and priorities. There will be occasional setbacks as some leaders decide to leave the Army rather than to change themselves. Many simply will be unable to accommodate to the new concepts and required skills and competencies.

Those who lead NMS units will be faced with the challenge of having to live with the longer-term consequences of their decisions and actions. Their individual performance will be more clearly linked to their units' performance than in past individual replacement system units. The effects of leadership will not be confounded by the continual change of subordinate membership. However, they will be leaders in a system which has not yet aligned itself to fully support the change to the NMS. They will need assistance. Those who are competent, "naturally gifted" leaders who can project long-term visions of unit performance for themselves will welcome the challenge and any worthwhile assistance. They may also be of risk in comparison to their non-NMS counterparts. Although they will be more accountable and results will be more clearly linked to their performance, the individual performance measures appropriate for NMS leadership will not be normative. Many superiors are likely to be using evaluation instruments and judgments generated in the individual replacement system - a set of reinforcements which are no longer appropriate.
Notwithstanding all these difficulties and others not discussed, we believe that such an implementation is feasible, and most desirable. We also believe that there are few who appreciate the dedication and energy such a change will take to succeed. The requirement for many successful Army leaders to reappraise and change their core values rarely occurs without great pressures. The pressures of war force that kind of change where leaders must adapt new values and behaviors to survive with their subordinates. Pressures of this intensity are not normally available in peacetime. During peacetime these pressures can only come from a well formulated change strategy directed by the CSA himself.

III. CONCLUSION

This monograph is only one of what may be many attempts to define the likely difficulties involved in such a large undertaking. A recent research report from The Industrial College of the Armed Forces, National Defense University (Johns et al, 1982) discussed cohesion in the U.S. military. The report analyzes powerful historical forces changing the U.S. military character from "normative controls and moral commitment (institutional) to remunerative controls and calculative commitment (occupational) (p. 104)". In practice, it argues, military management decisions "give undue weight to numbers over professional judgment (p. 105)". These conditions operate against successful development of highly cohesive units.

Antidotes to the present conditions are suggested in the form of recommendations which include the following:

- Military departments should make better use of scientific technology related to organizational behavior in general and cohesion in particular (p. 112).

- Military departments should develop concepts and doctrine that provide guidelines for systematic efforts to enhance military cohesion. Discussion. If a systematic effort is to be made to influence cohesion, commanders at all levels need a clear understanding of the nature of cohesion, the factors influencing it and techniques to use. To rely on common sense and good leadership is to beg the question. Building cohesion requires systematic planning and follow through just as does training, maintenance, and other functions. This planning can be enhanced by concepts and doctrine to complement leadership manuals which are excellent in most cases (pp. 109-110).

The suggestions contained in the Johns' report are similar to those we have presented in this monograph. They reinforce our conclusions and suggest similar actions. Without these actions, in the form we have suggested, we believe that the CSA's vision for the New Manning System will not be achieved. We believe very strongly in the need for and merits of the Chief of Staff's initiative. We have attempted to identify theories, concepts and strategies
which can be used to strengthen more immediate company level processes and the required large system change.

There are no simple rules, tools or algorithms which can guarantee the success of this venture. However, a practice theory and strategy which translates the vision in ways it can be achieved is an inescapable requirement if the NMS is to succeed. The refinement of the theory and strategy and resultant new knowledge, skills and competencies can only come in a timely manner, from solid action research in Army units. We hope that what we have contributed in this monograph provides one basis for fulfilling these needs.
ARI BRIEFING
PRESENTED TO MEMBERS OF THE NMS EVALUATION TEAM
AND MTF AT MILPERCEN
JULY, 1982

The briefing presented data collected from nine COHORT and nine baseline companies. An outline of what was covered is as follows:

- SATISFACTION WITH UNIT

- WHAT IS BEING REJECTED?
  - The COHORT idea?
  - The unit?
  - Army life?
  - The Post?
  - Officers?
  - NCOS?
  - Fellow soldiers?
  - Themselves?

- WHY REJECTION?
  - Military Discipline?
  - Lax enforcement of standards/norms?
  - Toughness of collective training?
  - Social-psychological processes?
  - Specific complaints?

- QUESTIONNAIRE ITEMS RELATED TO COMBAT POTENTIAL
  - Unit effectiveness
  - Combat readiness
  - Potential for cohesion in combat

The data actually discussed at MILPERCEN are presented in the remainder of this Appendix.
• SATISFACTION WITH UNIT

"All in all, I am satisfied with my unit."
Based on five point scale: 5.00 Strongly Agree
1.00 Strongly Disagree

<table>
<thead>
<tr>
<th>END OF IndividuaL ENtry Training</th>
<th>END OF COllective Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASE UNITS (n = 459)</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>2.65</td>
</tr>
</tbody>
</table>

COHORT UNITS (n = 603)

<table>
<thead>
<tr>
<th>Training Companies</th>
<th>END OF IndividuaL ENtry Training</th>
<th>END OF COllective Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>One Stop Unit</td>
<td>3.68</td>
<td>2.66</td>
</tr>
<tr>
<td>Basic Training/Advanced Individual Training Companies</td>
<td>3.66</td>
<td>2.66</td>
</tr>
</tbody>
</table>

*---indicates that no data were obtained for this category.*
WHAT IS BEING REJECTED BY SOME FIRST-TERM SOLDIERS?

