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Selection For Leadership

Transforming NCO Promotion

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Transforming NCO Promotion

ARI Special Report 52

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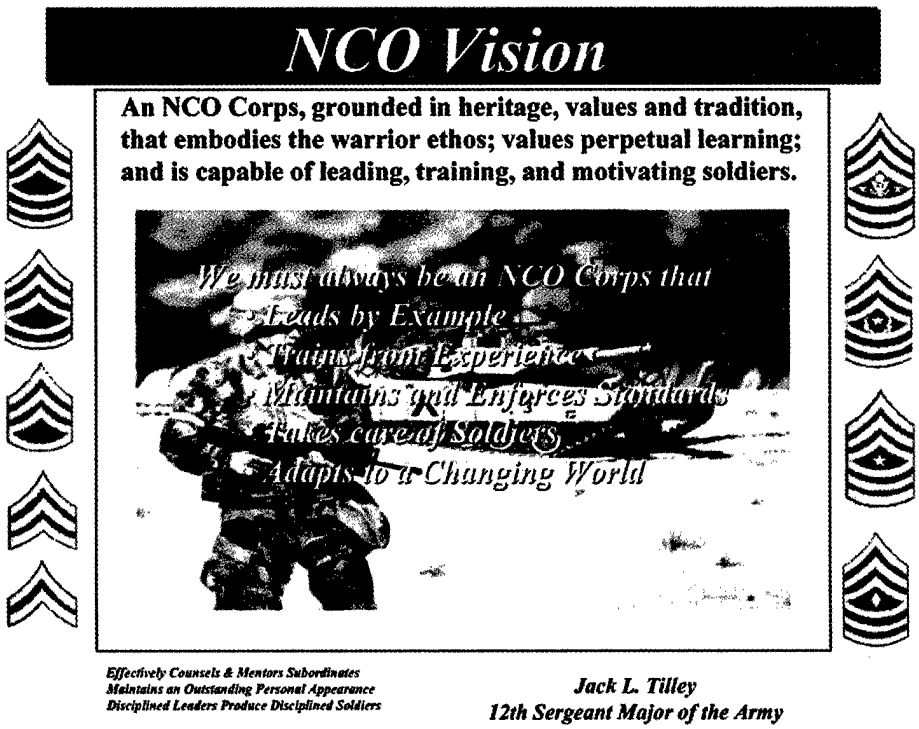
Selection For Leadership
Transforming NCO Promotion

Foreword

The U.S. Army Research Institute for the Behavioral and Social Sciences (ARI) conducts research to support Army personnel and training goals. In recognition of the dramatic changes Objective Force operations will require, ARI has developed a research program to identify, describe, and address future personnel requirements. This report describes one aspect of the program.

The objective of the "Maximizing 21st Century Non-Commissioned Officer Performance" (NCO21) research project was to improve 21st century NCO performance by providing the capability to identify and promote highly qualified soldiers with exceptional leadership potential. The project developed, validated, and evaluated future-oriented job performance predictor and performance measures. The project was conducted with support from the Army Deputy Chief of Staff for Personnel (the Army G-1) and the Army Training and Doctrine Command (TRADOC). The findings have been briefed to the U.S. Army Total Personnel Command, TRADOC, and the Army G-1. This report provides a description of the research effort and discusses how the research findings could provide a resource for improving the junior NCO promotion system.

Zita M. Simutis
Acting Director



Acknowledgements

This report represents an effort of over 4 years duration that had many, many contributors. Only a few are acknowledged here. From the Army G-1, Sergeant Major Gerald Purcell provided personnel expertise, wise counsel, encouragement, and support when the project reached its crucial latest phase. From the U.S. Army Research Institute for the Behavioral and Social Sciences, Dr. Michel Rumsey and Dr. Tonia Heffner provided oversight, direction, review, patience, and incomparable professional know-how throughout the project. From HumRRO, Ms. Pam O'Quinn provided the design, layout, and graphics for this report. And foremost are the almost 3,000 specialists and NCOs who, through their participation as examinees, raters, and administrators in the field validation phase, provided the data on which this report is based. It is in their interests that projects such as this are undertaken.

Contents

The System 1

How it Works Now 3

Objective Force Key Leader Characteristics 4

Building and Evaluating New System Components 8

Tools to Measure Job Performance 9

Tools to Predict Performance in the Next Grade 10

Summary of the Findings 14

Other Possible Applications 15

The Future of NCO Selection and Development 16

Your Input Counts 17

The System

It has over 81,000 'members.' It moves 30,000 people from soldier to sergeant each year. It requires the judgment, perception, and decision making skills of the Company Commander and the First Sergeant in a procedure that affects not only individuals' careers but the future welfare of the entire Army. It is at once exciting, challenging, rewarding, complex, and worrisome. "*It*" is the semi-centralized promotion system.

In 1998 the U.S. Army Research Institute for the Behavioral and Social Sciences (ARI) started a research project to identify the characteristics of 21st century Army NCOs, called NCO21. This effort involved a comprehensive analysis of future conditions and job demands to identify the *knowledges*, *skills*, and *attributes* (KSAs) that Objective Force NCOs will need. Over time, this effort became focused on junior NCOs – the movement of specialists/corporals to sergeants and the advancement of sergeants to staff sergeants.

The illustration on page 2 outlines the scope of the NCO21 project. The challenge was to develop tools to measure relevant KSAs along with tools that measure job performance, then to find out if these measures perform as anticipated by administering them to soldiers and analyzing the data. If they do work, they would provide an improved way of selecting junior leaders. A key element to the project is its future orientation – the effort begins to lay a foundation for NCO promotion as the Army adjusts to Objective Force operations, allowing the Army to be proactive in planning for these changes. Transformation to the Objective Force is not served by relying on 20th century promotion recommendation and selection procedures.

The development effort continues. This report is designed to inform and update the user community and others who are involved in the promotion of those at the entry level of the NCO pyramid.

" 'The only lesson of history is that men never learn anything from history,' said George Hegel. In the past several years promotions to sergeant and staff sergeant have risen dramatically, due in part to the Change In NCO Structure. Yet the question arises, 'Are we filling the ranks with unskilled soldiers,' and if so, are we going to pay for it in future conflicts?"

