MEASURES OF EFFECTIVENESS-CONUS RE-ORGANIZATION 1973 (AS PERTAINS TO FORSCOM, TRADOC, HSC, OTEA AND CAA). VOLUME II. DETAILED EVALUATION PLAN AND APPENDIXES A TO E

M. H. Hamilton, et al

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The study provides an evaluation plan based on selected performance measures which will assist in the overall assessment of the effectiveness of the US Army over time in terms of the fulfillment of the goals and objectives of the CONUS Reorganization of 1973. The plan is intended to complement other evaluation means such as commanders' personal estimates and reviews by Department of Army specialized agencies. (cont'd)

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The plan is limited to selected commands and agencies that were created or significantly affected by the Reorganization (i.e., Forces Command, Training and Doctrine Command, Health Services Command, Concepts Analysis Agency, and Operational Test and Evaluation Agency). The individual performance measures within the plan are specifically related to these commands and agencies as well as to the four major goals of the Reorganization. These goals are: (1) improve Army readiness of both Active and Reserve Components, (2) harness schools and combat development activities, (3) improve the quality and responsiveness of management, and (4) reinforce the role of the installation commander.

The basic analytical approach involved a disciplined identification of specific organizational subgoals/objectives, development of areas for measurement and means of their measurement, and finally, development of the integrated evaluation plan to include analytical techniques. The study used techniques and methods of effectiveness analyses. The plan provides for good use of existing data systems or new systems being established as the result of the reorganization to collect data for the evaluation. In some cases the formulation of performance measures directly into adequate quantifiable form is not possible and qualitative considerations in the form of surveys or special analyses must play an important role in assessment of the effectiveness of the reorganization.

The evaluation plan consists of five separate detailed assessment plans—one for each of the five commands and agencies to be evaluated. Each of the detailed plans is organized according to selected areas for measurement, with each area containing a varying number of performance measures. The areas for measurement are basically functional categories used to help managers at HQ DA and elsewhere in the Army to focus their attention on the broad management concerns associated with each of the organizations. The actual data collection effort on which any evaluation must be based is determined by the performance measures of which there are 88.

The individual performance measures can serve several purposes: (1) provide an indication of performance effectiveness in a specific area of concern, (2) be used in combination with other measures to develop an overall picture of effectiveness, and (3) serve as the basis for identifying opportunities, formulating policy alternatives, and taking action with regard to the management, organization, and operation of activities designed to achieve the mission/function covered by the measure.

An important use of the evaluation plan will be as a common means of communication for assessing the effectiveness of the CONUS Reorganization by those involved in the assessment process (i.e., the commands/agencies, AAA, IG, and Army Staff).

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Measures of Effectiveness—
CONUS Reorganization 1973
(As Pertains to FORSCOM, TRADOC, HSC, OTEA AND CAA)
Volume II—Detailed Evaluation Plan and Appendixes A to E

by

M. H. Hamilton
G. G. Gold
P. Solomon

OPERATIONS ANALYSIS DIVISION

GENERAL RESEARCH CORPORATION

WESTGATE RESEARCH PARK, McLEAN, VIRGINIA 22101

PREFACE

This report presents an evaluation plan designed to assist the Army in the overall assessment of its effectiveness in terms of the goals of the CONUS Reorganization - 1973. The report consists of four volumes. Volume I provides an executive summary. Volume II contains the detailed plan; it identifies measurement areas and performance measures and relates them to specific commands or agencies and goals. Data collection and analytical techniques are discussed in Volume III. Background information on the development of the plan to include information on study team visits and observations is provided in Volume IV.

The background material and information required for the study could not have been assembled in the time required had it not been for the unstinting cooperation of many individuals in the commands and agencies included in the evaluation plan. The critical reviews of Tasks I, II, and III were most helpful in narrowing the evaluation plan to manageable size and scope. Although these command and agency inputs contributed greatly to the plan's development, the final recommended plan is the sole responsibility of the authors.

A particular debt of gratitude is owed to Colonel Paul Raisig, the SAG Chairman, LTC Robert Michel, and LTC Winfield C. Frank, all of the Office of the Chief of Staff, US Army, for their timely guidance and assistance throughout the project. LTC Robert Faulkender, Headquarters FORSCOM; LTC Mark Hoke, Headquarters HSC; and Mrs. G. C. Milliken, Headquarters TRADOC, were particularly helpful in coordinating visits and study papers within their respective commands.

The manuscript was patiently prepared by Mrs. Betty M. Shifflett and Mrs. Elizabeth Ficklin of General Research Corporation.

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1 DEVELOPMENT OF EVALUATION PLAN

PURPOSE

This report provides an evaluation plan based on selected performance measures which will assist in the overall assessment of the effectiveness of the US Army in terms of the fulfillment of the goals and objectives of the CONUS Reorganization of 1973. The plan is intended to complement other evaluation means such as commanders' personal estimates and reviews by Department of Army specialized agencies, for example, the Office of the Inspector General and the Army Audit Agency.

SCOPE

The plan is limited as specified by the study sponsor to selected commands and agencies that were created or significantly affected by the Reorganization, i.e., Forces Command (FORSCOM), Training and Doctrine Command (TRADOC), Health Services Command (HSC), Concepts Analysis Agency (CAA), and Operational Test and Evaluation Agency (OTEA). The individual performance measures within the plan are specifically related to these commands and agencies as well as to the four major goals of the Reorganization. Those goals, also provided to the study team by the sponsor, are:

- Improve Army readiness of both Active and Reserve Components.
- Harness schools and combat development activities.
- Improve the quality and responsiveness of management.
- Reinforce the role of the installation commander.

The goals are refinements of several statements of guidance and purpose which had been the basis for the advance planning process used by the Army to develop the overall CONUS Reorganization plan. The goals summarized the basic thrusts of the Reorganization and served the significant

purpose of indicating the directions toward which future detailed planning and implementation should be headed.

IMPETUS FOR EVALUATION

The impetus for a formalized assessment of the CONUS Reorganization of 1973 was a product of:

- The intense interest of top Army management in an overall assessment of the performance of the five specified organizations.
- The extreme importance of the reorganizational changes that occurred.
- Recommendations from external sources for a follow-on evaluation.

The CONUS Reorganization of 1973 was the first major reorganization of the CONUS command structure since 1962. Experience and a series of management studies during the period 1966-1972 had identified and defined important problems under the CONARC-CDC concept of organization. Moreover, declining manpower, increasing costs, and reduced purchasing power all pointed to the need for realignment and strengthening of various Army elements. Top Army management wanted to have a means of assessing overall organizational performance within CONUS in a routine manner which would assist in managing ongoing operations plus encourage the design and implementation of any needed changes in the future without excessive delay and turbulence.

The very real importance of the changes which occurred because of the 1973 Reorganization was another factor in the impetus for the development of this evaluation plan. In the past it had been decided that CONARC's span of control was too broad to manage both the readiness and training missions with proper effectiveness. But now the question was whether two co-equal commands, FORSCOM and TRADOC, each with command over assigned installations, could fulfill their missions cooperatively. In the past, the separation of combat developers from the service schools had resulted in the inability to utilize combat developments resources with the desired effectiveness. Now the question was whether the inclusion of the Combat Developments Command's elements within the new TRADOC structure would result, in fact, in the closer integration of combat developments products and activities with the actual needs of decision makers and trainers. Each of the new organizations—FORSCOM, TRADOC, HSC,

CAA, OTEA—brought with it new questions. All of these questions focused on a single concern: Would the new structures help the Army do its job? Answers to this concern were essential if further improvements were to be planned and implemented effectively. The importance of each organization's mission underscored the necessity that trends in organizational performance be identified and analyzed before they developed into organizational crises requiring dramatic corrective action.

Providing still further impetus for the development of this evaluation plan was the interest of Congress and its investigative agency, the General Accounting Office. In part this interest stemmed from Congressional concern for the increasing costs of manpower and weapon systems, and the desire to improve the ratio of combat to support resources. In part this interest reflected one of the conclusions of the GAO's report on the Reorganization:

> We believe that the Army recognized the need for organizational change and accomplished that complex and difficult task of planning satisfactorily. The Army should establish a formal evaluation mechanism to measure the effectiveness of its new organization... The...findings should be available to the Army's key decisionmakers for periodic review. This should help insure that the reorganization goals and objectives are met.[1]

BASELINE FOR THE ASSESSMENT

The development of any evaluation plan, no matter what is being evaluated, is dependent upon two fundamental questions:

- What is the subject being studied?
- What is the baseline, the standard, against which the subject will be compared?

The first question has already been answered: the subject of this evaluation plan is the group of five commands and agencies (TRADOC, FORSCOM, HSC, CTEA, CAA) specified for evaluation by the study sponsor.

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[1]Comptroller General of the United States, The Army Reorganization for the 1970s: an Assessment of the Planning, DOD B-172707, August 13, 1973, pp 19-20.

The second question is not so unambiguous. Three plausible baselines were considered for the evaluation: past performance, theoretical standards of desired future performance, and trends in real present performance compared over time. The proposed evaluation plan centers on the third baseline. Its aim is to define reasonable, acceptable criteria and to identify sources of data which will be sufficiently stable to permit a series of iterative evaluations for the purposes of identifying trends in performance.

A comparison of present organizational performance with the past would have focused on the comparison of the CONARC/CDC concept with the present FORSCOM/TRADOC/HSC/CAA/OTEA concept. Comparable criteria and sources of data would have been necessary. The data base for such a comparison is incomplete, and totally absent in several instances since past organizations had no reason to anticipate the requirements of the evaluation plan now being developed. Because of this and the unlikelihood that the Army would consider reverting to its former configuration, comparisons with the past could only be incomplete and of partial value. Nonetheless, this approach is recognized in the present plan where individual measures are categorized according to the availability of data for past comparisons. This is done because of the Army's desire to make at least broad judgments as to the advantages and disadvantages of the Reorganization in comparison with the past.

A comparison of present performance with desired future performance would have required that Army managers establish theoretical performance standards including the specification of the conditions under which those standards could be attained. The Army did, of course, articulate the four major goals of the Reorganization. These goals, broadly conceived as they were, served to point the Reorganization planners and the organizations they designed toward generalized directions. But those goals did not provide criteria of success or failure. Nor were such criteria provided elsewhere in the planning effort. Army management desired to build into its organizations the capability of adapting flexibility to changing environmental conditions. The setting of narrow performance criteria would have restricted unnecessarily the ability of managers at the command and agency levels to revise their internal structures.

Improvement in future performance is recognized in the assessment plan as a matter requiring the selection by Army managers of timely strategies and techniques aimed at meeting performance objectives suited to specific situations rather than presuming to anticipate those situations. Information developed by this plan should help make those decisions more accurate and effective.

The proposed evaluation plan emphasizes the third baseline: trends in real present performance compared over time. Such a baseline uses the initial data collection to establish a point of comparison for future data collections. It remains the responsibility of Army managers to examine the actual measurements and trends to determine if performance is acceptable under conditions existing at the time. It also remains the responsibility of Army managers to take such corrective actions as may seem required and to implement evaluation activities to determine if those corrective actions were appropriate in fact.

ASSESSMENT APPROACH

Parameters

The evaluation plan has been formulated within guidance provided by the sponsor. This guidance emphasized the needs, first, to utilize existing data and reporting mechanisms to the maximum possible extent, and second, to emphasize simplicity in the plan, keeping the number of measures to a minimum. This guidance appeared to represent the objective to produce an evaluation plan which:

- could provide adequate coverage of key areas by sampling of selective indicators.
- could be reported in concise terms.
- could provide comparable data suitable to trend analysis.
- could be administered with minimal additional resource requirements at HQ DA or at the affected commands and agencies.
- would be accepted as a reasonable reporting requirement by the various commands and agencies from whom information would be collected.
- could be used by the Army itself with little or no dependence on outside contractors.