<table>
<thead>
<tr>
<th>COHORT UNITS, END OF ADVANCED INDIVIDUAL TRAINING</th>
<th>COHORT UNITS, END OF ONE STATION UNIT TRAINING</th>
<th>COHORT UNITS, END OF COLLECTIVE TRAINING</th>
<th>BASELINE UNITS, END OF COLLECTIVE TRAINING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approximate Number of Respondents</td>
<td>330</td>
<td>270</td>
<td>600</td>
</tr>
</tbody>
</table>

- The COHORT idea?
  
  Percent who say they "don't like it at all"  
  Percent who say it's "not so good"

<table>
<thead>
<tr>
<th></th>
<th>330</th>
<th>270</th>
<th>600</th>
<th>450</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent who say they &quot;don't like it at all&quot;</td>
<td>--</td>
<td>--</td>
<td>33%</td>
<td>16%</td>
</tr>
<tr>
<td>Percent who say it's &quot;not so good&quot;</td>
<td>--</td>
<td>--</td>
<td>16%</td>
<td>9%</td>
</tr>
</tbody>
</table>

- The Unit?
  
  Percent who say they would "jump at the chance" to transfer to another company
  Percent who say they would "think about it and eventually take the transfer"
  Percent who say they "dislike (the unit) a lot"
  Percent who say they "dislike (the unit)"

<table>
<thead>
<tr>
<th></th>
<th>330</th>
<th>270</th>
<th>600</th>
<th>450</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent who say they would &quot;jump at the chance&quot; to transfer to another company</td>
<td>13%</td>
<td>12%</td>
<td>43%</td>
<td>47%</td>
</tr>
<tr>
<td>Percent who say they would &quot;think about it and eventually take the transfer&quot;</td>
<td>16%</td>
<td>19%</td>
<td>26%</td>
<td>27%</td>
</tr>
<tr>
<td>Percent who say they &quot;dislike (the unit) a lot&quot;</td>
<td>29%</td>
<td>31%</td>
<td>68%</td>
<td>74%</td>
</tr>
<tr>
<td>Percent who say they &quot;dislike (the unit)&quot;</td>
<td>3%</td>
<td>1%</td>
<td>19%</td>
<td>21%</td>
</tr>
<tr>
<td></td>
<td>8%</td>
<td>5%</td>
<td>34%</td>
<td>44%</td>
</tr>
</tbody>
</table>

- Army Life?
  
  Percent who say they "dislike (Army life) very much"
  Percent who say they "dislike (Army life)"

<table>
<thead>
<tr>
<th></th>
<th>330</th>
<th>270</th>
<th>600</th>
<th>450</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent who say they &quot;dislike (Army life) very much&quot;</td>
<td>3%</td>
<td>1%</td>
<td>8%</td>
<td>13%</td>
</tr>
<tr>
<td>Percent who say they &quot;dislike (Army life)&quot;</td>
<td>5%</td>
<td>3%</td>
<td>13%</td>
<td>14%</td>
</tr>
<tr>
<td></td>
<td>8%</td>
<td>4%</td>
<td>21%</td>
<td>27%</td>
</tr>
</tbody>
</table>

- The Post?
  
  Percent who say they feel "very negative" about the Post
  Percent who say they feel "negative" about the Post

<table>
<thead>
<tr>
<th></th>
<th>330</th>
<th>270</th>
<th>600</th>
<th>450</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent who say they feel &quot;very negative&quot; about the Post</td>
<td>16%</td>
<td>2%</td>
<td>23%</td>
<td>35%</td>
</tr>
<tr>
<td>Percent who say they feel &quot;negative&quot; about the Post</td>
<td>34%</td>
<td>4%</td>
<td>21%</td>
<td>23%</td>
</tr>
<tr>
<td></td>
<td>50%</td>
<td>8%</td>
<td>44%</td>
<td>58%</td>
</tr>
</tbody>
</table>

- Officers?
  
  Percent of soldiers who say that half or fewer officers in the unit "really know their stuff"
  Percent of soldiers who disagree that "officers in my unit care about what happens to the individual soldier"

<table>
<thead>
<tr>
<th></th>
<th>330</th>
<th>270</th>
<th>600</th>
<th>450</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of soldiers who say that half or fewer officers in the unit &quot;really know their stuff&quot;</td>
<td>20%</td>
<td>--</td>
<td>47%</td>
<td>53%</td>
</tr>
<tr>
<td>Percent of soldiers who disagree that &quot;officers in my unit care about what happens to the individual soldier&quot;</td>
<td>9%</td>
<td>--</td>
<td>24%</td>
<td>31%</td>
</tr>
<tr>
<td>Approximate Number of Respondents</td>
<td>COHORT UNITS, END OF ADVANCED INDIVIDUAL TRAINING</td>
<td>COHORT UNITS, END OF ONE STATION UNIT TRAINING</td>
<td>COHORT UNITS, END OF COLLECTIVE TRAINING</td>
<td>BASELINE UNITS, END OF COLLECTIVE TRAINING</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>-------------------------------------------------</td>
<td>-----------------------------------------------</td>
<td>-------------------------------------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td>- NCOs?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent of soldiers who say that half or fewer of NCOs in the unit &quot;really know their stuff&quot;</td>
<td>12%</td>
<td>--</td>
<td>41%</td>
<td>56%</td>
</tr>
<tr>
<td>Percent of soldiers who say that NCOs seldom &quot;look out for the welfare of the soldiers in (the) unit&quot;</td>
<td>6%</td>
<td>--</td>
<td>23%</td>
<td>31%</td>
</tr>
<tr>
<td>- Fellow Soldiers?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent who say they &quot;like (the people they work with) a lot&quot;</td>
<td>34%</td>
<td>28%</td>
<td>20%</td>
<td>17%</td>
</tr>
<tr>
<td>Percent who say that the people they work with &quot;are OK&quot;</td>
<td>57%</td>
<td>61%</td>
<td>65%</td>
<td>68%</td>
</tr>
<tr>
<td></td>
<td>91%</td>
<td>89%</td>
<td>85%</td>
<td>85%</td>
</tr>
<tr>
<td>- Themselves?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent who say &quot;I am usually in low spirits&quot;</td>
<td>9%</td>
<td>6%</td>
<td>20%</td>
<td>16%</td>
</tr>
<tr>
<td>Percent who say they have &quot;adjusted to Army life very poorly&quot;</td>
<td>2%</td>
<td>1%</td>
<td>6%</td>
<td>4%</td>
</tr>
<tr>
<td>Percent who say they have &quot;adjusted to Army life poorly&quot;</td>
<td>6%</td>
<td>2%</td>
<td>12%</td>
<td>6%</td>
</tr>
</tbody>
</table>
## WHY REJECTION?