CSM Dan Elder,

The NCO Journal, Winter 2001

NCO21 Project Overview

Define NCO Requirements

Identify Objective Force NCO Knowledges, Skills, and Attributes

- Review past work
- Convene expert panels made up of military experts and psychologists

Identify Objective Force NCO performance requirements

- Review past work
- Interview a wide range of Subject Matter Experts

Create/ Identify Measures

Predictors

Existing

- Self-report Promotion Point Worksheet Administrative Points score (e.g., Awards, Letters of Recognition, Military Education)
- Armed Services Vocational Aptitude Battery (ASVAB)-General Cognitive Aptitude
- Temperament Indicator Scales (e.g., Interpersonal Skills, Work Orientation, Adjustment)

Newly Created

- Experience and Activities Record (ExAct)-Activities that may predict performance at the next grade
- Leadership Judgment Exercise (LeadEx)-Critical job and supervisory situations with suggested courses of action
- Semi-Structured Interview-Interviewer training, questions, and probes for conducting interviews

Job Performance

- Observed Performance Rating Scales *Supervisor ratings on 19 specific performance dimensions, overall NCO effectiveness, and potential effectiveness as a Senior NCO*
- Expected Future Performance Rating Scales *Supervisor ratings on six scenarios describing emerging or plausible future conditions*

Field Validation

Collect Data

Soldiers tested at seven locations
- 449 E4s
- 885 E5s
- 557 E6s

Total = 1,891 Soldiers

Ratings received from 988 supervisors; coverage for over 70% of the participating soldiers

Analyze Data

How well do these measures...

Predict NCO effectiveness as assessed by the supervisor ratings?

How it Works Now

The information that currently factors into semi-centralized promotion decisions is summarized in the box below. Completing Promotion Point Worksheets is currently a significant administrative burden because most of the information and the process of pulling it together are not automated. The Army is moving quickly toward automation, which will make it easier to introduce changes to the system and changes are less likely to present an undue burden to the field.

Overview of the Current Semi-Centralized Promotion Evaluation System

DA Form 3355 (Promotion Point Worksheet):		
Duty Performance Evaluation		150 points
Competence, Military Bearing, Leadership, Training, Responsibility and Accountability		
Promotion Board Appraisal		150 points
Personal Appearance, Bearing, Self-Confidence		
Oral Expression and Conversational Skills		
Knowledge of World Affairs		
Awareness of Military Programs		
Knowledge of Basic Soldiering		
Soldier's Attitude		
Military Training	**Administrative**	100 points
APFT, Weapons Qualification		
Awards, Decorations, Achievements		100 points
Military Education		200 points
Civilian Education		100 points
		800 points

Other:

- Time in service (primary zone): to E5 = 34 months, to E6 = 82 months.
- HS diploma or GED.
- Completed PLDC or BNCOC or conditional promotion pending completion.
- Eligible to reenlist (waiver for AWOL, courts martial, lost time).
- Medically qualified.
- Not flagged, in weight control program, or in alcohol/drug abuse control program.

A minimum of 350 points required for promotion to E5 and 450 points for promotion to E6.
Promotions are made by DA monthly based on vacancies existing in individual MOS.

Why change the promotion system? Didn't it just change? Can't we leave it alone for a while?

The semi-centralized promotion system is *never* static. Change occurs as the overall posture and needs of the Army change. Soldier evaluation becomes more efficient. Job requirements and performance predictors become more defined. In the near future, the entire semi-centralized promotion system will become automated, allowing for the incorporation of different promotion features without additional administrative burden.

But the primary reason is that the Army is changing. The NCO demands and requirements of the Objective Force encompass – and then surpass – the demands of the 1980s and 1990s. Selection of those who lead must reflect these changes.

This does not mean that *all* of the measures and findings outlined in this report will become part of that future promotion system. Some need more work, some are nearer term than others, and all need official approval before they are incorporated. But change to the semi-centralized promotion system is inevitable and we are developing specific ideas for change to consider further.

(In that regard, please note the disclaimer that the contents of this report are not official Army policy.)

Objective Force Key Leader Characteristics

The analysis of Objective Force NCO requirements involved two objectives:

- ✓ Developing a description of forecasted conditions affecting future NCO performance.
- ✓ Providing a descriptive list of the main qualities (i.e., KSAs) needed for effective NCO performance.

Note that the effort targeted general NCO qualities; not MOS-specific requirements. We recognize the criticality of MOS-specific skills, particularly as a prerequisite for promotion, but our purview was to follow the common soldier model currently used. Parts of specific MOS were investigated during the analysis but only if they were typical of future trends that all NCOs would need (e.g., digital operations, changing missions).

The analysis identified six primary characteristics that will affect all Army personnel in the future.

Transition to digital operations and an ever increasing pace of adaptation of technologies. The hallmark of the early Objective Force Army will be the phased introduction of information-age operations based on digital connection and supporting software. All aspects of combat, combat support, and combat service support will be affected. Tactical digital links will be crucial, but increasingly non-tactical applications will likely utilize militarized adaptations of commercial hardware and software. Change will occur rapidly – just keeping up will be a challenge.

Diverse missions and frequent deployments. While no peer opponent is likely to emerge during the first 20 years of the century, the number and complexity of Army operations will increase. Regional conflicts, peacekeeping, peacemaking, humanitarian missions, support to coalition forces, anti-terrorism, and domestic assistance are all likely to occur during the era. Each non-traditional mission will be somewhat unique and there will be little carryover and lessons-learned from preceding missions. Deployments will tend to be smaller in size, for shorter periods of time (as compared with 20th century conflicts), but more frequent.

Diversity of forces and mission-specific organizations. Experimentation, change, innovation, and inconsistency will mark the period. Some units and soldiers will experience the very latest in technology and capability while others will operate similarly to the Army of the mid-1990s. More and more units

will fill niches in equipment, missions, training, and technology and there will be less standardization across the force, even between like units.

Decentralized operations. Technological advances will increase the physical dispersion between elements and between supporting and supported units. Employment of elements will be less hierarchical. Missions will rely on smaller, more autonomous elements. Operations will be driven to lower levels with companies and even platoons becoming the focal point for many operations.

Changes in training structure, requirements, and delivery. Training will be typified by an increasing reliance on technology, less institutional attendance, and an increased dependence on self-development training. Self-development training will become an increasing requirement in career learning, including subjects that were formerly part of unit training curriculums.