This guidance affected the design of the study in two principal ways. First, every effort was made to avoid new reporting requirements. Thus, in some instances, a satisfactory existing report was included in preference to designing a new data requirement which might have provided a more exact description of a particular issue. Second, the need to achieve a relative simplicity of design meant that the assessment plan would have to avoid the pyramiding of measure upon measure, a method which assumes that overall organizational performance can be understood as a series of direct causal relationships. Given the numerous external influences upon organizational performance throughout the Army, such pyramiding would have been very vulnerable to inaccuracies.

Approaches to Assessment

Within the parameters established by the sponsor's guidance, the applicability of both of the traditional approaches to the analysis of organizational effectiveness—the goal approach and the functional approach—were examined. In the end, a hybrid approach was adopted because, while the four major goals were prescribed by the Army, the dynamic nature of the Army's operation also requires the use of the organization itself as a frame of reference. The importance of the functional approach was emphasized by the fact that the Army underwent two additional reorganizations of major magnitude (reductions and realignments of the Army Staff and reductions of oversea headquarters) during the preparation of this evaluation plan. Both of these reorganizations in some measure impacted on the commands and agencies to be evaluated. Furthermore, the four goals were stated not as final conditions to be achieved but rather as intentions to improve the performance of four crucial functions which cut across organizational boundaries in many instances.

Models for Analysis

Several models for analysis were considered in the design of the evaluation plan. For the purposes of this study a modified systems model based on the phases of organizational behavior (Figure 1) was used. This model emphasizes the flow of resources and activities found in each of the five commands and agencies without attempting to place the five organizations within a single common system.

Fig. 1—Phases of Organizational Behavior

The flow of resources and activities in each organization was defined as having three basic phases: input, throughput, and output. Wherever possible, measures of output were used, since the question of organizational effectiveness is essentially a question of an organization's ability to produce desired end products. Where output measures were not readily available, measures of input and throughput were used if it could be reasonably assumed that changes in those input and throughput factors would directly affect the production of outputs. For example, TDA figures represent an input factor (manpower) which is presumed to influence the workload performed during a given year by a given organization.

Several other models of organizational analysis were considered but rejected (Figure 2). Models based on organizational theory were rejected in large part because so many of them are based on assumptions concerning employee satisfaction or "psychological contracts" assumed to exist among an organization's members. Organizational theory models also tend to emphasize factors affecting organizational survival, considering survival as the ultimate "output." The Army's concerns relative to the 1973 Reorganization, however, were less theoretical and more practical, more concerned with the specific functions—such as readiness, training, materiel testing, health care, analytical studies—that the five organizations were expected to fulfill.

ORGANIZATIONAL THEORY	SYSTEMS DESIGN	ELEMENTS OF ADMINISTRATION
STRUCTURE	SIMPLICITY	PLANNING
HIERARCHY	FLEXIBILITY	ORGANIZATION
AUTHORITY	RELIABILITY	COMMAND
SPECIALIZATION	ECONOMY	COORDINATION
SPAN OF CONTROL	ACCEPTABILITY	CONTROL
LINE AND STAFF		

Fig. 2—Rejected Model Approaches

System design models were rejected because they tend to be too comprehensive in scope for the purposes of this study. Such models emphasize the relationships of organizations to their external environments as well as the complex relationships among the internal parts of each organization. Use of a system model would have directed management's attention to such issues as communication and policy making between and within organizations. These issues, however important in themselves, were not appropriate to the requirements of the study sponsor. Moreover, the cost of implementing an adequate system evaluation plan would have been prohibitive.

Finally, organizational analysis models based on the so-called elements of administration were also considered and rejected for the purposes of this study. These models start with some definition of the functions of management—such as: plan, organize, control, coordinate, evaluate—and relate those functions to an organization's performance. But the emphasis of these models is on the activities of managers themselves rather than on the overall performance of the organization.

METHODOLOGY FOR PLAN DEVELOPMENT

The methodology for the development of the evaluation plan embraced several key tasks:

- Review and analysis of Army documentation of the Reorganization of 1973 and earlier reorganization studies. This review provided important background information and identified issues requiring further examination and clarification during interviews with members of the affected organizations and former members of the STEADFAST task force responsible for most of the reorganization planning.

- Identification of innovative changes, resulting interactions, and the subgoals and objectives of the five organizations involved in the evaluation. These categories of information were placed in relationship to each of the five commands and agencies, to nine major functional areas, and to the four major goals of the Reorganization. (This task was the basis for the study's Task 1 Report—the central portion of which is included in Appendix H, Volume IV.)

- Selection of specific areas for measurement and performance measures. This task involved a studied pruning of possible areas and measures into a manageable number that would provide a valid assessment. It was conducted in close communication with the study sponsor and the five commands and agencies in order to assure accuracy, utility, feasibility, and overall fairness in the design of the final assessment plan.

- Identification of supporting data elements, their sources, and frequency of collection, and development of analytical techniques to be used.

Completion of these tasks was facilitated by visits to a representative sample of the activities affected by the Reorganization and discussions with several commanders and staff members at the various levels within CONUS. (Appendix I, Volume IV, provides a recap of these visits and resulting insights and observations.) Their observations regarding measurability, importance, and comprehensiveness of areas and measures helped considerably in developing the evaluation plan.

2 OVERVIEW OF EVALUATION PLAN

INTRODUCTION

The evaluation plan consists of five separate detailed assessment plans—one for each of the five commands and agencies to be evaluated. These detailed plans are contained in Appendixes A through E. Each of the detailed assessment plans is organized according to selected areas for measurement, with each area containing a varying number of performance measures. The areas for measurement are basically functional categories used to help managers at HQ DA and elsewhere in the Army to focus their attention on the broad management concerns associated with each of the organizations. The actual data collection effort upon which any evaluation must be based is determined by the performance measures. Each measure prescribes data elements and methods of analysis as well as identifying the sources of data and the frequency of collection.

SUMMARY OF PLAN

Table 1 is a summary of the proposed evaluation plan. The performance measures are grouped into six summary evaluation areas that easily relate them to Army missions and operations. In this way performance measures are shown to apply to one or more commands and to one or more of the four major goals of the Reorganization. Those four goals are identified in the Table (and later in each of the appendixes) by letters as follows:

A - Improve Army readiness of both Active and Reserve Components Forces.

B - Harness schools and combat developments activities.

C - Improve the quality and responsiveness of management.

D - Reinforce the role of the installation commander.

Table 1

EVALUATION PLAN SUMMARY

Summary evaluation areas and measures	Applicable command/ agency	Reporting frequency	Estimated level of effort required	Related goals	Valid for pre-reorganization comparison
TRAINING (MANAGEMENT, CONDUCT AND SUPPORT)					
The ratio of current assigned strength for HQ TRADOC (less DCSCD and DCSROTC) compared to July 1973 authorized TDA strength.	TRADOC	Annually	Minimum	C	No
Costs (adjusted for inflation) per actual student/trainee.	TRADOC	Annually	Minimum	C	Yes
Critical MOS shortages compared to training loads (DA-programmed and actual) by MOS.	TRADOC	Annually	Minimum	C	Yes
The percents of average daily School/ATC in-training loads (DA- and TRADOC-programmed) attained.	TRADOC	Annually	Minimum	C	Yes
The percent of student population not enrolled in courses.	TRADOC	Annually	Minimum	C	Yes
The average cost per trainee of Accession Overland Travel-Enlisted (MPA).	TRADOC	Annually	Minimum	C	Yes
The quality of service school instruction as demonstrated by on-the-job performance of recent graduates.	TRADOC & HSC	Annually	Substantial	B,C	No
The average number of months required for the introduction of new doctrine.	TRADOC	Annually	Moderate	B,C	No
The percent of service school faculty man-years devoted to support of collective (unit) training.	TRADOC	Annually	Substantial	B,C	No
The percent of achievement in filling the Army's annual requirements (Active and Reserve) for second lieutenants.	TRADOC	Annually	Minimum	C	Yes
The ratio of the combined current assigned strength for TRADOC DCSROTC and the four ROTC Region Headquarters compared to the July 1973 authorized TDA strengths for these activities.	TRADOC	Annually	Minimum	C	No
Percent of total cadets commissioned through the Senior ROTC Program that are female or minority cadets.	TRADOC	Annually	Minimum	C	Yes
The percent of retention through commissioning of Senior ROTC cadets awarded scholarship assistance.	TRADOC	Annually	Minimum	C	Yes
READINESS (MANAGEMENT AND STATUS)					
The percentage achievement of overall unit REDCON in relation to authorized levels of organization (ALO) and the Department of Army Master Priority List (DAMPL).	FORSCOM	Semiannually	Minimum	A,C	Yes
The ratio of combat to support personnel strengths.	FORSCOM	Annually	Minimum	A,C	Yes
The percentage achievement of unit training objectives by units submitting readiness reports.	FORSCOM	Monthly	Minimum	A,C,D	Yes
The percentage of STRAF unit personnel assigned on special duty to installation functions.	FORSCOM	Quarterly	Minimum	A,C,D	No
Percentage of materiel operationally ready (OR), not operationally ready maintenance (NORM), and not operationally ready supply (NORS).	FORSCOM	Monthly	Minimum	A,C,D	Yes
Percentage of Active Army Bns and seperate Cos tested and failed (ATT/ORTT).	FORSCOM	Annually	Minimum	A	Yes
The percentage of Reserve Components units achieving training objectives (company or comparable level proficiency).	FORSCOM	Annually	Minimum	A	Yes
The percentage of materiel required for training that is operationally ready (OR), not operationally ready maintenance (NORM), and not operationally ready supply (NORS).	FORSCOM	Semiannually	Minimum	A	Yes
The percentage of RC personnel time spent in the field for assistance purposes.	FORSCOM	Quarterly	Minimum	C	No
The timeliness of request satisfaction by RC for valid assistance requests from Reserve Components units.	FORSCOM	Quarterly	Minimum	C	No
The standardization of the approaches utilized by ARRs and RCs in carrying out their missions and functions.	FORSCOM	One-time	Moderate	C	No
The assessment of Reserve Components personnel regarding the impacts of the loss of dedicated unit advisors for most battalions and smaller units, the greater availability of technical expertise in functional areas, and the emphasis on "hands on" assistance.	FORSCOM	One-time	Moderate	C	No

Table 1 (continued)