<table>
<thead>
<tr>
<th>Approximate Number of Respondents</th>
<th>COHORT UNITS, END OF ADVANCED INDIVIDUAL TRAINING</th>
<th>COHORT UNITS, END OF ONE STATION UNIT TRAINING</th>
<th>COHORT UNITS, END OF COLLECTIVE TRAINING</th>
<th>BASELINE UNITS, END OF COLLECTIVE TRAINING</th>
</tr>
</thead>
<tbody>
<tr>
<td>330</td>
<td>270</td>
<td>600</td>
<td>450</td>
<td></td>
</tr>
</tbody>
</table>

### Military Discipline?

- Percent who say that "military control and discipline in (the unit) is too strict at the present time"
  - 27% 21% 41% 41%

- Percent who say that the unit has "very many (or many) 'Mickey Mouse' (silly) rules"
  - 14% 12% 43% 50%

- Percent who say that "soldiers in (the unit) are harassed much (or very much)"
  - 9% 14% 24% 33%

Possible Insight Question: "Strict Army discipline has a good influence on most young men:"

- Strongly disagree
  - 6% 2% 14% 13%
- Moderately disagree
  - 3% 2% 8% 9%
- Disagree mildly
  - 8% 4% 9% 14%
- Agree mildly
  - 18% 13% 23% 23%
- Moderately agree
  - 26% 23% 23% 20%
- Strongly agree
  - 41% 56% 23% 21%

### Lax enforcement of standards/norms?

- Percent who agree that "there is a lot of pressure in my unit for a guy to 'shape up or ship out'"
  - 62% 76% 49% 54%

- Percent who agree that "my NCO didn't cut anyone any 'slack' unless there was a very good reason"
  - 63% 66% 41% 45%

### Collective Training?

- Percent who say that training was tough or very tough
  - 55% 79% 44% 25%

- Percent who say that training was easy or very easy
  - 18% 8% 29% 35%
- Social-Psychological Processes?

<table>
<thead>
<tr>
<th>Interrelated Analysis Questions: Soldier Subgroups?</th>
<th>Mismatch Between IET and Collective Training?</th>
<th>A Developmental Stage?</th>
</tr>
</thead>
</table>

### Alienation (based on disillusionment)?

- Percent who say that their opinion of the Army has gotten much worse since enlisting:
  - Cohort Units: 3%
  - Cohort Units, End of One Station Unit Training: 1%
  - Cohort Units, End of Collective Training: 13%
  - Baseline Units, End of Collective Training: 17%

- Percent who say that their opinion of the Army has gotten worse since enlisting:
  - Cohort Units: 13%
  - Cohort Units, End of One Station Unit Training: 7%
  - Cohort Units, End of Collective Training: 27%
  - Baseline Units, End of Collective Training: 37%

### Alienation (based on return to pre-existing level)?

- Possible Insight Question: "It is the duty of each person to do his job the very best he can."
  - Strongly agree: 81%
  - Moderately agree: 11%
  - Agree mildly: 6%
  - Disagree mildly, moderately, or strongly: 3%

- Possible Insight Question: "When you are off post and not in uniform, would you say you think of yourself as a soldier?"
  - "Like any worker": 12%
  - "Undecided, not sure": 22%
  - "As a soldier": 65%

- Percent who say that it is very important personally to feel that "you are a good soldier":
  - Cohort Units: 74%
  - Cohort Units, End of One Station Unit Training: 80%
  - Cohort Units, End of Collective Training: 54%
  - Baseline Units, End of Collective Training: 33%

- Percent who say that it is fairly important personally to feel that "you are a good soldier":
  - Cohort Units: 15%
  - Cohort Units, End of One Station Unit Training: 11%
  - Cohort Units, End of Collective Training: 30%
  - Baseline Units, End of Collective Training: 48%

- Percent who agree that "being thought of as a 'good soldier' by NCOs and officers is important to me":
  - Cohort Units: 95%
  - Cohort Units, End of One Station Unit Training: 97%
  - Cohort Units, End of Collective Training: 89%
  - Baseline Units, End of Collective Training: 85%
- Specific Complaints?

**Examples:**

- Availability of Army Schools
- Promotions
- COHORT Corporal Program
- MOS Stabilization
- Misrepresentations
- Educational Opportunities
- Weekend Requirements
- Treatment As Kids
## Questionnaire Items Related to Combat Potential at End of Collective Training

<table>
<thead>
<tr>
<th>Approximate Number of Respondents</th>
<th>Cohort Units, End of Advanced Individual Training</th>
<th>Cohort Units, End of One Station Unit Training</th>
<th>Cohort Units, End of Collective Training</th>
<th>Baseline Units, End of Collective Training</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>330</td>
<td>270</td>
<td>600</td>
<td>450</td>
</tr>
</tbody>
</table>

### Unit Effectiveness

"What is your opinion of the overall effectiveness" of your unit?"