Changes in the youth population and recruiting needs. Army active duty non-prior service accession requirements will be around 90,000 annually. Competition for high quality youth (i.e., high school graduates in the upper two-thirds mental category) will stiffen as more choices are available to individuals considered in the prime recruiting market.

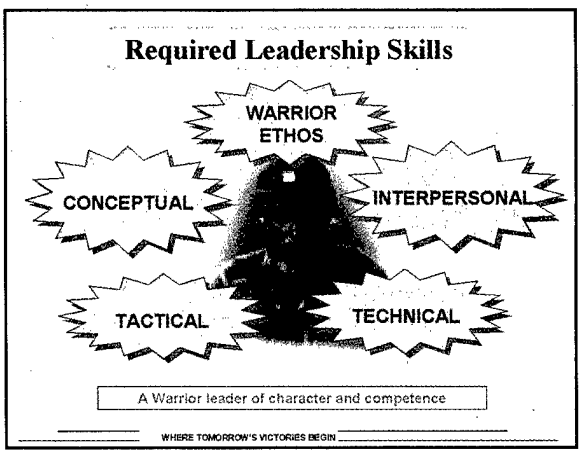
Based on this operational framework, we defined critical soldier requirements (i.e., KSAs). This presented a unique challenge because we were projecting KSAs to *future* requirements that had not, in most cases, been fully experienced. In the end, the KSAs are a combination of existing, well-established requirements along with some newly formed ones. All were redefined to reflect the Army Objective Force characteristics.

The 38 KSAs in the list that starts on page 6 were identified and defined. These KSAs are consistent with, and supportive of, the doctrine of what leaders must be, know, and do as presented in FM 22-100, *Army Leadership*. Although not designed to fit exactly in the FM 22-100 framework, the NCO21 KSAs can be roughly sorted into the required leadership skills (see chart to the right). For example, Conceptual Skills include Adaptability and General Cognitive Aptitude. Under Interpersonal Skills would be the KSAs of Concern for Soldier Quality of Life and Team Leadership.

Both current and future NCO requirements can be sorted in different ways, called by different names, and identified at different levels of detail. The key is being clear on what is expected and building NCO selection, training, development, and reward systems around those expectations.

"As the Army transforms to the Objective Force we must adjust our personnel system in anticipation of future demands. Our focus will always be on the development and identification of a professional NCO corps that will meet the full spectrum of emerging challenges. When the promotion system changes, it will change because we have discovered proven ways to make it better and more predictive of leadership performance."

SGM Gerald Purcell, Directorate of Military Personnel Policy, Army G-1



Starred (★) KSAs were judged by subject matter expert panels as most important for promotion to E5 and/ or E6.

NCO21 Knowledges, Skills, and Attributes (KSAs)

★ **Adaptability.** Can modify behavior or plans as necessary to reach goals or to adapt to changing goals. Is able to maintain effectiveness when environments, tasks, responsibilities, or personnel change. Easily commits to learning new things when the technology, mission, or situation requires it.

★ **Common Task Knowledge and Skill.** Possesses the necessary knowledge and skill to perform common tasks at the appropriate skill level (e.g., land navigation, field survival techniques, and NBC protection).

★ **Conscientiousness and Dependability.** Is trustworthy, reliable, planful, and accountable. Respects the chain of command and the value of discipline. Does not try to avoid responsibility.

★ **Directing, Monitoring, and Supervising Work.** Works with subordinates one-on-one to assign tasks and set individual goals for work and assignments. Ensures that assignments are clearly understood. Monitors individual subordinate performance and gives appropriate feedback.

★ **Effort and Initiative.** Demonstrates high effort in completing work. Takes independent action when necessary. Seeks out and willingly accepts responsibility and additional challenging assignments. Persists in carrying out difficult assignments and responsibilities.

★ **General Cognitive Aptitude.** Has the overall capacity to understand and interpret information that is being presented, the ability to identify problems and reason abstractly, and the capability to learn new things quickly and efficiently.

★ **Integrity and Discipline.** Maintains high ethical standards. Does not succumb to pressure to commit prohibited, harmful, or questionable acts. Demonstrates trustworthiness and exercises effective self-control. Understands and accepts the basic values of the Army and acts accordingly.

★ **MOS/Occupation-Specific Knowledge and Skill.** Possesses the necessary technical knowledge and skill to perform MOS/occupation-specific technical tasks at the appropriate skill level. Stays informed of the latest developments in one's particular field.

★ **Motivating, Leading, and Supporting Subordinates.** Recognizes, encourages, and rewards effective performance of individual subordinates. Corrects unacceptable conduct. Communicates reasons for actions and listens effectively to subordinates one-on-one. Fosters loyalty and commitment.

★ **Need for Achievement.** Has a general but not misplaced confidence in own abilities. Seeks and enjoys positions of leadership and influence. Is typically enthusiastic and energetic. Sets high standards and strives for accomplishment and recognition in almost any situation.

★ **Oral Communication Skill.** Speaks in a clear, organized, and logical manner. Communicates detailed information, instructions, or questions in an efficient and understandable way. Note that this skill refers to how well the individual can speak and communicate, not whether technical expertise is high or low.

★ **Physical Fitness.** Meets Army standards for weight, physical fitness, and strength. Maintains health and fitness to meet deployablity and field requirements as well as the physical demands of the daily job.

★ **Problem Solving and Decision Making Skill.** Reacts to new problem situations by applying previous experience and previous education and training appropriately and effectively. Does not apply rules or strategies blindly. Assesses costs and benefits of alternative solutions and makes timely decisions even with incomplete information.

★ **Relating to and Supporting Peers.** Treats others in the NCO corps in a courteous, diplomatic, and tactful manner. Provides help and assistance to other NCOs. Backs up and fills in for others when needed. Works effectively as a team member.

★ **Team Leadership.** Communicates team goals and organizes and rewards effective teamwork. Leads the team to adapt quickly when missions change and keeps the team focused on new goals. Resolves conflicts among team members. Shares relevant information with team members.

Sponsored by...

This work was directed, and is being monitored by, the Directorate of Military Personnel Policy (DMPP), Army G-1. The Army G-1 is the Army's Human Resource provider, responsible for programs, policies, and systems that shape and enable the manning and well-being of the force. It is responsible for enhancing the readiness and institutional strength of the Army. This work supports the Army Transformation Program.

NCO21 Knowledges, Skills, and Attributes (KSAs) Continued

★ **Training Others.** Evaluates and identifies individual or unit training needs. Institutes formal or informal programs to address training needs. Develops others by providing appropriate work experiences. Guides and assists subordinates on technical matters.