Summary evaluation areas and measures	Applicable command/ agency	Reporting frequency	Estimated level of effort required	Related goals	Valid for pre-reorganization comparison
COMBAT DEVELOPMENTS (MANAGEMENT AND CONDUCT)					
The ratio of the combined assigned strength of HQ TRADOC DCSCD and the CACDA, PACDA, and LOGC to the July 1973 authorized TDA strengths for these activities.	TRADOC	Annually	Minimum	B,C	No
The production of Required Operational Capability (ROC) documents.	TRADOC	Annually	Minimum	B,C	No
The percent of total annual combat developments tasks (programmed and unprogrammed) accomplished.	TRADOC	Annually	Substantial	B,C	No
The index of the timeliness and utility of medical inputs into the combat developments process managed by TRADOC and medical development activities that are managed by OTSG.	HSC	Annually	Minimum	B	No
The extent of "slippage" of more than two weeks from established ASARC/DSARC/IPR schedules for combat and force developments tasks being performed and/or coordinated by TRADOC.	TRADOC	Annually	Substantial	B,C	No
HEALTH CARE (MANAGEMENT AND DELIVERY)					
Average number of personal staff visits per MEDDAC per quarter by the Regional Coordinator or his staff in the interest of medical professionalism and standardization of health care delivery.	HSC	Quarterly	Minimum	C	No
Percent of supported installation commanders contacted by the Regional Coordinator for the purpose of determining their views on the effectiveness of health care.	HSC	Semiannually	Minimum	C,D	No
Ratio of HSC HQ actual strength to total HSC actual strength.	HSC	Annually	Minimum	C	No
The ratio of actual to authorized of the percents of medical professionals (doctors and nurses) who are not involved in the direct delivery of health care.	HSC	Annually	Minimum	C	Yes
The percent of HSC's annual funding program that is distributed to subordinate elements during the last two months of the fiscal year.	HSC	Annually	Minimum	C	No
The index of installation commander satisfaction with locally provided health services.	HSC	Annually	Substantial	A,C,D	No
The index of patient satisfaction with health care and its delivery.	HSC	Annually	Substantial	C	No
IMPROVED DA ANALYTICAL AND DECISION-MAKING SUPPORT					
The distribution of the fiscal year CAA work effort.	CAA	Annually	Minimum	C	No
The extent of actual utilization of CAA task products in support of high level Army decision making.	CAA	Annually	Substantial	C	No
The ratio of current assigned strength for CAA compared to July 1973 authorized TDA strength.	CAA	Annually	Minimum	C	No
The allocation and expenditure of CAA resources for modal improvement and development.	CAA	Annually	Minimum	C	No
The percent of total TMM work effort utilized in direct support of the HQ DA staff office to which CAA is assigned.	CAA	Annually	Minimum	C	No
"Slippage" from established schedules for tasks being performed by CAA.	CAA	Annually	Minimum	C	No
The ratio of study contract funds to total CAA costs.	CAA	Annually	Minimum	C	No
Tasking between CAA and other Army force/combat developers.	CAA	Annually	Moderate	B,C	No
The ratio of OTEA estimates of user testing cost requirements to actual test costs.	OTEA	Annually	Minimum	C	No
The percentage of test findings qualified by insufficient personnel, training, time, equipment, or instrumentation.	OTEA	Annually	Minimum	C	No
The effect of OTEA independent evaluations on decision making in the material acquisition process and the development of concepts, doctrine, and organizations.	OTEA	Annually	Moderate	C	No
The number of times statements based on other than findings of fact appear in test reports and evaluations.	OTEA	Annually	Moderate	C	No
The utility of the FYTP as a tool for managing resources for major and selected nonmajor systems OT, major FDTE, and joint user testing by OTEA.	OTEA	Biannially	Moderate	B,C	No
The adequacy of OTEA management (regulations, policies, procedures) and organization (structure, personnel, occupational specialities) for intercommand user-developer-tester coordination.	OTEA	Biennially	Moderate	B,C	No

Table 1 (continued)

Summary evaluation areas and measures	Applicable command/ agency	Reporting frequency	Estimated level of effort required	Related goals	Valid for pre-reorganization comparison
INSTALLATION MANAGEMENT					
Supply Division Fill Rate.	TRADOC & FORSCOM	Quarterly	Minimum	C,D	No
Maintenance Production/Backlog.	TRADOC & FORSCOM	Monthly	Minimum	C,D	No
Installation generated recruitment and reenlistment rates.	TRADOC & FORSCOM	Monthly	Minimum	C,D	Yes
The percent of MACOM's annual funding program that is distributed to subordinate elements the last two months of the fiscal year.	TRADOC & FORSCOM	Annually	Minimum	C,D	Yes
The percent of the installations' annual funding program that is obligated in the last thirty (30) days of the fiscal year.	TRADOC & FORSCOM	Annually	Minimum	C,D	Yes
The extent of modification (average number of changes) of installation resource contracts.	TRADOC & FORSCOM	Annually	Minimum	C,D	No
The release of unobligated funds by installations during the last two months of the fiscal year.	TRADOC & FORSCOM	Annually	Minimum	C,D	Yes
Percent of stock fund obligations to sales and stock fund obligations to demands.	TRADOC & FORSCOM	Quarterly	Minimum	C,D	Yes
Percent of pay changes rejected (JUMPS-Army status report).	TRADOC & FORSCOM	Quarterly	Minimum	C,D	Yes
Percent of financed requirements to total requirements for maintenance of real property.	TRADOC & FORSCOM	Annually	Minimum	C,D	Yes
Percent of minor construction (direct expenses) to maintenance of real property (MRP) (direct expenses).	TRADOC & FORSCOM	Quarterly	Minimum	C,D	Yes
Percent of occupancy of family housing	TRADOC & FORSCOM	Semiannually	Minimum	C,D	Yes

It will be noted that the summary evaluation plan contained in Table 1 lists only 63 of the 88 performance measures which make up the total evaluation plan. These 63 performance measures are recommended as the minimum number appropriate for a meaningful evaluation of the five commands and agencies. The additional 25 performance measures are included in the appendixes as recommended supplementary performance measures. Using these additional measures would add confidence and additional insights to the information provided by the essential measures contained in Table 1. These recommended supplementary performance measures are identified for each command and agency in Tables A.1, B.1, C.1, D.1, and E.1 of the appendixes.

Performance Measures

The individual performance measures can serve several purposes:

- Provide an indication of performance effectiveness in a specific area of concern.
- Be used in combination with other measures to develop an overall picture of effectiveness.
- Serve as the basis for identifying opportunities, formulating policy alternatives, and taking action with regard to the management, organization, and operation of activities designed to achieve the mission/function covered by the measure.

While most of the recommended measures are quantitative in nature, the plan does not attempt to aggregate the various kinds of information into a single score of effectiveness. This is not practical due to the magnitude and breadth of the activities covered. Moreover, it is not compatible with the use of the evaluation plan as a means for monitoring ongoing operations.

Appendixes A through E include the following detailed information on each performance measure: a full description of the measure, supporting data elements, data sources, current reporting status, the recommended collection frequency to support the evaluation, and suggested analytical procedures. Because there are a few performance measures that are qualitative in nature, Appendix F in Volume III includes a discusssion of sample surveys. their techniques and limitations. Appendix G, Volume III,

provides discussions and examples of trend analysis and comparative analysis—the primary analytical techniques to be used in support of the evaluation plan.

Reporting Frequency

About 68 percent of the essential measures are based on the reporting of data on an annual basis. Two related to Reserve Components support are one-time measures unless the initial results indicate the need for follow on evaluations. Except for these two, data collection should cover at least two years. It is possible that the Director of Management, Office of the Chief of Staff, United States Army, will choose to use several of the indicators as a permanent means of tracking operations in order to identify opportunities for improvements.

Fiscal year 1975 data should be used for the first iteration of the evaluation plan with no data collection before January 1975. This schedule is generally compatible with the times for measure established in an independent study sponsored by the Industrial College of the Armed Forces.[2] The schedule also allows ample time for final selection of measures, designation of personnel to conduct the evaluation, and finalization of integrated procedures based on using this plan and other means for the full assessment of effectiveness.

Levels of Effort

For purposes of this evaluation plan, levels of effort are defined as follows:

- Minimum - less than 2 technical man-months (TMM).
- Moderate - 2 to 6 TMM.
- Substantial - over 6 TMM.

[2] LTC Newell Vinson, USA, A Delphi Study: Assessing Army Reorganization - CONUS-1973, ICAF, 10 June 1974.

Approximately 76 percent of the recommended essential performance measures are estimated to require minimum levels of effort. This is possible because of the ready availability of the supporting data elements. Only 7 measures are estimated to require substantial efforts. In each case the importance of the measure is viewed to justify the resource expenditure required.

Pre-Reorganization Comparisons

The evaluation plan summary includes an indication of the validity of each of the performance measures for making comparisons with pre-reorganization performance. As indicated earlier, past performance under the former organizational framework is not the proper baseline for an evaluation that is primarily concerned with effectiveness now and in the future. On the other hand, if comparisons with the past are desired, the possibility exists for several areas as indicated in Table 1.

3 USES, LIMITS, AND POTENTIAL EXTENSIONS OF THE PLAN

USES OF THE EVALUATION PLAN

This assessment plan was specifically designed to have several uses. These include:

- To provide a substantive indication of the effectiveness of the Army in its reorganized form.
- To provide HQ DA and various Army levels with key indicators of the on-going effectiveness of the Army in performing its missions and functions.
- To serve as a foundation for taking corrective actions in response to deficiencies in Army performance or changes in the Army's operational environment.

Detailed command/agency reviews on a task-by-task basis during the phased development of the evaluation plan helped to insure the plan's utility. During these reviews particular emphasis was placed on the:

- Comprehensiveness of coverage, including organizational changes, resulting interactions, and areas for measurement versus command/agency missions.
- Validity, measurability, reliability, and comprehensiveness of the associated performance measures.

The utility of the evaluation plan to measure the accomplishment of the Reorganization goals is demonstrated in Appendix I. Using informally collected data to test selected performance measures, a preliminary assessment is developed. These data are supplemented by information gained by the study team through interviews, briefings, and discussions durings its contacts with over 300 representatives of the commands and agencies involved.

The sponsor of the study to develop the evaluation plan has been the Director of Management, Office of the Chief of Staff. It is anticipated that the agency responsible for implementing the plan also will be at the HQ DA level. The plan has been designed to meet the information requirements of decision makers at that level.

It is also true that the broad management concerns, and the specific measurement areas and performance measures, contained in the evaluation plan will be of interest to managers at other levels within the Army. Moreover, the collection of information will require the cooperation and participation of many of the Army's commands and agencies. It is reasonable to expect that the information developed through this plan to measure organizational effectiveness and assess trends in performance will have applications beyond those of the principal user, HQ DA.

LIMITS OF THE PLAN

Although highly versatile in its uses, the plan does have limitations. Principal among these are:

- The several external variables that can affect the performance of each command and agency. The organizations whose performance is to be evaluated can not, for example, control changes in Congressional or DOD policies and resource decisions. Detailed lists of such variables as they affect each of the commands and agencies are found in Annexes A.2, B.2, C.2, D.2, and E.2.

- The narrow scope of the plan, focusing on only five of the commands and agencies affected by the Reorganization of 1973. This has meant that the plan could not address fully the crucial issues of the interactions and interrelationships between the affected organizations and other commands, agencies, and offices. For example, both readiness and training are subject to many factors determined at HQ DA and AMC. Issues such as personnel policy formulation and operation of the wholesale supply systems were not included. Inevitably, the scope of the plan neglects some key aspects of Army operations.

- The conciseness of the plan, providing key performance measures rather than a description of the total system. Conciseness is a major virtue of the evaluation plan in that it permits Army managers to pinpoint trends in areas of major concern without a large expenditure of

time and resources. But conciseness has its limitations. Principally, this means that the information provided by the plan will not always contain final answers. The information frequently must be interpreted within the context of current demands and situations affecting the ability of the various commands and agencies to manage as desired. While the performance measures reflect the most important and significant aspects of organizational performance (within the limits noted here), they do not always provide definitive indications of the effectiveness of performance. Rather they point to areas where further investigation may be required, where modifications in operating procedures may be considered, and where future, more detailed, evaluation efforts may be directed.