- Percent who say "not effective" 4%  --  5%  11%
- Percent who say "slightly effective" 5%  --  10%  17%
- Percent who say "average effective" 18%  --  41%  43%
- Percent who say "very effective" 46%  --  34%  24%
- Percent who say "extremely effective" 28%  --  10%  5%

### Combat Readiness

"If my unit were to go into combat today, it would do a good job."

- Strongly disagree 6%  --  8%  9%
- Disagree 9%  --  11%  15%
- Not sure 21%  --  35%  42%
- Agree 29%  --  32%  21%
- Strongly agree 37%  --  14%  13%

### Potential for Cohesion in Combat

#### Personal Integration

Percent who agree that "a strong Army is necessary for the security of the United States" 97%  96%  92%  91%

#### Horizontal Integration

Percent who say that soldiers in the unit work well (or very well) together 76%  68%  58%  51%

Percent who say that they do their work well (or very well) 85%  74%  65%  60%

Percent who say that most soldiers in the unit are "good soldiers" (16% say very few or none are) 75%  74%  49%  50%
<table>
<thead>
<tr>
<th>Possible Insight Question:</th>
<th>&quot;I don't trust the other guys in my unit.&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>15%            17%   26%         30%</td>
</tr>
<tr>
<td>Say &quot;not really sure&quot;</td>
<td>48%            52%   53%         51%</td>
</tr>
<tr>
<td>Disagree</td>
<td>36%            31%   21%         18%</td>
</tr>
</tbody>
</table>

**Vertical Integration**

| Percent who agree that "my NCO (Squad Leader, Tank Commander, Section Chief) encouraged guys to work together as a team" | 94% | 97% | 75% | 60% |
| Percent who agree that "my NCO really understood the guys in the unit" | 65% | 74% | 40% | 30% |
| Percent who agree that "my NCO kept himself informed about what was going on in my unit" | 75% | 84% | 56% | 48% |
| Percent who agree that "my NCO is such a good soldier, he could show us how to best perform our tasks" | 69% | 69% | 56% | 42% |
| Percent who agree that "my NCO made me feel like a 'winner' when I did something well" | 57% | 59% | 35% | 30% |
| Percent who agree that "overall, my NCO did a very good job" | 75% | 78% | 53% | 45% |
| Percent who say that "when I asked my NCO for help solving a problem, he helped out" most or all of the time | 66% | 76% | 46% | 45% |
| Percent who say that "when I asked my NCO for help solving a problem, he helped out" not very often or never | 10% | -- | 20% | 22% |
| Percent who say that "when I went to my NCO for help, he listened well and cared about what I said" most of the time or always | 73% | 74% | 52% | 38% |
| Percent who say that "when I went to my NCO for help, he listened well and cared about what I said" not very often or "never" | 10% | 9% | 17% | 29% |
APPENDIX B

COMBAT READINESS IN DEVELOPING UNITS
Historically, the Army has devoted considerable attention and effort to the assessment and monitoring of its potential combat effectiveness. Since the Army does not engage in actual combat on a frequent basis, it is not possible to devise or operationalize a truly systematic peacetime measurement of actual combat effectiveness. Yet, the overall mission of the Army (i.e., to be prepared to engage in combat effectively on very short notice) dictates that the Army must use a combat effectiveness measurement procedure which is predictive of potential combat effectiveness. We will refer to this set of procedures as combat readiness measures. In other words, the Army must measure its potential combat effectiveness through surrogate rather than true measures of performance. This situation is somewhat unusual, though not unique. Most other formal organizations can assess their actual performance in relatively straightforward ways on a systematic basis (e.g., periodic financial and sales measures, production quantity and quality, user reaction to service delivery, etc.).

In this report, no attempt is made to analyze or otherwise judge the basic necessity of a combat readiness measurement procedure. The requirement for the Army to measure and monitor its combat readiness, in whatever manner, is taken to be manifest. Rather, the purpose here is to examine the Army's current combat effectiveness measurement system from a relatively comprehensive behavioral science perspective in order to deduce whether and how it might be enhanced as a predictive measurement system. Although on the surface this purpose may appear to be quite broad, it is recognized that the overall issue of combat readiness measurement is complex and possibly not amenable to a ready, simple solution.

One of the factors which makes renewed interest in combat readiness measurement appropriate at this time is the Army's move toward the New Manning System. From a theoretical perspective, a reorganization of the magnitude which will be generated by the NMS necessarily calls into question the adequacy of any measurement system designed for the preceding organizational arrangement. From a more immediate and practical standpoint, the Army is committed to evaluating the impact of the NMS, and one of the principal features of this evaluation is how the NMS impacts on unit and combat readiness/effectiveness.

The remainder of this section contains the following subsections.

- Review of the Army's current system of effectiveness measurement
- Behavioral science perspectives on the measurement of
organizational effectiveness

. Initial model of an enhanced combat effectiveness measurement system.

A. Review of Current Army Effectiveness Measurement

The Army uses numerous and diverse measures of effectiveness. Since the ultimate purpose of the Army is the effective execution of combat, the presumption underlying virtually all of the Army's effectiveness measures is that they are related to combat performance in some fashion. In the case of combat support and combat service support units, and certainly in the case of TDA organizations, this presumption becomes less tenable both conceptually and empirically. This is entirely understandable in recognition of the organizational role and mission of these types of units and organizations. However, in line combat units which are the focus of this report, the presumption that various effectiveness measures are related to combat performance is quite explicit in most instances and at least implicit in other instances. It is beyond the scope of this report to review every single measure or indicator which the Army uses, so the review presented here will be directed primarily to effectiveness measurement considerations in combat units, although much of the review applies also to combat support and combat service support units.