Adherence to Regulations, Policies, and Procedures. Adheres to policies and follows prescribed procedures in carrying out duties and assignments.

Advanced Computer Skills. Understands numerous computer systems and operating systems such as Unix, NT, and Army specific systems and applications. Can perform routine troubleshooting of computer systems and applications.

Basic Electronics Knowledge. Knows general information regarding electronics principles and electronics equipment operation and repair. Knows general facts and principles relevant for a wide variety of electronics related tasks, but does not necessarily have highly specific electronics knowledge required for a particular job.

Basic Mathematics Facility. Knows and applies addition, subtraction, multiplication, division, and simple mathematical formulas.

Basic Mechanical Knowledge. Knows general information regarding mechanical principles, tools, and mechanical equipment operation and repair. Knows general facts and principles relevant for a wide variety of tasks that require technical knowledge, but does not necessarily have highly specific mechanical knowledge required for a particular job.

Battlefield Function Coordination and Management. Can individually apply and effectively integrate multiple battlefield functions such as direct and indirect fires, communications, intelligence, and combat service support to achieve tactical goals.

Concern for Soldier Quality of Life. Is aware of subordinates' off-duty needs and constraints. Is sensitive to others' priorities, interests, and values, and tries to assist subordinates in making their personal and family life better.

Cultural Tolerance. Demonstrates tolerance and understanding of individuals of other cultural and social backgrounds, both in the context of the diversity of U.S. Army personnel and in interactions with foreign nationals during deployments or when training for deployment.

Emotional Stability. Has the tendency to act rationally, to display a generally calm and even mood. Generally maintains composure and does not become overly distraught by stressful situations.

General Self-Management Skill. Uses appropriate strategies to self-manage the full range of one's work and non-work responsibilities (e.g., assignments, personal finances, family). Such strategies include setting both long-and short-term goals, prioritizing goals, allocation of effort and personal resources to goal priorities, and assessing one's own performance. Works effectively without direct supervision, but seeks help and advice from others when appropriate.

Information Management. Effectively monitors, interprets, and redistributes digital display information (as well as printed and orally delivered information) from multiple sources to multiple recipients. Sorts, classifies, combines, excludes, and presents information so that it is usable by others. Does not readily succumb to information overload.

Knowledge of Inter-Relatedness of Units. Is capable of analyzing how goals and operations of own unit are interrelated with other units and systems, and how one unit's actions affect the performance of other units. Can see the larger strategic picture and interpret how one's own unit relates to it.

Military Presence. Presents a positive and professional image of self and the Army even when off duty. Maintains proper military appearance.

Models Effective Performance. Acts in ways that consistently serves as a model for what effective performance should be like, be it technical performance, military bearing, commitment to the Army, support for the Army mission, or performance under stressful or adverse conditions. Can consistently set an example for others to follow.

And, we are....

The U.S. Army Research Institute for the Behavioral and Social Sciences (ARI) is part of the G-1 function of the Army. Headquartered in Alexandria, Virginia, ARI serves the Army world-wide with nine field locations and a presence wherever and whenever there is a personnel issue to be addressed. ARI's mission is to maximize individual and unit performance and readiness to meet the full range of worldwide Army missions through advances in the behavioral and social sciences. It is the primary arm of the Army conducting research and analysis on personnel performance. ARI's programs support three of the Army's Imperatives: Quality People, Leader Development, and Training. Learn more about ARI at http://www.ari.army.mil.

The Human Resources Research Organization (HumRRO) is a private, non-profit research firm with over 50 years of experience and dedication to working with the Army. It is staffed with scientists and specialists in the areas of military policy and functions, personnel planning and policy analysis, and performance measurement and assessment. It is also located in Alexandria, Virginia with a number of field locations. Find out more about HumRRO at http://www.humrro.org.

Together, the ARI-HumRRO team takes pride in its approach to researching soldier issues. The focus is always service to the Army. We involve soldiers in our projects through panels, surveys, interviews, field data collection, and product reviews.

NCO21 Knowledges, Skills, and Attributes (KSAs) Continued

Perceptual Speed and Accuracy. Has the ability to recognize and interpret visual information quickly and accurately, particularly with regard to comparing similarities and differences among words, numbers, objects, or patterns, when presented simultaneously or one after the other.

Psychomotor Aptitude. Has the ability to coordinate the simultaneous movements of one's limbs (arms, legs), to operate single controls or to operate multiple controls simultaneously, and to make precise control adjustments that involve eye-hand coordination.

Safety Consciousness. Follows safety guidelines and instructions. Checks the behavior of others to ensure compliance.

Self-Directed Learning Skill. Has a clear goal of maintaining continuous learning and training over one's entire career. Is proficient at determining personal training needs, planning education and training experiences to meet them, and evaluating one's own training success. Uses efficient personal learning strategies (e.g., identifying specific learning goals, organizing the material to be learned, and practicing the new skills in an appropriate context).

Selfless Service Orientation. Commits to the greater good of the team or group. Puts organizational goals ahead of individual goals as required.

Spatial Relations Aptitude. Has the ability to mentally visualize the relative positions of objects in two dimensional or three-dimensional space, and how they will be positioned if they are moved or rotated in different ways.

Working Memory. Has the ability to maintain information in memory for short periods of time and to retrieve it accurately.

Writing Skill. Communicates thoughts, ideas, and information successfully to others through writing. Uses proper sentence structure including grammar, spelling, capitalization, and punctuation.

The Promotion Predictor Challenge:

Promotion is not a reward for past performance – it is an expectation of future performance. But it is also true that the best predictor of future performance is past performance. Therefore the NCO21 KSA list includes job performance requirements that are applicable (to varying degrees) to performance at grades E4, E5, and E6. This allows us to consider using current performance as a specialist (for example) to help predict future performance as a sergeant. The more time in service, the more historical information there is to evaluate, but there will always be an amount of uncertainty involved. Reducing that uncertainty improves the promotion system.

Building and Evaluating New System Components

The identification of important NCO KSAs was only the first step. Identifying KSAs has little practical application unless we measure them so they can be used for making decisions. Measurement presents its own challenges. There are no perfect ways to measure characteristics of people that, unlike height and weight, are not directly observable. Our goal is to make the measurement of soldiers' capabilities as accurate and reliable as possible – removing irrelevant factors and making the selection fair and objective. This usually involves standardizing how soldiers are evaluated.