POTENTIAL EXTENSIONS OF THE PLAN

Any decision to actively assess performance involves a resource allocation decision along with a decision regarding the necessity of the assessment information involved. Therefore, the decision of whether or not to extend this plan to include additional Army entities and/or measures must be made by weighing the potential value of information to be obtained from assessment activities against the resources required to implement those activities. The proposed/present performance measures are all viewed as having high utility. Close attention was paid to the resource requirements of the measures, resulting in an evaluation plan utilizing existing data collecting systems wherever possible. If the intended benefits of improved management capability are realized and extension of this evaluation plan is desired, Army managers will want to consider two other areas:

- The measurement and assessment of the performance of Army entities not presently included in the assessment plan, especially the Army Staff and the Army Materiel Command.
- The development of additional performance measures to supplement the proposed performance measures, particularly in the areas of individual training, combat and force developments, and unit training.

Appendix A

DETAILED ASSESSMENT PLAN FOR

TRAINING AND DOCTRINE COMMAND

Appendix A

DETAILED ASSESSMENT PLAN FOR
TRAINING AND DOCTRINE COMMAND

MISSION REFERENCES

Detailed information on the missions and functions of the Training and Doctrine Command (TRADOC) is contained in:

- DA AR 10-41, 27 June 1973.
- TRADOC Regulation 10-41, 15 August 1973.
- TRADOC Regulation 10-5, 25 June 1974 (draft).

SELECTED AREAS FOR MEASUREMENT

Measurements in the seven areas listed below are necessary to assess TRADOC's overall mission performance:

Measurement Area 1: Management of Training Programs and Resources. Meeting the Army's training requirements demands continuous management attention to effective allocation of resources to program objectives and their efficient use. TRADOC's capability to control resources and direct them to recognized training needs affects the overall quality of training programs.

Measurement Area 2: Conduct of Individual Training. Producing individuals in sufficient numbers who can perform on the job is the basic purpose of TRADOC's training activities. The Army relies on TRADOC's service schools and training centers to provide effective training enabling individuals with varied backgrounds and skills to meet acceptable performance standards.

Measurement Area 3: Conduct of Army-wide Training Support. Support for training throughout the Army is an essential complement to TRADOC's institutional training of individuals in schools and training centers. Army-wide training support covers an expansive range of situations and

related training requirements with the single common theme of keeping all segments of the Army informed and trained in up-to-date doctrine.

Measurement Area 4: Management of the ROTC Program. The ROTC program is critical to the flow of new, well-qualified Army officers. Assuring that this resource is maintained both in quality and quantity is one of TRADOC's principal responsibilities.

Measurement Area 5: Management and Conduct of Assigned Combat Developments. The management of combat developments is a problem-solving activity for the crucial areas of doctrine, materiel, and TOE organizations. TRADOC's responsibilities in this area require a capability to define problems of genuine importance and to then develop coordinated, meaningful solutions to those problems.

Measurement Area 6: Coordination and Integration of the Total Combat Development Effort of the Army. As the Army's principal combat developer, TRADOC stands at the center of many varied activities at many stages of maturity within the force/combat development process. Maintaining a comprehensive, timely grasp on all these activities is one of TRADOC's greatest challenges.

Measurement Area 7: Installation Management. Supporting all of TRADOC's mission activities are the basic logistical, supply, and maintenance functions performed by installations. Competent and responsive installation management has significant impact on TRADOC's mission accomplishment and the readiness of FORSCOM units supported. This measurement area considers a number of key aspects of installation operation and management.

ASSESSMENT PLAN SUMMARY

Table A.1 summarizes the assessment plan for TRADOC. The individual performance measures to be used in the assessment are specified for each of the areas selected for measurement. Detailed information on each of the performance measures is contained in Annex A.1. This information includes: a description of the measure, supporting data elements, data sources, current reporting status, the recommended collection frequency to support the evaluation, and analytical procedures (method of analysis and level of effort required).

Table A.1

ASSESSMENT PLAN SUMMARY: TRADOC

Performance areas and measures	Minimum essential			Recommended supplement		
	Data available	New report	Special analysis	Data available	New report	Special analysis
Measurement Area 1: Management of Training Programs and Resources						
Performance Measures						
1.1 The ratio of current assigned strength for HQ TRADOC (less DCSCD and DCSROTC) compared to July 1973 authorized TDA strength.	X					
1.2 Costs (adjusted for inflation) per actual student/trainee.	X					
1.3 Critical MOS shortages compared to training loads (DA-programmed and actual) by MOS.	X		X			
1.4 The percents of average daily School/ATC in-training loads (DA- and TRADOC-programmed) attained.	X					
1.5 The percent of student population not enrolled in courses.	X					
1.6 The average cost per trainee of Accession Overland Travel-Enlisted (MPA).	X					
1.7 Average length of time between date individuals (Active Army) report at point of entry for active duty and the date that they report for first permanent duty assignment trained in selected MOS.					X	X
Measurement Area 2: Conduct of Individual Training.						
Performance Measures						
2.1 The quality of service school instruction as demonstrated by on-the-job performance of recent graduates.			X			
2.2 Standards attained by students/trainees on performance-based tests or MOS tests.					X	X
Measurement Area 3: Conduct of Army-wide Training Support						
Performance Measures						
3.1 The average number of months required for the introduction of new doctrine.	X		X			

Table A.1 (continued)

Performance areas and measures	Minimum essential			Recommended supplement		
	Data available	New report	Special analysis	Data available	New report	Special analysis
3.2 The percent of service school faculty man-years devoted to support of collective (unit) training.		X	X			
Measurement Area 4: Management of the ROTC Program						
Performance Measures						
4.1 The percent of achievement in filling the Army's annual requirements (Active and Reserve) for second lieutenants.	X					
4.2 The ratio of the combined current assigned strength for TRADOC DCSROTC and the four ROTC Region Headquarters compared to the July 1973 authorized TDA strengths for these activities.	X					
4.3 Percent of total cadets commissioned through the Senior ROTC Program that are female or minority cadets.	X					
4.4 The percent of retention through commissioning of Senior ROTC cadets awarded scholarship assistance.	X					
4.5 The ratio of assigned supervisory Region Deputy Commanders to numbers of Senior ROTC instructor groups.				X		
4.6 The average cost of recruiting and information activities (OMA) per new Senior ROTC enrollee.				X		
Measurement Area 5: Management and Conduct of Assigned Combat Developments						
Performance Measures						
5.1 The ratio of the combined assigned strength of HQ TRADOC DCSCD and the CACDA, PACDA, and LOGC to the July 1973 authorized TDA strengths for these activities.	X					
5.2 The production of Required Operational Capability (ROC) documents.	X					
5.3 The percent of total annual combat developments tasks (programmed and unprogrammed) accomplished.		X	X			

Table A.1 (continued)

Performance areas and measures	Minimum essential			Recommended supplement		
	Data available	New report	Special analysis	Data available	New report	Special analysis
5.4 The evaluated capability of common scenarios and the "SCORES" methodology to coordinate and support TRADOC combat developments efforts.					X	X
Measurement Area 6: Coordination and Integration of the Total Combat Development Effort of the Army						
Performance Measure						
6.1 The extent of "slippage" of more than two weeks from established ASARC/DSARC/IPR schedules for combat and force developments tasks being performed and/or coordinated by TRADOC.		X	X			
Measurement Area 7: Installation Management						
Performance Measure						
7.1 Supply Division Fill Rate.	X					
7.2 Maintenance Production Backlog.	X					
7.3 Installation generated recruitment and reenlistment rates.	X	X				
7.4 The percent of TRADOC's annual funding program that is distributed to subordinate elements the last two months of the fiscal year.	X					
7.5 The percent of the installations' annual funding program that is obligated in the last thirty (30) days of the fiscal year.	X					
7.6 The extent of modifications (average number of changes) of installation resource contracts.	X					
7.7 The release of unobligated funds by installations during the last two months of the fiscal year.	X					
7.8 Percent of stock fund obligations to sales and stock fund obligations to demands.	X					
7.9 Percent of pay changes rejected (JUMPS-Army status report).	X					

Table A.1 (continued)

Performance areas and measures	Minimum essential			Recommended supplement		
	Data available	New report	Special analysis	Data avsilable	New report	Special analysis
7.10 Percent of financed requirements to total requirements for maintenance of real property.	X					
7.11 Percent of minor construction (direct expenses) to maintenance of real property (direct expenses).	X					
7.12 Percent of occupancy of family housing.	X					
7.13 The ratio of current assigned strength compared to July 1973 authorized TDA strength for TRADOC installation garrisons.				X		

Table A.1 also classifies each performance measure into one of two categories, i.e., performance measures considered as minimum essential to the assessment and those that are recommended to provide important supplementary support for the essential measures. Within each category and for each measure there is indication as to whether the data are already available, a new report is required, or a special analysis of some type is needed.

RELATIONSHIPS OF PERFORMANCE MEASURES TO THE GOALS OF THE CONUS REORGANIZATION 1973

In table A.2 the TRADOC performance measures are cross-referenced with the four major goals of the CONUS Reorganization 1973.

EXTERNAL VARIABLES

Major external variables that can impact on the performance of TRADOC are contained in Appendix A.2.

Table A.2

RELATIONSHIPS OF TRADOC PERFORMANCE MEASURES TO REORGANIZATION GOALS

Performance areas and measures	Reorganization goals			
	A	B	C	D
Measurement Area 1: Management of Training Programs and Resources				
Performance Measures				
1.1 The ratio of current assigned strength for HQ TRADOC (less DCSCD and DCSROTC) compsred to July 1973 authorized TDA strength.			X	
1.2 Costs (adjusted for inflstion) per actual student/trainee.			X	
1.3 Critical MOS shortages compared to training loads (DA-programmed and actual) by MOS.			X	
1.4 The percents of average daily School/ATC in-training loads (DA- and TRADOC-programmed) attsined.			X	
1.5 The percent of student population not enrolled in courses.			X	
1.6 The average cost per trainee of Accession Overland Trsvel-Enlisted (MPA).			X	
1.7 Average length of time between date individuals (Active Army) report at point of entry for active duty and the date that they report for first permanent duty assignment trained in selected MOS.			X	
Measurement Ares 2: Conduct of Individual Training.				
Performance Measures				
2.1 The quality of service school instruction as demonstrated by on-the-job performance of recent graduates.		X	X	
2.2 Standards attained by students/trainees on performance-based tests or MOS tests.		X	X	
Measurement Area 3: Conduct of Army-wide Training Support				
Performance Measures				
3.1 The average number of months required for the introduction of new doctrine.		X	X	
3.2 The percent of service school faculty man-years devoted to support of collective (unit) training.		X	X	

Table A.2 (continued)