The principal measurement system in line units is the Unit Status Report (AR 220-1, Unit Status Reporting, 1 June 1981). The current Unit Status Report is a derivative of various previous unit measurement procedures, and the current version includes measures of three major dimensions. These are:

. Personnel
. Equipment
. Training.

The Personnel and Equipment dimensions involve several component measures, while the Training dimension is a single measure. Specifically, the Personnel dimension includes a strength component (i.e., the percentage of authorized positions actually filled), and a job qualifications component (i.e., the percentage of position incumbents actually trained and qualified for the positions which are filled). The Equipment dimension includes an availability component (i.e., percentage of authorized equipment available to the unit), and an operational status dimension (i.e., percentage of available equipment which is actually operating). The Training dimension is based on the unit commander's estimate of the number of weeks of training required for the unit to reach top combat form. Various standards are applied to each of these components and dimensions in order to arrive at a summary measure of unit effectiveness.
In practice, the lowest scoring component or dimension is determinative of the unit's overall score. Each of the three components or dimensions is treated as equally important. The unit's overall readiness score is defined by the category score in which it rated lowest.

The Unit Status Report has been reviewed thoroughly and criticized extensively. Among the major criticisms leveled at the Unit Status Reporting System are that it omits critical factors which influence combat effectiveness (e.g., leadership, turbulence), it includes a number of irrelevant factors, it rates a number of factors as equally important when they have, in fact, quite varied individual and interactive effects (Sorley, 1980:76), and the information provided by units is often inaccurate. Indeed, with regard to this latter point, in a survey of 1648 officers and NCOs conducted by the Army War College (1976), 70 percent said that Unit Readiness Reports (the name was changed to Unit Status Reports in 1981) do not reflect the true readiness of units. The major reason for the failure of these reports according to the sample is that unit commanders inflate scores on the reports because the commanders feel that the scores reflect on their own career advancement.

While the Unit Status Report is the Army's primary indicator of unit readiness, the Army directs the compilation and assessment of many other measures by which effectiveness is gauged for different purposes. For instance, there is the Annual General Inspection (AGI) which is required for every Army unit and which includes an array of quantitative as well as qualitative (though nonetheless empirical) indices. There also is a wide array of measures which are conventionally referred to as command indicators. For example, included in the category of command indicators are:

- Expeditious discharges
- Adverse discharges
- Article 15s
- Courts Martial
- AWOLs
- Desertions
- First-term reenlistments
- Career reenlistments
- Violent crimes
- Property crimes
- Letters of indebtedness
Drug arrests

Traffic violations.

For the most part, the command indicators are reflective of discipline and morale. The presumption underlying measurement of the command indicators is that a well-disciplined and high morale unit is better prepared to engage in combat effectively.

Another set of combat effectiveness measures is based on performance during actual field exercises. For instance, the Army Training and Evaluation Program (ARTEP) generally is regarded as a sound indicator of actual unit performance although, it is intended formally to be simply a training evaluation device.

The measurement characteristics and properties of these additional indicators of unit effectiveness are quite dissimilar to the Unit Status Report, and they vary considerably among themselves. Recently, there has been an attempt to evaluate these different indicators. The Army Research Institute's Command Climate study (O'Mara, 1981) asked 48 battalion commanders, 28 brigade commanders, and six general officers to rate the validity of 21 effectiveness measures (at the battalion level). The respondents rated the ARTEP as the most accurate index of effectiveness (although it was judged as far from perfect) followed closely by personal judgments and the AGI. Both Unit Status Reports and command indicators were generally rated as poor indicators of unit effectiveness.

The Command Climate research also examined the interrelationships among various "objective" measures of effectiveness (O'Mara, 1981) including ARTEP, AGI, and Unit Status Report total score. The research found no significant relationship between any of the three indicators. What this means is that each of these three "measures of unit effectiveness" measures something different.

The findings from the Command Climate study, along with those from other studies and comments about the measurement of unit effectiveness, agree on two points. First, the measurement of unit effectiveness and combat readiness is complex. In all likelihood, no one measure of effectiveness such as an ARTEP or an AGI is sufficient for determining the combat readiness of a unit. Second, current attempts to measure combat readiness in the Army such as the Unit Status Report are, by most estimates, inaccurate and require reassessment and redevelopment. This should not be taken to mean that these current measures are without merit. Rather, one might assume that the measures provide complementary and even overlapping means of viewing combat readiness. In reexamining the measurement of unit effectiveness and combat readiness, currently employed measures need to be carefully considered and those portions retained which can contribute to a comprehensive and valid measurement system.
B. Behavioral Science Perspectives

The generic issue of effectiveness measurement can be considered from a number of different perspectives which have been well developed in the behavioral sciences. For instance, there is the matter of what purpose the measures are to serve, i.e., what decisions or actions (if any) are to be taken as a consequence of the measures generated? Also, there is the issue of levels of abstraction to which the measures can be applied, i.e., how generalized and inclusive are the measures versus how specific and concrete? Another set of issues centers on methods and procedures of measurement which have a marked effect on the precision of the data actually produced. Other issues can be mentioned, but those already noted are among the principal ones to be addressed, and additional issues often can be shown to be derivative of these.