We developed several potential measures that could be used as a basis for making decisions about promotion. These became our *predictor* measures because we use them to predict NCO performance at the next pay grade. We also developed two separate measures of NCO job performance – one for current performance and another for performance under future conditions. These measures were the criteria against which the predictor measures were evaluated. Both the predictor and job performance measures went through extensive, painstaking, and time

consuming development procedures. Then the predictor measures were administered to hundreds of soldiers and performance ratings were obtained from their supervisors in a *field validation*.

Our research focused on the predictability of a soldier's performance in the next highest grade level as determined by the relationship between the KSA (predictor) measures and the supervisor ratings. Rather than track soldiers over time, we administered the predictor *and* job performance measures to sergeants and staff sergeants. Looking at the relationship between predictor and job performance scores for the E5 soldiers tells us what is likely to work best for promoting specialists/corporals to sergeant and looking at the same data for the E6 soldiers tells us what predictors will likely work best for promoting sergeants to staff sergeants. If a predictor measure has a high correlation with supervisors' job performance ratings, that means it could be useful for predicting performance. An even better outcome would be if results for the experimental predictor tools, combined with the current Promotion Point Worksheet, show a significantly higher correlation with the job performance ratings than does the current system by itself. Adding such tools to the current system would improve the accuracy of promotion decisions.

Tools to Measure Job Performance

Within the military, supervisor ratings have been well established as an accurate means of evaluating both performance and potential of subordinate soldiers. It is a comfortable role for most supervisors. Two different supervisor rating instruments were developed: (a) one set to evaluate performance in the current Army, and (b) another set to anticipate how soldiers will perform under expected future Army conditions.

Observed Performance Rating Scales

These scales were designed to provide an overall picture of the individual's current performance, plus potential as a senior (E7-E9) NCO. NCO performance is multi-dimensional and we identified 19 areas of functional

Sample Rating Area: Relating to and Supporting Peers		
How effectively does this soldier relate to and support peers?		
Tends to be rude, selfish, and insensitive to peers' concerns; generally fails to provide assistance to others, even when there is a clear need to do so; may force his/her approach to tasks on others without seeking input.	Usually courteous and tactful when dealing with peers; provides assistance to others, especially when it is clear that help is needed; tries to develop approaches to tasks that take into account obvious differences of opinion.	Always treats peers in a courteous and tactful manner; offers assistance without waiting to be asked, even in situations that involve complicated interpersonal situations; actively seeks out peers' opinions and incorporates peers' ideas into own plans.
LOW	MODERATE	HIGH
1 2	3 4 5	6 7

requirements. A sample scale is shown on page 9 and the complete list of areas is shown in the box below. Supervisors provide scaled ratings based on what they have observed about their soldiers' performance. This provides a complete description of the individual, identifying both strong and weak areas. The results are used as one set of criteria to evaluate the predictor measures.

Expected Future Performance Rating Scales

It was necessary to develop an instrument that focused on performance under future conditions because the focus of the work is to improve NCO promotion in the future Army. This instrument was based on the analysis of emerging Objective Force requirements and conditions, largely reflected in the six characteristics described on pages 4-5. Collectively, these scales provide a picture of how supervisors predict soldiers will perform in this future environment. Taken together with the Observed Performance Rating Scales, these scales provide the complete set of criteria for evaluating the predictor measures.

Observed Performance Rating Scales – NCO Areas of Performance

- MOS/Occupation-Specific Knowledge and Skill
- Common Task Knowledge and Skill
- Computer Skills
- Writing Skill
- Oral Communication Skill
- Level of Effort and Initiative on the Job
- Adaptability
- Self-Management and Self-Directed Learning Skill
- Demonstrated Integrity, Discipline, and Adherence to Army Procedures
- Acting as a Role Model
- Relating to and Supporting Peers
- Cultural Tolerance
- Selfless Service orientation
- Leadership Skills
- Concern for Soldier Quality of Life
- Training Others
- Coordination of Multiple Units and Battlefield Functions
- Problem Solving/Decision Making Skill
- Information Management

For a complete set of the Observed Performance Rating Scales and other selected NCO21 measures, please submit a request to NCO21@ari.army.mil.

Tools to Predict Performance in the Next Grade

Predictor measures were developed to assess whether a soldier possesses the relevant KSAs for promotion to a higher level of leadership. The predictor measures were designed to be suitable for *potential* inclusion in the Army's semi-centralized NCO promotion system, which means we had to consider the realities of operational administration. The goal is to provide meaningful information for making promotion decisions from the grades of E4 to E5 and from E5 to E6.

The Personnel File Self-Report

Description: The Personnel File Self-Report recreates the administrative information found on the Promotion Point Worksheet. During the field validation it was not possible to access personnel records and extract Promotion Point information. However, it was necessary to analyze the administrative point areas currently used – this, in effect, was baseline information reflecting the promotion *status quo.*

Previous work has indicated that soldiers are generally pretty accurate in providing information about themselves. We therefore asked soldiers for the information normally found on the Promotion Point Worksheet. The self-report form was not meant to mirror exactly the Promotion Point Worksheet, only *approximate* it. The Personnel File Self-Report information was sufficiently detailed so that we were able to simulate an Administrative Points score for each soldier.

Field Validation Results: The simulated Administrative Points promotion score predicted performance fairly well. We found that some of the administrative categories predicted how soldiers would perform as a sergeant better than how they would perform as a staff sergeant, and vice versa. We also looked at these areas by job categories (clusters of MOS) and found some differences. While we must be cautious in this regard because our sample did not include all MOS or represent all career management fields, there is evidence that prediction could be improved by weighting the administrative categories differently by pay grade and MOS or MOS cluster. Indeed, the experimental predictor measures described below all showed differences in how they worked by pay grade and MOS type.

Armed Services Vocational Aptitude Battery (ASVAB)

Description: The ASVAB is an existing measure used for both selection into the Army and for MOS classification. Additionally, ASVAB scores are used after a soldier is in service to determine reenlistment, and sometimes, schooling and duty options. Soldiers can retake the ASVAB while in service – then it is called the *Armed Forces Classification Test (AFCT)*.