Performance areas and measures	Reorganization goals			
	A	B	C	D
Measurement Area 4: Management of the ROTC Program				
Performance Measures				
4.1 The percent of achievement in fiiling the Army's annual requirements (Active and Reserve) for second lieutenanta.			X	
4.2 The ratio of the combined current aasigned strength for TRADOC DCSROTC and the four ROTC Region Headquarters compared to the July 1973 authorized TDA strengths for these activities.			X	
4.3 Percent of the cadets commissioned through the Senior ROTC Program that are females or minority cadets.			X	
4.4 The percent of retention through commiasioning of Senior ROTC cadets awarded scholarship assistance.			X	
4.5 The ratio of assigned supervisory Region Deputy Commandera to numbers of Senior ROTC instructor groups.			X	
4.6 The average cost of recruiting and information activities (OMA) per new Senior ROTC enrollee.			X	
Measurement Area 5: Management and Conduct of Assigned Combat Developments				
Performance Measures				
5.1 The ratio of the combined assigned strength of HQ TRADOC DCSCD and the CACDA, PACDA, and LOGC to the July 1973 authorized TDA strengths for these activities.		X	X	
5.2 The production of Required Operational Capability (ROC) documents.		X	X	
5.3 The percent of totai annuai combat developments taska (programmed and unprogrammed) accompiished.		X	X	
5.4 The evaiuated capability of common scenarios and the "SCORES" methodology to coordinate and support TRADOC combat developments efforts.		X	X	
Measurement Area 6: Coordiuation and Integration of the Total Combat Deveiopments Effort of the Army				
Performanc. Measures				
6.1 The extent of "siippage" of more than two weeks from estabiished ASARC/DSARC/IPR schedules for combat and force developments tasks being performed and/or coordinated by TRADOC.		X	X	

Table A.2 (continued)

Performance aress and measures	Reorganization goals			
	A	B	C	D
Measurement Area 7: Instaliation Management				
Performance Measures				
7.1 Supply Division Fill Rate.			X	X
7.2 Maintenance Production Backlog.			X	X
7.3 Installation genersted recruitment and reenlistment rates.			X	X
7.4 The percent of TRADOC's annual funding program that is distributed to subordinste elements in the last two months of the fiscal year.			X	X
7.5 The percent of the instsllstions' annual funding program that is obligated in the lsst thirty (30) days of the fiscal year.			X	X
7.6 The extent of modification (average number of changes) of instsllstion resource contracts.			X	X
7.7 The release of unobligated funds by instsllations during the last two months of the fiscal year.			X	X
7.8 Percent of stock fund obligations to ssles and stock fund obligations to demands.			X	X
7.9 Percent of pay changes rejected (JUMPS-Army status report).			X	X
7.10 Percent of financed requirements to total requirements for maintenance of real property.			X	X
7.11 Percent of minor construction (direct expenses) to maintenance of resl property (direct expenses).			X	X
7.12 Percent of occupancy of family housing.			X	X
7.13 The ratio of current assigned strength compared to July 1973 authorized TDA strength for TRADOC installation garrisons.			X	X

Annex A.1

DETAILS OF SELECTED PERFORMANCE MEASURES

TRAINING AND DOCTRINE COMMAND

PERFORMANCE MEASURE

1.1 The ratio of current assigned strength for HQ TRADOC (less DCSCD and DCSROTC) compared to July 1973 authorized TDA strength.

DESCRIPTION

Reduction in overhead was one of the motivating factors of the Reorganization. This measure will track increases or decreases in the headquarters manpower resources, with the emphasis placed on support for TRADOC's training mission. It is assumed that the bulk of headquarters level personnel support TRADOC's training mission. Therefore only those offices (DCSCD and DCSROTC) specifically addressed by other performance measures, in other areas, are omitted from this measure. The baseline for comparison is the July 1973 authorized TDA developed in accordance with TRADOC's original intended functions and workload. It is understood that changes in both authorized and assigned strength can occur for many reasons. It is also understood that changes in mission, functions, and/or workload are not always reflected in changes in strength. The purpose of this measure is simply to focus management attention on the factor of headquarters manpower size relative to the training mission.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Total current assigned strength for HQ TRADOC (less DCSCD and DCSROTC)	TRADOC DCSPER records	X		Annually
2. Total July 1973 authorized TDA strength for HQ TRADOC (less DCSCD and DCSROTC)	TRADOC DCSRM records	X		Annually

DATA ANALYSIS

The desired ratio can be constructed easily from the data elements, the second of which remains constant as the denominator for all comparisons with current assigned strength. Presumably the ratio would be supported by a narrative analysis provided by HQ TRADOC, identifying

related changes, if any, in TRADOC missions, functions, and/or organization affecting assigned strength. Trend analysis would be used to monitor for unfavorable shifts.

LEVEL OF EFFORT REQUIRED

Minimal effort will be required from HQ TRADOC DCSPER and DCSRM to provide this measure.

PERFORMANCE MEASURE

1.2 Costs (adjusted for inflation) per actual student/trainee.

DESCRIPTION

This measure provides a gross measure of dollar resources available per student/trainee, using fiscal year 1974 as a baseline. OMA costs are provided by individual purpose (mission) as well as in total. MPA costs are provided to measure military support and also to help track the impacts of civilianization programs. Costs per student/trainee provide no information about program quality. However, the measure does provide a resource status baseline against which proposed program benefits can be assessed according to their potential impact on overall dollar costs. It is recognized that individual schools and training centers will vary greatly in their per student/trainee costs, depending on differences in such things as physical plants, complexity of instruction, student/trainee loads, and student/trainee availability.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. School data: a. OMA per student b. MPA per student c. Total per student	TRADOC DCSRM 159 report	X		Annually
2. Training Center Data: a. OMA per trainee b. MPA per trainee c. Total per trainee	TRADOC DCSRM 159 report	X		Annually

DATA ANALYSIS

On a gross basis, trends in the cost factors provide an indication of TRADOC's mangement of training resources. Comparative analysis by HQ TRADOC among the individual service schools and training centers will pinpoint specific opportunities for improvement.

LEVEL OF EFFORT REQUIRED

Minimal effort will be required from HQ TRADOC DCSRM to provide this measure.

PERFORMANCE MEASURE

1.3 Critical MOS shortages compared to training loads (DA-programmed and actual) by MOS.

DESCRIPTION

DA DCSPER and MILPERCEN rather than TRADOC are responsible for the identification of specific MOS training requirements and for the identification of Career Management Fields and Sub-fields where critical shortages exist. TRADOC receives DA-programmed trainee/student loads and must be prepared to provide training and instruction. In practice, actual student loads frequently fall well below programmed loads. Also in practice, an individual MOS may be defined as "critical" for a very brief period of time (perhaps a month or two) because of an unanticipated delay in scheduling a particular course or because of an unanticipated failure of MOS qualified personnel to reenlist. This measure, by following MOS shortages over time and as skill clusters (Fields and Sub-fields), is designed to identify persistent, chronic problem areas. By following the relationships between these persistent shortages and their associated training loads, the measure is designed to focus on the interrelationship of TRADOC's training establishment with DA planning and programming.

The definition of "critical" MOS shortages is in accordance with AR 600-200: shortages having an adverse effect on the Army's mission and requiring formalized training including instructors and appropriate equipment.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. DA-programmed trainee/student loads: a. "critical" shortage MOSs b. persistent shortage Career Management Fields	DA DCSPER COPO-45, Part 14	X		Annually

(cont'd)

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
2. Actual filled trainee/student loads:	DA DCSPER COPO 45, Part 14			
a. "critical" shortage MOSs		X		Annually
b. persistent shortage Career Management Fields		X		Annually

DATA ANALYSIS

The selection of "critical" MOSs from among those in shortage must be left to the discretion of MILPERCEN and DA DCSPER. Only critical shortages existing for more than six months out of the fiscal year should be included. Career Management Fields showing persistent shortages over a period of one year would be included from the total of 39 Fields. Recent back issues of COPO-45, Part 14, would have to be consulted as that document covers only a six month period. Percentages of fill (Actual/Programmed) can be computed directly from the elements. Repeated programmed shortages should be investigated as to the capability of TRADOC's training base to train the required loads and to a possible need for restructuring the MOS career field or changing MOS course entrance requirements so that units must not operate with critical shortages. Repeated actual shortages should be investigated to determine the extent that TRADOC influences them by actions such as course cancellations, course rescheduling, course entrance requirements, or unusual failure rates. Analysis should be made of individual service school performance by HQ TRADOC to identify specific opportunities for improvement.

LEVEL OF EFFORT REQUIRED

Minimal effort will be required from MILPERCEN (Resources Planning Division) to provide this measure.

PERFORMANCE MEASURE

1.4 The percents of average daily School/ATC in-training loads (DA- and TRADOC-programmed) attained.

DESCRIPTION

This measure is included as a means of monitoring actual in-training loads in comparison to DA and TRADOC programmed loads, particularly important since training loads are a principal workload indicator. Gaps between programmed and actual loads reflect proportionate gaps in resource commitments, leading to the possibility of chronic overstaffing where programmed loads are rarely approached. Trends in the differential between DA and TRADOC programming will also provide insight into the degree of resource flexibility found in the training area. Student/trainee availability has a major impact on costs.

SUPPORTING DATA

Elements	Source	Currently reported Yes	No	Collection frequency
1. Army Training Centers	TRADOC	X		Annually
a. DA Program load	DCSTS			
b. TRADOC Program load				
c. Actual load				
2. TRADOC Schools	TRADOC	X		Annually
a. DA Program load	DCSTS			
b. TRADOC Program load				
c. Actual load				

DATA ANALYSIS

Dividing element 1c by 1a and 1b will provide the percents of achievement of DA and TRADOC programmed training center loads, respectively. Dividing element 2c by 2a and 2b will provide the same type of information for service schools. In addition to trend analysis over time for TRADOC performance as a whole, HQ TRADOC should make separate analyses for the individual service schools and training centers to identify opportunities for changes in programmed workloads, resource allocations, or procedures.

LEVEL OF EFFORT REQUIRED

Minimal effort is required from TRADOC DCSTS to provide this measure as it is being used now as an indicator in TRADOC's Command Performance Summary.

PERFORMANCE MEASURE

1.5 The percent of student population not enrolled in courses.

DESCRIPTION

This measure reflects manpower utilization as it is affected by the scheduling of instructional programs. The measure provides some insight into the costs of removing trained manpower from duty assignments and the costs of delaying the preparation of new accessions for their first duty assignments. The measure includes both officer and enlisted student populations. In addition to the costs of removing these individuals from productive roles (whether as active students or permanent party), the maintenance of nonenrolled students adds to the overhead support costs of schools and their respective installations.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. TRADOC School population	TRADOC DCSTS	X		Annually
2. Number enrolled in courses	TRADOC DCSTS	X		Annually

DATA ANALYSIS

The measure is computed by dividing element 2 by element 1 and subtracting the resulting percent from 100. Trend analysis over time will provide some indication of the overall management of the training program. Analysis should be made by HQ TRADOC for the individual service schools and training centers to identify opportunities for improvement.

LEVEL OF EFFORT REQUIRED

Minimal effort is required from TRADOC DCSRM to provide this measure as it is being used now as an indicator in TRADOC's Command Performance Summary.

PERFORMANCE MEASURE

1.6 The average cost per trainee of Accession Overland Travel-Enlisted (MPA).

DESCRIPTION

This is one of two measures aimed at monitoring the benefits of the one-station training (OST) concept. The reduction of travel related to BCT-AIT School training cycles should result in substantial cost savings adjusting for inflation. This measure, drawn in part from the Army Management Structure (Project 1412), covers the travel of enlisted personnel from home of record or place from which ordered to active duty to first CONUS permanent duty assignment. The measure includes all submoves between point of entry on active duty and first permanent duty assignment. Dividing this figure by the number of trainees will control for variations in manpower while still reflecting on a gross basis the impact of the OST operation on travel costs. Trainees are defined by the number of individuals attending Basic Combat Training (BCT) during the fiscal year.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Cost of accession overland travel—enlisted (MPA-Army Management Structure Code 1412.0000)	DA COA	X		Annually
2. Total number of trainees in BCT during fiscal year	TRADOC DCSTS	X		Annually

DATA ANALYSIS

The measure requires only the computation of a mean (average) cost using the two readily available figures. Adjusting for inflation, trends over time should be downward from Fiscal Year 1974 costs.