Furthermore, these various issues are not independent of one another. Typically, it is found that particular choices made about a certain issue markedly constrain the possible choices about another issue. For instance, if the purpose is to determine overall unit performance, simply counting the number of personnel who can complete a particular task correctly is normally an inappropriate procedure. Rather, overall unit performance is a function of numerous elements measured at various levels of detail, and all of these elements need to be taken into account. Therefore, it is important to recognize that the development and operation of an effectiveness measurement system is a complex enterprise which is not necessarily amenable to cookbook solutions.

Behavioral scientists have devoted a great deal of attention and study to the matter of effectiveness measurement. Taken individually, various behavioral science perspectives are relevant to particular issues of effectiveness measurement. Taken together, the findings and insights which have been gained through these efforts provide an invaluable reference framework for examining the Army's effectiveness measurement systems. This section presents several salient behavioral science perspectives.

The behavioral science literature on organizational effectiveness as a distinct area of study stretches over the past several decades. As a construct, organizational effectiveness is a central theme in virtually all fields of organizational research and analysis. The essential importance of measuring organizational effectiveness is unquestioned; however, the means by which it should be measured has been shown to be a matter of considerable debate. Indeed, the literature on organizational effectiveness fairly can be said to be in a state of disarray. Many different measurement propositions have been advanced with relatively minimal effort devoted to integration.

Campbell (1977) presented a seminal review of the organizational effectiveness literature and identified 30 different criteria of effectiveness. These criteria included a number of diverse measures such as profit, productivity, morale, and cohesion
which had been operationalized in a variety of ways by different investigators. Based on this review, Campbell deduced two general models of organizational effectiveness criteria: the goal model and the open system model. In essence, the goal model includes measures for which objectives can be established and quantified thus permitting determinations to be made of whether objectives have been satisfied. The open system model includes measures which are essentially descriptive (versus the prescriptive nature of the goal model) of the manner with which the organization interacts with its environment. Until recently, this dichotomization of effectiveness measurement models has prevailed with various authors attempting to fit their work to these models (occasionally with conceptual or operational difficulty).

Recent research has attempted to draw some order out of this confusing state of affairs (Quinn and Rohrbaugh, 1981). Rather than use the more conventional approach of analyzing actual organizations or the results derived from primary research efforts, this effort was based on the responses of recognized organizational theorists and authorities.

The major rationale for conducting the study in this way was to use an unbounded approach which would reflect the best possible expert overview of the organizational effectiveness area since it is widely agreed that there is a need to clarify the situation by eliminating overlapping concepts in order to identify the core variables. In order to evaluate an organization in any fashion, it is necessary to select an appropriate set of measures. Typically, this process includes either the imposition of measures by the external evaluator or the identification of measures based on the inputs of organizational members. Regardless of the approach taken to identify the measures of effectiveness, "the selected criteria usually reflect an unarticulated but fundamental set of underlying personal values about the appropriate emphasis in the domain of effectiveness" (Quinn and Rohrbaugh, 1981).

The initial list of criteria measures used by Quinn and Rohrbaugh were the 30 measures originally listed by Campbell. The first step was to eliminate obviously inappropriate or redundant measures. Then, the organizational experts made judgments among every possible pair of measures as to their conceptual similarity. The results of multidimensional scaling analyses showed three principal dimensions underlying these similarity judgments. Figure 1 presents the resulting structure. The structure in Figure 1 demonstrates that organizational experts share an implicit structural framework which sorts effectiveness criteria in terms of three competing values. One value dimension relates to organizational focus from an emphasis on development of people to development of the organization as a whole. The second dimension relates to organizational structure from an emphasis on control to an emphasis on flexibility. The third dimension relates to organizational means and ends from an emphasis on processes to an emphasis on outcomes. The various criteria measures which formed the basis of the study are reflective to a greater or lesser extent
Figure 1. STRUCTURAL FRAMEWORK OF ORGANIZATIONAL EFFECTIVENESS CRITERIA
of each of these three competing values dimensions.

Based on this analysis, Quinn and Rohrbaugh proposed a four model structure for organizational effectiveness analysis. The four models are:

- Open system model
- Rational goal model
- Internal process model
- Human relations model.

Figure 2 portrays these four models in terms of the three competing values dimensions. The outer layer of the circle in Figure 2 contains the four effectiveness models. The middle layer of the circle contains the organizational means for the respective models, and the inner layer contains the organizational ends. This presentation depicts the major dilemmas confronting organizational analysts of all types. In other words, all organizations face a dilemma between assuring order and control versus the pursuit of innovation and growth. Likewise, organizations almost invariably seek to achieve a reasonable balance between the interests of individuals versus the interests of the organization as a whole. And finally, organizations often confront the dilemma of balancing or integrating organizational ends with organizational means.

Having identified this four model structure of organizational effectiveness measurement, it must be noted that there is no particular utility to the emphasis of one model versus any other model. Indeed, it can be presumed that organizations ideally strive to achieve some optimum balance among all competing values and/or models.

Another behavioral science perspective of particular relevance to the Army is that of organizational life cycle. Organizational life cycle stages as described in this Appendix are to be distinguished from the life cycle stages noted in the first section of this report (those which relate to group life cycle development), although both life cycle perspectives are conceptually similar. A basic premise of organizational life cycle theory is that organizations are not static entities existing in an unchanging environment. Rather, it is proposed that organizations of all types progress through a relatively systematic series of life cycle stages. In a previous report (A Study of Systems Tools for Army Personnel Management: Task One Report, Draft) a four stage organizational life cycle model was proposed for the prototypical case of Army units within the framework of the New Manning System. These four stages include:

1. Identification: This stage begins with the formation of the unit and includes an early emphasis on marshalling resources and instilling a sense of ideology and mission.
In this stage, the individual identifies with the group and the unit, and the informal communication structures and sense of group collectivity develop.