The ASVAB has several subtests that are combined to create various composite scores. One composite – the *Armed Forces Qualification Test (AFQT)* – is used to identify high quality soldiers for selection into the Army. Nine composites are used as prerequisites for classification into specific Army jobs. The 11th composite – *General Technical (GT)* – is used extensively in-service for schooling and reenlistment options. The ASVAB provides a direct measure of the soldier's general cognitive aptitude which is an underlying requirement to many aspects of NCO performance such as problem solving and decision making.

Field Validation Results: The ASVAB showed some capacity to improve the prediction for both E5 and for E6 performance over the current system. In other words, it would improve slightly over what is currently being used in the Promotion Point Worksheet Administrative Points areas.

Temperament Indicator Scales

Description: These scales provide measures of a variety of life skills, reactions to life events, behaviors, and psychological constructs. They are directly related to such attributes as adaptability, dependability, and interpersonal skills. There is a strong leadership component to these

Sample Temperament Indicator Items

1. *On a 5-point scale, indicate how much you agree or disagree with the following statements.*

   A. To what extent have you enjoyed thinking about the plusses and minuses of alternative approaches to a problem?

   B. How likely are you to criticize others when they start criticizing you?

2. *Mark the statement that is most like you with an "M" and mark the statement that is least like you with an "L."*

   M A. I rarely got into trouble with my high school teachers.

   L B. I have not exercised routinely over the past year.

   ____ C. I have enjoyed being in positions of authority.

   ____ D. I sometimes lose sleep over worries.

Faking It?

A concern in measure development is that there are certain instruments where soldiers, if they have a stake in the outcome (such as promotion), will give the input they think the Army expects to hear, not necessarily the most truthful response. Some of the trial predictor measures are more susceptible to this than others. For example, in some measures (the ASVAB for example) there is a "right" answer, so faking is not an issue (though cheating can be). But in other measures, the answer is not right or wrong but the answer tells us something about the person. If people are asked how much they cheat on their income tax, they may be less than truthful if the response can be identified with them. In that example, people can tell the "good" answer from the "bad" answer and can vary their response based on what they feel the effect of providing a completely truthful response might be.

There are ways in which the instruments can be designed to help guard against the inclination. For example, some of the Temperament Indicator scales use a so-called "forced choice" strategy. There are also procedures that can be used to identify respondents who are probably faking.

Concern about this issue is a serious requirement. It is essential that a trial validation period under operational conditions be part of the development. The Army (its soldiers and leaders) must have confidence that potential promotion instruments are fair, accurate, and reliable.

scales that has been established in a variety of other Army applications. Results show that these scales can be used to predict far ranging behaviors from individual physical fitness to personal integrity.

Field Validation Results: Some of the individual behavioral areas assessed by these scales suggest that they could substantially improve the prediction of performance over the current Administrative Points. For example, Social Maturity and Tolerance for Ambiguity scores showed promise for predicting performance for sergeants whereas the Adjustment score was particularly useful for predicting staff sergeant job performance.

Experience and Activities Record (ExAct)

Description: The ExAct assesses how often a soldier has engaged in specific activities or experiences that may predict performance at the next grade. The ExAct elicits verifiable information about individual experiences that are often considered by supervisors when evaluating personnel for promotion. It is not meant to capture normal duty or MOS performance but to identify those experiences and activities that occur beyond the expected performance for the job and grade. It codifies what is already being done on an informal basis.

Field Validation Results: The ExAct did a fairly good job at predicting performance for sergeants. However, we found it provided only limited improvement to the prediction of performance over the Administrative Points portion of the current Promotion Point Worksheet.

The Leadership Judgment Exercise (LeadEx)

Description: The LeadEx assesses the effectiveness of judgments about appropriate courses of action in various job-related, supervisory-based scenarios. Situations address areas of problem solving and decision making, team leadership, dealing with subordinates, and conducting training.

Although the LeadEx items look like traditional multiple-choice test questions, all responses have some degree of acceptability; that is, there is not a single "correct" answer with all other choices being incorrect. Because each possible response has been rated by senior NCOs as to its effectiveness for handling the problem presented, the scoring system allows some fairly precise rankings of supervisory effectiveness.

Field Validation Results: The LeadEx showed itself to be a promising instrument, particularly for predicting performance for sergeants. It significantly improved the prediction of performance over and above current promotion requirements.

Sample LeadEx Items

Instructions: For each item, mark which course of action you would be most likely to follow with an "M" and mark the choice that you would least choose with an "L."

As a junior NCO, you need to counsel a subordinate. What is the most important thing to do when preparing for and conducting the counseling?

____ a. Prepare a course of action that you want the soldier to follow.

____ b. Plan to guide and encourage the soldier to arrive at his own solutions.

L c. Focus on the sanctions and rewards that you control.

M d. Follow the outline of the DA Form 4856-R, General Counseling Form.

Your unit is on a joint British-US exercise. You are supervising a joint communications center. One of your soldiers is talking with a British officer on the phone. He greets him and says goodbye using a British slang term he has heard. After he gets off the phone, one of the British soldiers in the room informs your soldier that the slang term he used is considered an insult in this context. What should you do?

____ a. Tell the soldier to not use slang terms unless he is sure of the meaning.

M b. Inform all staff members that all business will be conducted in a professional, military manner: no slang, street talk, etc. Strictly military.

L c. Let the soldier involved and the British soldier who corrected him work it out. No action is required on your part.

____ d. Explain to the British soldiers that no insult was intended and that you all have to learn about each other's ways and tolerate each other while the learning is going on.

Semi-Structured Interview

Description: The semi-structured interview was designed to provide a board evaluation but under more controlled conditions than exists with the current promotion board process. The interview is structured to measure specific leadership traits. It provides for questions with in-depth response requirements based both on the individual's past experiences and on hypothetical situations. Soldiers are evaluated using a structured rating procedure.The interview provides standardized measurement of adaptability, effort and initiative, self-management and self-directed learning, and leadership potential.

Field Validation Results: During the field validation, the semi-structured interview showed a strong validity for predicting performance for

Sample Semi-Structured Interview Questions

Past experiences in specific situations

Tell me about a time when you planned an event or prepared an assignment well in advance and your supervisor changed it at the last minute. What did you do?

Hypothetical situations

You have just broken an important piece of equipment. If you turn it in to the armorer, there is a chance it will not be blamed on you. What would you do?