LEVEL OF EFFORT REQUIRED

Minimal effort will be required from HQ TRADOC DSCRM to provide this measure.

PERFORMANCE MEASURE

1.7 Average length of time between date individuals (Active Army) report at point of entry for active duty and the date that they report for first permanent duty assignment trained in selected MOS.

DESCRIPTION

This is one of two measures aimed at monitoring the one-station training (OST) concept. The implementation of the OST concept should result in some savings on the total time required to place individuals in their first permanent duty station, allowing for completion of BCT, AIT, and/or service school preparation for an MOS position. Savings should result from reductions of travel time, delays due to class scheduling, in/out processing, and other administrative bottlenecks associated with multi-station training. It is recognized that changes in this measure are almost entirely beyond the control of TRADOC and that delays in transition time may frequently be traced to the coordination of MILPERCEN with TRADOC elements.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Date of entry into Active Army	Individual 201 File	X		Annually
2. Date of reporting for first permanent duty assignment	Individual 201 File	X		Annually

DATA ANALYSIS

The computations required for this measure are uncomplicated but time-consuming. The two essential dates may be taken from the personnel file of newly trained individuals who have recently reported to their first permanent duty stations. The total number of days elapsed may be derived from these two dates. Using a sufficiently large random sample of individual cases, an average figure may be computed. A somewhat more meaningful analysis would use the same sample of days elapsed to compute a mean (average), median, and standard distribution. Initial efforts should concentrate on the high density MOSs affected by the OST concept.

LEVEL OF EFFORT REQUIRED

Neither TRADOC nor HQ DA maintain records appropriate for this measure. In order to develop data identifying the dates of entry and dates of reporting for first permanent duty station for a large group of individual accessions into the Active Army, it will be necessary for individual reviews of personnel files. These could be done by the units concerned, designated auditors at installations, an ad hoc group established for this purpose, Army Audit Agency or IG representatives, or some other independent review source. A substantial level of effort would be required.

PERFORMANCE MEASURE

2.1 The quality of service school instruction as demonstrated by the on-the-job performance of recent graduates.

DESCRIPTION

The ultimate purpose of individual training conducted by TRADOC is to produce individuals who are capable of performing their assigned duties in an effective manner. The training facilities' role in this process is conditioned by many assumptions, including such crucial ones as: (1) the individuals that are trained meet minimum ability criteria, (2) trained individuals are assigned to jobs in which their skills will be utilized, and (3) the skills exhibited on the job by these individuals were learned as a result of service school instruction and further developed through unit experience and training. On-the-job performance also is conditioned by the attitude and motivation of individuals and, possibly, locally unit/mission unique factors. This measure employs survey methods to assess, on a sample basis, the actual performance of service school graduates in appropriate MOS positions within 3-6 months of their graduation from MOS-producing courses. Samples of both immediate job supervisors and the graduates themselves will be analyzed for their perceptions of the appropriateness of training to job requirements. It is expected that the sample survey approach will enable analysts to separate unit-unique criticisms from more basic and widespread concerns related to training.

Those MOSs that are awarded as the result of AIT in training centers are generally the less complex ones. They are equally important to the Army's functioning; however, in view of the need for economy and to curtail workload, formalized surveys and reporting on these MOSs are not proposed. Instead, reliance is placed on the less formalized evaluative procedures presently in use by the Army. These include: liaison visits by training center commanders to field units; visits by HQ DA and HQ TRADOC representatives to field units; interviews and visits related to the ongoing review of the enlisted personnel management system; and user feedback of suggested changes to programs of instruction (using DA Form 20-28 per AR 310-1). Should future developments indicate the desirability of a more structured evaluation process, the survey approach used for school MOS-producing courses appears appropriate.

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
(Relevant survey issues)				
1. Rated capabilities of recent graduate to meet job requirements	Sample of recent course graduates (3-6 months) and their immediate job supervisors		X	Annually
2. Identification of positive and negative aspects of school instruction affecting performance			X	Annually
3. Identification of unit/ mission unique factors affecting performance			X	Annually

DATA ANALYSIS

Comparative analysis should be made of the survey results by MOS. The analysis should center on those MOSs in which the overall rated performance is unsatisfactory. The survey results are of interest to DA because of TRADOC's responsibility for training of individuals who serve Army-wide and because of the overall impacts of personnel MOS qualification on military readiness of Active and Reserve Components units. The HQ TRADOC analysis should be on a course-by-course basis to identify need for changes in course content or length or revisions of course entrance requirements. Possibilities for improvement in the transition and orientation phase when graduates arrive at specific job assignments also may be identified.

LEVEL OF EFFORT REQUIRED

Substantial effort will be required. Responsibiity for the evaluations under this performance measure should be decentralized to the respective service schools. Inasmuch as TRADOC Regulation 351-3, para 2-2b(2), currently requires evaluation of MOS-producing courses, this does not represent an additional workload for the schools. Annual reporting to HQ TRADOC and HQ DA would be on a "management by exception basis" thereby minimizing reporting requirements.

PERFORMANCE MEASURE

2.2 Standards attained by students/trainees on performance-based tests or MOS tests.

DESCRIPTION

This measure seeks to identify in some degree the actual contribution of TRADOC conducted training to the skill levels of students by measuring what was added to students' knowledge through participation in the training programs. Standardized Army MOS tests or skill performance tests, if available, are administered to students at the beginning and upon conclusion of selected courses in order to provide a measure of learning. The results also furnish some indication of the adequacy of the contents of TRADOC's courses and the quality of instruction.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Precourse test performances for sample of students	Survey of selected courses		X	Annually
2. Postcourse test performances for the same sample of students	Survey of selected courses		X	Annually

DATA ANALYSIS

Results of testing prior to training (element 1) will be compared to results of testing following training (element 2). Analysis should center on any learning areas that reflect little progress. The survey results are of interest to DA because of TRADOC's responsibility for training of individuals who serve Army-wide. Also, changes in DA policies—for example, on recruitment, civilian acquired skills, or educational levels—could be signaled by the survey results. The HQ TRADOC analysis should be on a course-by-course basis to identify need for possible changes such as a restratification of skill levels, alteration of course content or length, or revision of course entrance requirements.

Evaluations using this performance measure could be reenforced by the less formalized evaluative procedures presently in use by the Army. These include: liaison visits by service school and training center commanders to field units; visits by HQ DA and HQ TRADOC representatives to field units; interviews and visits related to the on-going review of the enlisted personnel management system; and user feedback of suggested changes to programs of instruction (using DA Form 20-28 per AR 310-1).

LEVEL OF EFFORT REQUIRED

Substantial effort will be required. The use of MOS tests, existing performance-based tests, or other performance-oriented tests that may result from the Army's ongoing enlisted personnel management system (EPMS) review will considerably reduce the effort required for this measure. The sample tests should be administered by the individual schools and training centers, with the results reported to HQ TRADOC annually.

PERFORMANCE MEASURE

3.1 The average number of months required for the introduction of new doctrine.

DESCRIPTION

The Army-wide Training Literature Program is the principal means of disseminating new doctrine throughout the Army. This measure will monitor one crucial phase of the doctrine development and dissemination process. This will be done by maintaining a relatively simple record of time taken to transform approved concepts into the several publication formats appropriate for the timely dissemination of doctrine. Where speed of dissemination is essential, the publication of a training circular, a TRADOC Bulletin, or some comparable document may be a crucial step, and the publication of a thoroughly reviewed field manual may prove to be a relatively unimportant, although official, event. Because TRADOC is presently reviewing and reorganizing the training literature process, the present official publications are used in this measure only to suggest principal types. They could be replaced with other publication classifications when developed.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Date of project approval: a. DA Pamphlet b. Training Circular c. Technical Manual d. Field Manual e. ARTEP f. TRADOC Bulletin	TRADOC DCSTS Army-wide Training Literature records; DCSCD studies and field experimentations	X		Annually
2. Date of project publication: a. DA Pamphlet b. Training Circular c. Technical Manual d. Field Manual e. ARTEP f. TRADOC Bulletin		X		Annually

DATA ANALYSIS

For each level of publication all projects completed during the fiscal year will be organized according to the date of initial project approval (element 1). This date will be compared to the date of actual publication (element 2) and the difference will be computed. The mean (average) of these differences in time will be computed, producing six individual measures for the six major types of publications. Because of the worldwide implications DA and other MACOMs as well as TRADOC are concerned about the results. Trend analysis will provide for monitorship of this important TRADOC function and should reflect shortened time spans as TRADOC's experience grows and its procedures are refined.

LEVEL OF EFFORT REQUIRED

Moderate effort will be required from TRADOC DCSTS's Army-Wide Training Support Division to develop this measure as the data elements will have to be produced manually. The work effort could be reduced to a minimal level if the two dates required and the various computing steps were incorporated into the computer printout of the TRADOC portion of the fiscal year Army-Wide Training Literature Program.

PERFORMANCE MEASURE

3.2 The percent of service school faculty man-years devoted to support of collective (unit) training.

DESCRIPTION

TRADOC has now placed a high priority and increased emphasis on assisting units in achieving an improved readiness posture through the production of new Army Training and Evaluation Programs (ARTEP) and other publications such as training circulars (TC) which support the ARTEP. In addition to this program development, service school staffs also participate directly in the training of units in the field and at service schools. This measure monitors this involvement in unit training through a workload analysis describing the extent of faculty man-years in unit-related activities. The measure relies on detailed school records for a data-sampling survey effort.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Service school faculty man-years devoted to support of collective (unit) training, through: a. school platform hours b. mobile training team time c. unit training literature development d. OJT literature development e. ARTEP development	Service school records (selected sample)		X	Annually
2. Total service school faculty man-years available	TRADOC DCSTS service school records	X		Annually

DATA ANALYSIS

Percents can be computed for each type of support (elements 1a to 1e) by dividing by element 2. This basic breakdown of faculty time spent on various activities related to unit training will give Army managers a sense of the scope of service school support to this program that is vital to readiness. The particular emphasis of that participation will also be given visibility, permitting more informed program planning at HQ DA and HQ TRADOC levels. Because of the worldwide impacts of this support, other MACOMs are obviously concerned about the results. Trend analysis would provide for monitorship of unit training support over time.

LEVEL OF EFFORT REQUIRED

Substantial effort will be required to develop and provide this measure because of the detailed accounting required to produce this measure. Once the data are collected, however, further analysis should prove simple, and will enable comparisons among schools according to the extent and direction of their involvement with unit training. Data for this measure will have to be collected at the service schools themselves. This accounting effort should be limited to the Infantry, Armor, Artillery, Air Defense, Signal, Engineer, and Quartermaster schools. The measure should be developed and implemented by an independent office within HQ TRADOC or HQ DA or by some other independent review source.

PERFORMANCE MEASURE

4.1 The percent of achievement in filling the Army's annual requirements (Active and Reserve) for second lieutenants.

DESCRIPTION

The basic, underlying goal of the ROTC program is to obtain well-educated and dedicated commissioned officers in sufficient numbers to meet both the Active Army and Reserve Components requirements. This measure, therefore, is the most direct assessment of the program's effectiveness, irrespective of impinging conditions within or beyond the control of ROTC managers. Officer requirements are determined at HQ DA. The ROTC requirement, in effect, becomes a management goal guiding the planning and organization of all program activities, from recruiting and information campaigns to the development of curricula and the preparation and conduct of summer training: all designed to recruit, retain, and commission second lieutenants.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. HQ DA requirement for second lieutenants (Active Army and Reserve Components)	DA DCSPER records	X		Annually
2. ROTC graduates commissioned (Regular Army and USAR)		X		

DATA ANALYSIS

The desired percentage figures can be easily computed by dividing element 2 by element 1. Trends over time is an overall indicator of the program's effectiveness.