2. **Stabilization:** This stage is characterized by increased institutionalization of procedures, emphasis on task efficiency and pattern maintenance, and formalization of administrative activities.

3. **Elaboration:** This stage is marked by an increased emphasis on adaptability, management by exception, fully integrated team action, and self discipline.

4. **Transformation:** This is a relatively brief stage characterized by an awareness that major change is forthcoming, a restriction in the planning horizon, and the beginning of decline in individual commitment and group collectivity.

In the preliminary report of organizational life cycle stages applied to the Army situation, various propositions were advanced regarding matters of effectiveness measurement. For instance, it was proposed that training proficiency is at a relatively low level in early life cycle stages and increases in later life cycle stages. Although no empirical evidence has yet been generated regarding these propositions in the Army, the underlying conceptual and theoretical premises are sound and extensive. The most important consideration in the current context is that organizational life cycle theory strongly suggests that different measures of effectiveness are appropriate at different stages of an organization's development. In other words, though it may be reasonable to measure the same indicators in all stages, it is nevertheless unreasonable to suppose that each indicator should reflect uniformly high readings in all cases. Likewise, it is important to recognize that different measures of effectiveness might receive increased emphasis and attention in different life cycle stages.

In summary, this brief review of various behavioral science perspectives has shown that:

- Contemporary organizational effectiveness thinking suggests a four model approach based on three underlying dimensions of competing values.
- Organizational life cycle stages have a marked effect on the appropriateness and expected level of various effectiveness measures.

C. **A Proposed Approach**

The evidence reviewed in the previous two sections has shown that the Army's current effectiveness measurement procedures are subject to criticism on a number of grounds, and that although there
FOUR EFFECTIVENESS MODELS

FLEXIBILITY

HUMAN RESOURCES MODEL
COHESION--MORALE
VALUE AND DEVELOPMENT OF HUMAN RESOURCES
STABILITY--EQUILIBRIUM
INTERNAL PROCESS MODEL

OPEN SYSTEMS MODEL
FLEXIBILITY--READINESS
GROWTH--RESOURCE ACQUISITION--EXTERNAL SUPPORT
PRODUCTIVITY--EFFICIENCY
PLANNING GOAL SETTING--EVALUATION
RATIONAL GOAL MODEL

PEOPLE

CONTROL

ORGANIZATION
is some disarray in the measurement prescriptions offered by the behavioral sciences there do appear to be selected perspectives that would be of utility to the Army. In advancing any proposed revisions to the Army's effectiveness measurement procedures, there are several criteria which should be applied to the construction of such a revised approach. At a minimum, these criteria include:

1. Combat readiness must be established as the ultimate outcome. This criterion is based on the simple fact that the ultimate purpose of the Army is to engage combat effectively.

2. A revised approach should expand upon and/or elaborate the factors currently measured so as to include additional indicators which influence the ultimate outcome of combat effectiveness. Given the complexity of the overall phenomenon of combat effectiveness, achievement of this criterion almost certainly will require additional investigation and analysis.

3. The revised procedures must be designed to account more completely for the dynamic nature of effectiveness (e.g., varying models and emphases through various life cycle stages). In essence, this criterion can be achieved (or at least approached) by relinquishing a static, snapshot procedure as is now employed and moving toward some form of continuous monitoring with periodic summarization of effectiveness data and information.

4. Even with the increased comprehensiveness and conceptual complexity in effectiveness measurement as suggested here, the procedure itself must be made as practical as possible. Practicality in this sense means ease of use and administration in an operational setting by those who are responsible for conducting the measurement.

5. Mechanisms must be identified and established which eliminate the harmful influences of the chain of command. This is not to say that the chain of command (e.g., the commander) does not have a highly responsible role to fill in effectiveness measurement procedures. Rather the point here is to supplement the commander's role with additional and appropriate perspectives in order to assure a more accurate assessment of effectiveness. (It can be noted that in a related vein, the Army's Officer Efficiency Reporting system in the past has been criticized on many of the same grounds as the Unit Status Reporting system, and revised procedures have by all accounts ameliorated some of the problems underlying these criticisms.)

6. To the extent possible, a revised measurement procedure must be designed to provide clear indications of areas in need of attention and/or even the possible corrective actions to be taken as a consequence of the measured
assessment. This criterion is related to the basic issue of the purposes to be achieved by the measurement procedure itself. Although various purposes can be achieved by a measurement system, it is presumed that the Army's purpose is to monitor its readiness for combat. The most immediate and reasonable correlative to this purpose is to enable the identification of remedial actions which can improve combat readiness.

As noted above, a good deal of investigation and analysis is required prior to the actual formulation of a revised effectiveness measurement procedure. Thus, the first step in accomplishing the revision would be to identify the actual measures to be employed. A sound approach for accomplishing this objective can be modeled after the design used by Quinn and Rohrbaugh, i.e., placing reliance upon the judgments of experts. In general, this step would begin with the creation of a comprehensive list of candidate measures selected from among those already employed by the Army as well as additional measures which have been proposed by various authors. At this point in the process it is not critical that each candidate measure share similar measurement and abstraction properties since the purpose is to assure comprehensiveness. Next, a small panel of qualified experts (e.g., five to ten people) would convene to review the initial list of measures for the purpose of eliminating obviously redundant measures. The result of this process would be a reduced list of candidate effectiveness measures.