"[Conducting these interviews] was a real good experience. I could see that soldiers were really involved and thinking about their answers. I saw some real display of skills and I saw soldiers who really lack skills. It made me reflect on my own soldiers and where they would be in such a process and what I need to do to improve them."

Comment from a Platoon Sergeant, Fort Stewart after sitting as a Semi-Structured Interview Board Member for 3 days during the Field Validation

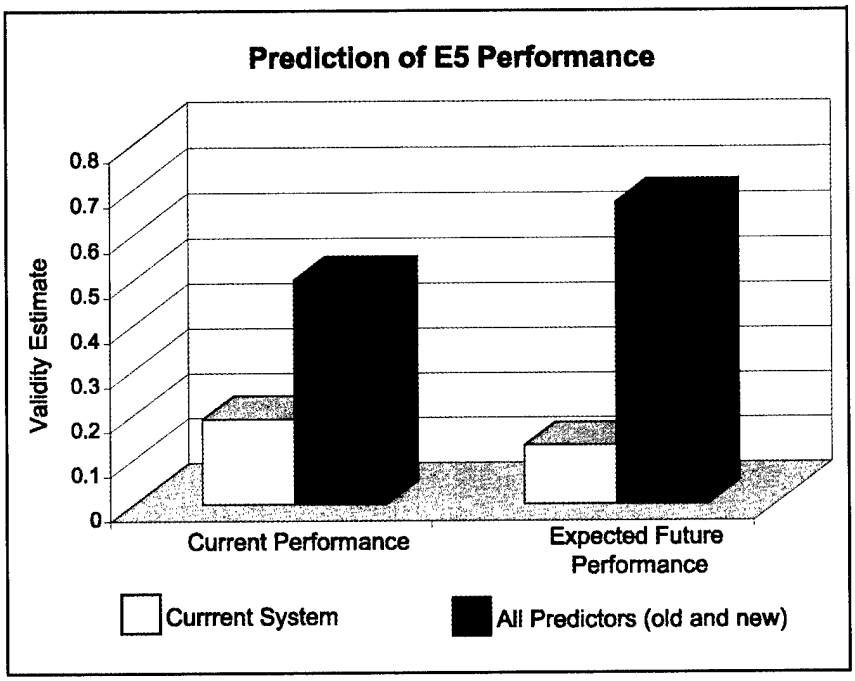
E5 soldiers. Because of time constraints, the interview was not administered to the E6 soldiers so no conclusions were reached about this group.

Summary of the Findings

Validation is finding out what works, what doesn't work, what works a little bit, and what works a lot. In this case, with a lot of different measures and a lot of different groups (E4s, E5s, E6s), we need to be cautious about what we conclude. Study, analysis, and review of the data that we gathered will continue, but we do have some preliminary indications about the current promotion system and what effect changes would have.

Just how much improvement is achievable over the current system cannot yet be precisely quantified. As indicated in our discussion of each individual measure, however, most of the predictors that we examined showed potential as additions for enhancing the Army's semi-centralized promotion system. In most cases, the results were stronger when considering promotion to E5 than when applied to E6 promotion.

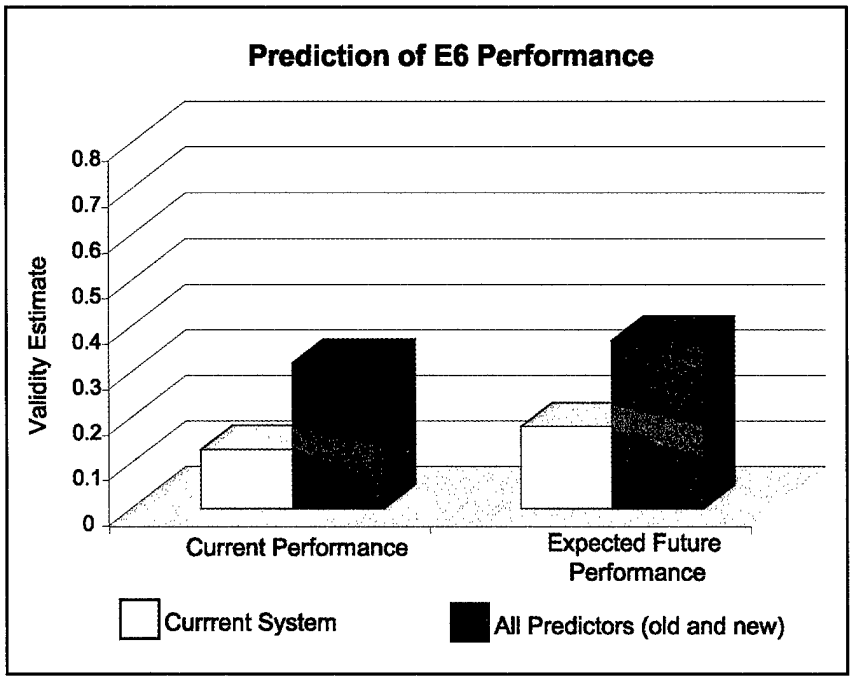
The figures on pages 14-15 indicate an approximate improvement if *all* of the experimental predictor measures developed in the NCO21 project were added to the existing Promotion Point Worksheet[1].



Taken together, the findings indicate that the semi-centralized promotion system could be improved and that elements of the measures we studied are good candidates to be part of that improvement. There is also some compelling evidence that there are differences between how various types of information can best be used to forecast performance at the sergeant and staff sergeant levels. More accurate promotion decisions would be possible if these differences were reflected in the system (e.g., by varying the number of points assigned to different pieces of information on the Promotion Point Worksheet, depending on

[1] *Validity estimates are based on correlations between the predictors and criterion . These values can vary from 0 to 1, where 0 indicates no association between predictors and criterion, and 1 indicates a perfect association. Thus, the higher the values, the better the prediction. These values are based on estimates that have been corrected for standard statistical artifacts (i.e., criterion unreliability, range restriction in the predictor, and shrinkage).*