LEVEL OF EFFORT REQUIRED

Minimal effort will be required of DA DCSPER, Office of Military Personnel Management in order to provide this measure.

PERFORMANCE MEASURE

4.2 The ratio of the combined current assigned strength for TRADOC DCSROTC and the four ROTC Region Headquarters compared to the July 1973 authorized TDA strengths for these activities.

DESCRIPTION

The Reorganization was designed to improve the administration of the ROTC Program while reducing the number of personnel assigned to administrative-type positions overall for Army programs within CONUS. This measure will track increases or decreases in the headquarters level manpower resources allocated to the ROTC program. The baseline for comparison is the July 1973 authorized TDA developed in accordance with the anticipated command and supervisory functions and workload for the ROTC program. Neither a negative nor positive judgment should be assigned to either an increase or decrease in the ratio based on numbers alone. It is understood that changes in authorized and assigned strength can occur for many reasons. It is also understood that changes in mission, functions, and/or workload are not always reflected in changes in strength. The purpose of this measure is to focus management attention on the factor of headquarters manpower size relative to past experience, placing this factor in the context of current conditions before reaching final conclusions.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Total current assigned strength for TRADOC DCSROTC and the four ROTC Region Headquarters	TRADOC DCSPER records	X		Annually
2. Total July 1973 authorized TDA strength for TRADOC DCSROTC and the four ROTC Region Headquarters	TRADOC DCSRM records	X		Annually

DATA ANALYSIS

The desired ratio can be constructed by dividing element 1 by element 2. Changes of plus or minus 5 percent should be supported by a narrative analysis provided by HQ TRADOC, identifying related changes, if any, in TRADOC missions, functions, and/or organization affecting assigned strength.

LEVEL OF EFFORT REQUIRED

Minimal effort will be required from HQ TRADOC DCSPER and DCSRM to provide this measure.

PERFORMANCE MEASURE

4.3 Percent of total cadets commissioned through the Senior ROTC Program that are female or minority cadets.

DESCRIPTION

This measure monitors the relative progress of the ROTC Program in recruiting cadets from two population groups that have not been represented in the past (female) or have had relatively little participation (minority). The measure's importance is related to two factors: first, the high priority given recruitment in these areas; second, the possibility that female and minority recruitment could accout for a major portion of increased ROTC cadet strength.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Number of female cadets receiving commissions	TRADOC DCSROTC records	X		Annually
2. Number of minority cadets receiving commissions		X		Annually
3. Total number of cadets commissioned		X		Annually

DATA ANALYSIS

The desired percentages can be computed by dividing element 3 into elements 1 and 2. In addition to trend analysis of command wide performance, HQ TRADOC should make comparative analysis of the Regions.

LEVEL OF EFFORT REQUIRED

Minimal effort will be required from TRADOC DCSROTC to provide this measure.

PERFORMANCE MEASURE

4.4 The percent of retention through commissioning of Senior ROTC cadets awarded scholarship assistance.

DESCRIPTION

The objective of the ROTC program is to provide qualified officers in sufficient numbers for service in the Active Army and Reserve Components. The scholarship program within ROTC is one means of providing incentives to qualified individuals and to help the ROTC program meet its objectives. Scholarship assistance represents a substantial commitment of ROTC resources, not only in the dollars budgeted, but also in ROTC staff program development time, recruiting effort, and administration. The losses related to this true total cost are also substantial each time a cadet awarded a scholarship fails to remain in the program through his/her commissioning as a second lieutenant. This measure is a broad indicator and monitor of the ROTC program's return on investment. The measure groups together all scholarship recipients, regardless of the length of their award.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Number of cadets commissioned who received scholarship assistance	TRADOC DCSROTC records	X		Annually
2. Number of cadets who received scholarship assistance but failed to be commissioned with their scheduled class		X		Annually

DATA ANALYSIS

The desired percentage can be constructed by dividing element 2 by element 1 and subtracting the percentage from 100. It will be useful, however, to provide descriptive footnotes regarding the attrited portion, noting those who left the program entirely, those who may be

absent from the college or university but are expected to return, and those who remain in the program but did not graduate with their scheduled class. In addition to trend analysis of command wide performance, HQ TRADOC should make comparative analysis of performance by Region.

LEVEL OF EFFORT REQUIRED

Minimal effort will be required from TRADOC DCSROTC to provide this measure.

PERFORMANCE MEASURE

4.5 The ratio of assigned supervisory Region Deputy Commanders to numbers of Senior ROTC instructor groups.

DESCRIPTION

Taken as a group, the deputy commanders of the four ROTC Regions are the principal link between TRADOC policy-implementers and the actual performance of ROTC units on campuses. In the past, supervision of instructor groups by higher headquarters has been spread too thinly among too few supervisors, creating workloads that necessarily placed emphasis on fulfilling basic formal activities. The ROTC Regions with their staffs of deputy commanders were designed to remedy this situation and provide the direct and responsive attention necessary to maintain quality instruction and high morale of the instructors. It is anticipated that the ratio of supervisors to instructor groups, now about 1:15, will remain stabilized for the near future. However, this measure is included because of the critical importance of adequate supervision to the ROTC program. The purpose of the measure is to focus the attention of high-level management on this issue from time to time and thereby to assure that informal fluctuations in the ratio are kept within narrow limits and that formal changes in the official ratio are made only on the basis of the most serious considerations.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Number of Region Deputy commanders assigned to supervise instructor groups	TRADOC DCSROTC records	X		Annually
2. Number of Senior ROTC instructor groups		X		Annually

DATA ANALYSIS

The desired ratio can be constructed directly from the two required elements. In addition to trend analysis of command wide performance, HQ TRADOC should make comparative analysis of the Regions.

LEVEL OF EFFORT REQUIRED

Minimal effort will be required from TRADOC DCSROTC to provide this measure.

PERFORMANCE MEASURE

4.6 The average cost of recruiting and information activities (OMA) per new Senior ROTC enrollee.

DESCRIPTION

Recruiting and other information activities are not the only causes of cadet enrollments in the ROTC Program, but they are a principal means over which ROTC managers have control. The higher visibility and improved management resources made available to the ROTC Program through the CONUS Reorganization of 1973 were intended to have a positive effect on the quality and effectiveness of recruiting and information activities. Thus, despite the many extraneous factors affecting enrollments, this measure is included in order to provide a first-level perspective on the operation of the recruiting program. It is not the intention of this measure to minimize cost per enrollee: that could be achieved by eliminating the recruiting budget with no gain, and probably great loss, in actual enrollments. Rather the intent is to establish trends which will require further, periodic analysis of current conditions affecting the status of the average cost figure.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Cost of Senior ROTC recruiting and information activities	OMA Program 8, Army Management Structure Code 811125.50000	X		Annually
2. Number of new Senior ROTC cadets enrolled	TRADOC DCSROTC records	X		Annually

DATA ANALYSIS

The desired average cost figure can be constructed by dividing element 1 by element 2. In addition to trend analysis of command wide performance, HQ TRADOC should make comparative analysis of the Regions.

LEVEL OF EFFORT REQUIRED

Minimal effort will be required from HQ TRADOC DCSRM to provide the measure.

PERFORMANCE MEASURE

5.1 The ratio of the combined assigned strength of HQ TRADOC DCSCD and the CACDA, PACDA, and LOGC to the July 1973 authorized TDA strengths for these activities.

DESCRIPTION

This measure will track increases or decreases in the headquarters and intermediate management levels manpower resources available to the TRADOC combat development effort. The baseline for comparison is July 1973 authorized TDA strengths developed in accordance with the anticipated responsibilities of the several organizations. Neither a negative nor a positive judgment should be assigned to either an increase or decrease in the ratio. It is understood that changes in mission, functions, and/or workload can occur for many reasons. It is also understood that changes in mission, functions, and/or workload are not always reflected in changes in strength. The purpose of this measure is to focus management attention on the factor of combat development manpower size above the service school level within TRADOC. Rationales for continuity or changes in this factor should be placed in the context of current requirements. Gradual expansion of higher level elements could, however, indicate a need for serious external review.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Total current assigned strength for HQ TRADOC DCSCD and CACDA, PACDA, LOGC	TRADOC DCSPER records	X		Annually
2. Total July 1973 authorized TDA strength for HQ TRADOC DCSCD and CACDA, PACDA, LOGC	TRADOC DCSRM records	X		Annually

DATA ANALYSIS

The desired ratio can be constructed easily from the data elements, the second of which remains constant as the denominator for all comparisons with current assigned strength. Presumably the ratio would be supported by a narrative analysis provided by HQ TRADOC, identifying related changes, if any, in DCSCD and Center/Activity missions, functions, and/or organization affecting assigned strength. Trend analysis would be used to monitor for unfavorable shifts.

LEVEL OF EFFORT REQUIRED

Minimal effort will be required from HQ TRADOC DCSPER and DCSRM to provide this measure.

PERFORMANCE MEASURE

5.2 The production of Required Operational Capability (ROC) documents.

DESCRIPTION

As the basic document initiating review and decisions related to resource allocations for materiel development, ROC's play a central role in the combat development process. Assuring that central role is properly defined and becomes neither too encompassing (resulting in an overload on technical management review capabilities) nor too restrictive (resulting in the discouragement of new concept initiatives) will always be a matter of judgment and wise management practices. This measure is designed to monitor the production of ROC documents at the TRADOC level. Large changes in production amounts or decreases in rates of approval should be explained.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Number of ROCs submitted to TRADOC ROC Review Committee	TRADOC DCSCD ROC Review Committee records	X		Annually
2. Number of ROCs approved by TRADOC ROC Review Committee		X		Annually
3. Number of ROCs approved by HQ DA (DCSOPS)	TRADOC DCSCD ROC Review Committee Records (or HQ DA DCSOPS records)	X		Annually

DATA ANALYSIS

The data elements above may be presented directly and/or they may be used to compute percentages. The percent of ROCs approved by the ROC Review Committee of those submitted for review from TRADOC schools and Functional Centers would be one useful supplementary indicator. Not all

ROCs approved by the Review Committee are submitted to HQ DA. Rather the committee is an advisory and recommending body supporting the final decisions of the CG, TRADOC. On occasional, but infrequent, instances, the Committee's recommendations are rejected. Therefore, percent of the ROCs approved at HQ DA compared to those approved at the ROC Review Committee would slightly understate the rate of HQ DA approval compared to the number submitted from HQ TRADOC. Trend analysis of both absolute numbers and percentages should be made to fully assess performance.

LEVEL OF EFFORT REQUIRED

Minimal effort will be required from HQ TRADOC DCSCD to provide this measure.