The next step would be to convene a larger panel of experts (e.g., thirty to fifty people) whose task would be to judge the relative similarity among every possible pair of measures. The second panel of experts would be constructed from among appropriately qualified Army officers as well as selected researchers and analysts. The judgments made by the second panel of experts then would be analyzed to determine the underlying structure of Army effectiveness measurement. In fact, the results of this analysis should be compared directly to the four model structure identified by Quinn and Rohrbaugh. If the two structures were similar, greater credence could be placed in the results since they would be conceptually analogous to a wealth of previous evidence drawn from many different situations. If the two structures were dissimilar, further investigation might be warranted.

In any case, the next step would be to operationalize the various effectiveness measures in terms of concrete measurement procedures. In some cases the measures may already reflect an optimal measurement procedure. In other cases, determinations would need to be made about what to observe, how to quantify, frequency of measurement, and the like.

After designing the operational measures, the next step would be to develop the overall measurement system itself. The approach proposed here draws upon scientific advances in judgmental assessment technology as embodied in use of assessment centers for personnel selection. Assessment centers have demonstrated that
assessors possessing first-hand experience with requirements for criterion performance can accurately predict future performance effectiveness. For example, Moses and Byham (1977) have shown that third-level supervisors (the assessors) who are familiar with the performance requirements of second-level supervisors can make accurate predictions of the eventual performance of first-level supervisors (the assesseees) who are candidates for promotion. In reviewing the assessment center methodology, Holmes (1977) stated that:

Over the decades, improvements in assessment techniques and procedures have been developed which correspond optimally with what assessors are capable of doing most and least effectively (p. 142)... Assessment center assessments are powerful because they are based upon concrete, undeniable facts about an individual and make excellent use of the experience, wisdom, and information-processing capabilities of managers. The assessment center technique represents a compatible marriage among the skills of human observers and decision makers, the recognition capabilities of humans, and a structured set of procedures which appropriately separate and order nonevaluative observations, creation of meanings, and judgmental decision making (p. 139).

For a judgmental assessment process to work effectively, it is essential that the assessment activities (data assimilation, data interpretation, prediction) of qualified judges be tightly constrained and sequenced with sound principles derived from knowledge about human information-processing capabilities. Assuming that military experts with combat experience know what will be required in future combat environments, the assessment technology exists to provide them with information enabling them to recognize the relative combat potential of Army units and elements.

The next step would be to select a sample of New Manning System units to serve as the validation sample for the proposed approach. This proposed approach would include a variety of measures which would be collected periodically and continuously by the unit.

It then would be necessary to establish a panel of assessors in an operational setting. Most conveniently these assessors could be drawn from the ranks of co-located units. A modest number of assessors would likely be required (i.e., on the order of 3 to 5 individuals). During this developmental/validation stage it would probably be sufficient for the assessment panel to convene bi-monthly. The task of the assessors would be to review the data and information collected within the unit. Each assessor would review the complete set of data and information independently in order to construct their individual ratings and perceptions of the unit, followed by an assimilation of these individual ratings among all assessors. This assimilation step provides the opportunity for clarifying differences among the assessors to arrive at an overall rating of effectiveness. It must be noted that all of these assessment judgments would be made with reference to a standardized combat scenario.
These various measures would be collected, analyzed, and assessed at continuing periodic intervals in a similar manner to the way in which the Army collects and analyzes its conventional indicators. This being the case, these measures can be examined in relation to the organizational life cycle stages noted above. The general hypothesis is that the various measures will change over time (i.e. increase/decrease) as a function of the unit's development through the four organizational life cycle stages (Identification, Stabilization, Elaboration and Transformation). More definite hypotheses could be formulated after the measures are operationalized. It can be seen, however, that investigating the differential relationships between the effectiveness measures and the organizational life cycle stages can serve to add meaning to each of these factors. This type of analysis would be directed at the construct validity of both dimensions.

A second analysis strategy would be to relate the results of the revised effectiveness measures to the performance measures which will be collected at the National Training Center. With little doubt, the National Training Center will provide the best approximation to actual combat performance for the units which go there. As noted previously, the ultimate outcome is combat performance, and the measurement procedures suggested above are designed to identify the indicators which are predictive of that ultimate outcome. Thus, the availability of National Training Center results presents an excellent opportunity to determine the predictive validity of the revised effectiveness measurement procedures.

In summary, this appendix has reviewed relevant studies and analyses of the Army's current procedures for measuring effectiveness, and the evidence clearly indicates that there is room for improvement. Also, several pertinent behavioral science perspectives were reviewed briefly, regarding the overall matter of organizational effectiveness. In particular, a four-part model of organizational effectiveness was presented which is a function of selected competing values. This four-part model includes the following components:

- Open system model
- Rational goal model
- Internal process model
- Human relations model.

In addition, a model of organizational life cycle stages was reviewed which comprises the following stages:

- Identification
- Stabilization
Based on these related lines of conceptual development, as well as drawing upon the well-documented assessment center methodology, a series of suggestions was presented for a revised unit effectiveness measurement procedure. Given the Army's move to the New Manning System, all of these matters are critical operational measurements, which when perceived to be linked to performance evaluation, tend to drive individual behavior and organization outcomes. To be most useful as an overall evaluation device and reinforcer of performance, measurements must be linked with:

- Clear, desired, individual and organizational outcomes, i.e. combat readiness.
- A consistent model of unit development which changes over time, results in improved performance in combat readiness, and begins, with the constitution of the unit, (i.e. NMS company) and ends with the unit's re-constitution.
BIBLIOGRAPHY

Army Cohesion and Stability Study (ARCOST), 1980.


Holmes, D. S. Applications of Organizational Psychology to Army Problems, in Preparation.