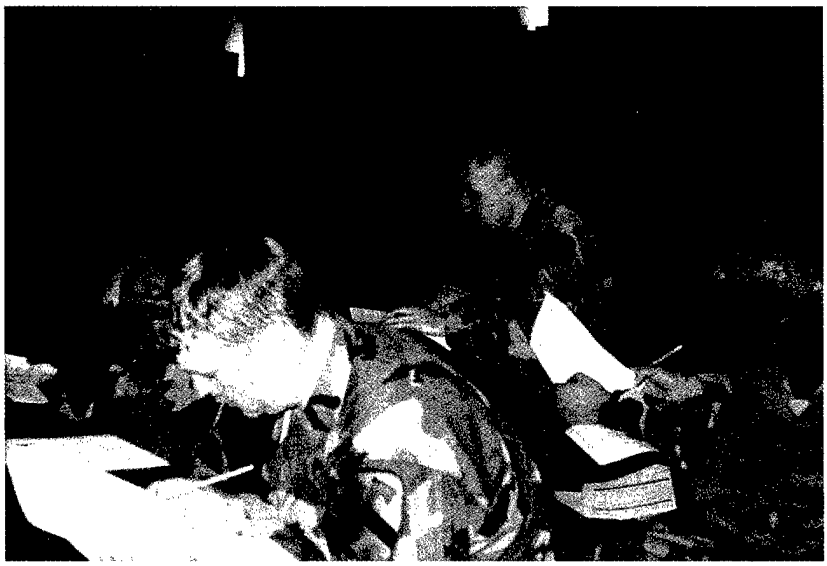
whether one is up for an E5 or E6 promotion). This would be easy to implement in an automated promotion system. Similar differences can be identified by types of jobs (MOS or clusters of MOS) but the field validation is not broad enough to draw more than preliminary indications that there might be some effect that would warrant different promotion treatment by MOS.



Other Possible Applications

During the field validation, a lot of reaction, some pro and of course, some con, to the different measures was provided by the participants and supervisors. However there were three that consistently generated the most interest for potential uses other than the semi-centralized promotion structure.

Observed Performance Rating Scales: These were seen as a valuable counseling tool by many of the supervisors. Mentioned most frequently as a feature was the behavioral anchor descriptions that could be used (as shown in the example on page 9), not only to define current levels of performance but also to pinpoint what is needed for individuals to get to higher levels. Participants pointed out that the scales were a handy working document that could be shared with subordinates. Several supervisors highlighted the flexibility of the scales – that they could be tailored for each individual, concentrating on just a few of the areas at a time. To get a broader perspective, ratings could be collected from peers and subordinates, as well as supervisors.



Experiences and Activities Record (ExAct): This too was seen as a counseling tool but primarily as a roadmap for those seeking to improve themselves. Several supervisors thought of it as being particularly helpful to use

NCOES Applications...

It is not necessary for individual measures that are proven predictors to be integrated into the semi-centralized promotion system to have an effect on future leadership. Many of the measures can be used as counseling tools to change or guide behaviors, not just to measure KSAs. The path to NCO leadership is one of learning and experience in a great number of areas. Many of these measures can provide an individualized roadmap for soldiers.

A logical place to use some of these measures is in NCOES – PLDC and BNCOC. NCOES is currently undergoing study and evaluation as part of the Army Transformation and we will make our findings available to those charged with this mission.

with their "fast track" specialists and corporals. Not everyone agreed completely with all of experiences and activities listed and some felt they would modify or delete some of the items. Foremost among the changes was to add blank lines to list MOS- or unit-specific experiences and activities.

Semi-Structured Interview: Most of the reaction came from senior NCOs who served as board participants during the field validation. Almost all had prior experience as board members. They commented that there were a lot of board activities in the Army besides the semi-centralized board, including E4 boards, soldier of the month boards, Sergeant Morales, and Audie Murphy boards. Since little guidance exists for preparing for and interacting with the soldier during board proceedings, they felt that the semi-structured interview would be a good training vehicle for supervisors, giving them specific practice in how to apply and interpret results.

The Future of NCO Selection and Development

Significant changes to the semi-centralized promotion system will be deliberate, based on scientific evidence of improvement, and in conjunction with other NCO leadership initiatives, coupled with command and user buy-in. This effort is a first step to lay a foundation for inevitable change to the system. It has identified some viable tools that could improve performance of the NCO corps either through changes to promotion requirements or through counseling or NCOES improvements.

An option that will be evaluated further is to combine elements of some of the promising NCO21 measures (e.g., the LeadEx and Temperament Indicator) to form a Leadership Assessment Tool that could be administered to semi-centralized promotion candidates. A logical next step is to try-out such a concept under operational conditions over a period of time in an experimental setting that could last for 1-2 years. It would be "experimental" in that soldier's promotions would not be affected by the new leadership measure. Other than that, it would be applied along side the current promotion criteria on a wide basis to soldiers under existing field conditions. Work is progressing on implementing such a try-out.

Your Input Counts

Now you can provide feedback by giving us your reaction to what we have done and what we propose to do. Any comments are welcome. Send your input to:

Directorate of Military Personnel Policy (DMPP)
Army G-1
DAPE-MPE-PD
300 Army Pentagon
Washington, DC 20310-0300
DSN: 224-7182 or COMM: 703-614-7182
Or provide input by email to
gerald.purcell@hqda.army.mil

Measuring performance...

In this study, we used supervisor ratings of observed and expected future performance as the criteria for evaluating the predictors. Performance ratings are measures with established effectiveness and are relatively easy to collect. But they are not the only measures that could be used. MOS-specific tactical and technical knowledge tests and hands-on performance tests of technical and leadership skills would also be valuable measures. The drawback to these is their difficulty in preparation and administration. However, we are exploring ways that simulations can be used to provide standard evaluations and reduce the overhead requirements of these measures. Further, ARI is currently conducting research to develop MOS-specific tactical and technical competency tests that overcome the preparation, administration, and operational obstacles of former MOS skill tests.

[The Army must]... "develop Enlisted Personnel and Leader Development Systems that produce a deployable, agile, versatile, lethal and survivable soldier who is persuasive in peace, invincible in war, and victorious in any form of conflict."

Excerpt from the Army Developmental Systems XXI vision statement

Selection For Leadership
Transforming NCO Promotion

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14. ABSTRACT *(Maximum 200 words)*:

The NCO21 research program was undertaken to help the U.S. Army plan for the impact of future demands on the noncommissioned officer (NCO) corps. The performance requirements and associated knowledge, skills, and aptitudes (KSAs) expected of future successful NCOs were used as a basis for developing tools that could be incorporated into an NCO performance management system geared to 21st-century job demands. This report provides a user-oriented overview of the "NCO21" project and the tools that it has produced.

15. SUBJECT TERMS

Behavioral and social science	Personnel	Noncommissioned Officer
Leadership	Manpower	Promotion System

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