PERFORMANCE MEASURE

5.3 The percent of total annual combat developments tasks (programmed and unprogrammed) accomplished.

DESCRIPTION

The central concern of this measure of combat developments workload is with the amount of unprogrammed effort required. Unlike the training and schools mission of TRADOC, the combat developments mission is not governed by routinized procedures of defining and programming input requirements and resources well ahead of actual performance. Rather, combat developers are subject to unexpected requirements, fluctuating suspense dates, and crisis-oriented resource distribution. Mechanisms such as common scenarios offer one important element of stability. The capability to define the workload problem with greater accuracy and, possibly, to forecast anticipated workload cycles would be another tool by which TRADOC managers could better control their resources. This measure will rely on a TRADOC DCSCD management information system still being refined to provide an accurate picture of the combat developments workload.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Programmed CD technical man-months (TMM)	TRADOC DCSCD data base	X		Annually
2. Unprogrammed CD TMM required during fiscal year			X	Annually
3. Total TMM performed		X		Annually

DATA ANALYSIS

The desired measure can be computed by adding the programmed (element 1) and unprogrammed TMM requirements (element 2) and dividing their sum into TMM performed (element 3). TMM workload could also be organized by "directive authority" in order to show which organizations, both within and outside of TRADOC, are responsible for various portions of the programmed or unprogrammed task requirements. Repeated low accomplishment

rates should be investigated in terms of the need for additional staffing or tighter controls on tasking.

LEVEL OF EFFORT REQUIRED

The required information should be included in reporting for the Combat Developments Management Information System (CDMIS) presently under final development. Major reprogramming of the CDMIS input format would be required to indicate whether a task was a programmed or unprogrammed effort, and to indicate actual manpower applied. Presently the CDMIS input includes manpower requirements only as projected effort, in man-days which must be converted into man-months. Actual manpower applied, however, will require a separate major subsystem item on the CDMIS input Form 769-R. This would also enable comparisons, if desired, between projected and actual manpower requirements. Once the CDMIS has been modified to incorporate the required data, the crucial factor affecting the measure's validity will be the cooperation of the various TRADOC combat development organizations in submitting CDMIS requirements on a thorough, routine basis. A substantial effort would be required for this measure, pending final development of the CDMIS.

PERFORMANCE MEASURE

5.4 The evaluated capability of common scenarios and the "SCORES" methodology to coordinate and support TRADOC combat developments efforts.

DESCRIPTION

Focusing the complex and disparate capabilities of TRADOC's combat developers on problems of significance to Army decision-makers is one of TRADOC's most difficult management challenges. This measure seeks to monitor the progress made toward meeting that challenge by examining the managerial mechanisms being used to structure and control combat development study topics and assumptions: specifically, the SCORES (Scenario Oriented Recurring Evaluation System) methodology used to develop and modify combat development scenarios, and the basic common scenarios themselves. Survey methodology is viewed as the best approach to assessing the development, implementation, and eventual effectiveness of these efforts to coordinate, speed-up, and to improve the practicality of combat developments study efforts. All study efforts using the SCORES methodology will be identified in the TRADOC study program.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
(Relevant survey issues)				
1. Definition and assignment of functions related to SCORES and common scenario development/application	Sample survey of knowledgeable individuals at CDEC, Functional Centers, service schools, and HQ DA; analysis of TRADOC study program		X	Annually
2. Definition and adequacy of data base and information communication system required for SCORES and scenario development/application			X	Annually
3. Adaptability of data base, scenarios, and cooperating organizations to new study assumptions and study requirements			X	Annually

(cont'd)

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
4. Practicality of SCORES and scenarios related to identification of force capabilities and deficiencies, developing improvements, and making decision recommendations			X	Annually

DATA ANALYSIS

Strictly defined, the actual data elements for this measure will be individual questions contained in the proposed survey instrument. For presentation purposes, however, the survey results would be organized according to the four basic issues identified above. The objective of the analysis will be to provide HQ DA and HQ TRADOC managers with insight into the actual functioning of the combat developments study effort, assessing the effectiveness of crucial coordinating mechanisms, and recommending system improvements. The TRADOC study program will provide much of the basic data concerning individual actions.

LEVEL OF EFFORT REQUIRED

Substantial effort will be required to develop, pretest, and administer a reliable and valid survey instrument or set of instruments. An interview questionnaire would be the principal instrument used, although interviews could be supplemented with data collection forms to be completed either by the interviewee or appropriate action officers. Because the management of the combat developments effort is still in a developmental stage, it may prove necessary to revise the survey instruments from year to year in the light of current emphases and organizational changes. It is recommended that a survey effort of this type be conducted by an evaluator independent of TRADOC and the combat developments community. This evaluator could be an office or agency of HQ DA or some other independent review source.

PERFORMANCE MEASURE

6.1 The extent of "slippage" of more than two weeks from established ASARC/DSARC/IPR schedules for combat and force developments tasks being performed and/or coordinated by TRADOC.

DESCRIPTION

The primary controlling factor in the production of combat/force development task products is the suspense date set for each task. Product importance has already been established by the decision to task. Resource constraints have been identified, and the single criterion of time sets the final boundary on what the combat developer can do with those resources. Tasks required to meet ASARC/DSARC/IPR timetables are, by definition, important tasks whose efficient management is a matter of concern, affecting the overall coordination of research and development resource utilization. This measure monitors this crucial aspect of the force/combat development process by maintaining a check on the number of projects which fail to meet their scheduled milestones and completion dates. The measure does not seek justifications for delays, although it is recognized that delays may be justifiable. Rather, the measure assumes that TRADOC's role as the Army's principal combat developer makes it responsible for the broad problem of keeping the total number of "slipped" projects within reasonable proportions.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Number of tasks with "slippage" of more than two weeks from schedules set by: a. ASARC b. DSARC c. IPR	TRADOC DCSCD data base		X	Annually
2. Number of combat and force developments tasks performed or coordinated by TRADOC that are governed by milestones of: a. ASARC b. DSARC c. IPR			X	Annually

DATA ANALYSIS

Both the numbers of "slippages" and their percents (element 1 divided by element 2) are of interest in evaluating performance. Trend analysis should be made of command performance. Comparative analysis of Functional Center performance should be made by HQ TRADOC.

LEVEL OF EFFORT REQUIRED

A substantial effort would be required for this measure unless the required information is included in reporting for the Combat Developments Management Information System (CDMIS) presently under final development. Only minor modification of the CDMIS input format would be required. Input item 11A on TRADOC Form 769-R (CDMIS Data Input) already identifies "the highest decision making level for approval throughout the materiel acquisition process." This means that the CDMIS can already sort tasks according to DSARC/ASARC/IPR approval requirements. Similarly, initiation, completion, and a single "critical" date are included in Form 769-R, but only by year and quarter. A really crucial factor, however, once the CDMIS has been modified to incorporate the data requirement for this measure, is the cooperation of the various TRADOC combat developments organizations in submitting CDMIS requirements on a thorough, routine basis.

An alternative procedure to develop this information, or a procedure which could be used to cross check CDMIS information, would be to review, on a case by case basis, systems records maintained by the DA Systems Coordinators in ODCSRDA.

PERFORMANCE MEASURE

7.1 Supply Division fill rate.

DESCRIPTION

In considering installation performance in providing units with required supply items, the extent that valid demands for stocked and non-stocked items can be filled fully and immediately on request is of importance. Inability to supply valid items can potentially have serious impacts on both combat readiness and the on-going operation of the Army. The fill rate when aggregated and compared over time will also provide an indication of overall Army supply performance. Accordingly, this measure will provide information that will assist installation, command, and Army Staff personnel in considering the impact of supply operations on Army effectiveness and in establishing procedures to improve supply fill, if necessary.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection
1. Number of valid demands received by the installation supply division	FORSCOM and TRADOC installations		X	Quarterly
2. Number of valid demands received by installation supply division that are fully and immediately filled			X	Quarterly

DATA ANALYSIS

DA Circular 700-25, dated 23 April 1974, prescribes selected Army logistics performances measures that include the supply division fill rate (computed by dividing element 2 by element 1). The Circular establishes objective rates of 65 percent for installations supporting more than one division and 70 percent for installations supporting a division or less. Trend analysis of the mean for all TRADOC installations will

provide an indication of overall TRADOC performance. At HQ TRADOC comparative analysis should be made of the installation rates to identify potential problem areas.

LEVEL OF EFFORT REQUIRED

Minimal effort is required. Presumably the installations are already using this measure to monitor logistics performance.

PERFORMANCE MEASURE

7.2 Maintenance Production/Backlog.

DESCRIPTION

With regard to installation materiel maintenance activities, the backlog, change in backlog, and production rates are useful measures of performance. Backlog information measures the size of any shortfall in maintenance resources. Change in backlog measures the effectiveness of the installation's response to a backlog problem. Production rate measures the installation's capacity to perform maintenance activities. Taken together this information provides an overview of installation performance in the materiel maintenance area that can serve as the basis for further investigation as required.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Total number of maintenance jobs beginning of month	TRADOC installations	X		Monthly
2. Number of maintenance jobs at end of month		X		Monthly
3. Number of jobs completed in month		X		Monthly

DATA ANALYSIS

TRADOC Regulation 750-3, 1 July 73, prescribes the purpose, scope, and method of submission of a Monthly Maintenance Production/Backlog Report by TRADOC installations. It is suggested that special consideration be given to the following information:

Backlog: element 2

Change in backlog: element 2 - element 1

Production: element 3

In particular, trend analysis of the mean for all TRADOC installations

will provide an indication of overall TRADOC performance. AT HQ TRADOC comparative analysis should be made of the installation performance to identify potential problem areas and to make decisions concerning installation staffing, programming, and allocation of funds, and mission assignments.

LEVEL OF EFFORT REQUIRED

Minimal effort is required. Installations are already using this information to monitor and report maintenance performance.

PERFORMANCE MEASURE

7.3 Installation generated recruitment and reenlistment rates.

DESCRIPTION

With the adoption of the "All Volunteer Army" concept, recruitment and retention became major concerns and responsibilities of installation commanders. The recruitment rate achieved by an installation through the Army's unit-of-choice/station-of-choice programs can significantly influence the capabilities of units stationed at the installation in reaching their personnel ALO objectives. The recruitment rate used here focuses on ranks E-1 through E-4 which make up the bulk of installation recruiting. Exceptions made for individuals in the stripes-for-skills option are omitted from the measure purely for reasons of administrative simplification.

Retention rates are important because they represent a continued return of investment. The resources required to train recruits are large. The experience gained by individuals during a first term of service is an additional "trained" resource that can not be duplicated except by the repeated process of finding replacements. Moreover, the reenlistment rate is an imprecise, but still indicative, measure of motivation, job satisfaction, morale, and the comparative appeal of a military career in comparison to other career alternatives. The reenlistment rate used here focuses on "first termers," individuals with less than 48 months of service, whose decision on a second term of service is really a decision to make the Army a career.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
Recruitment rate:				
1. Number of persons recruited (E-1 through E-4)	TRADOC DCSPER	X		Monthly
2. Number of authorized enlisted spaces (E-1 through E-4) to be filled through recruitment		X		Monthly

(Cont'd)

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
Reenlistment rate:				
3. Number of "first termers" reenlisted		X		Monthly
4. Number of "first termers" eligible for separation who are also eligible for reenlistment			X	Monthly

DATA ANALYSIS

The recruitment rate (element 1 divided by element 2) and the reenlistment rate (element 3 divided by element 4) should be computed for each installation and the command as a whole. The TRADOC rates should be analyzed through trend analysis and also by comparisons with other CONUS commands. Comparative analysis should be made of the installation rates to identify especially successful programs or potential problem areas requiring assistance/action by HQ TRADOC, USAREC, or HQ DA.

LEVEL OF EFFORT REQUIRED

Minimal effort is required.

PERFORMANCE MEASURE

7.4 The percent of TRADOC's annual funding program that is distributed to subordinate elements in the last two months of the fiscal year.

DESCRIPTION

In the past, a limitation on the installation commander's capability to plan and control resources on an orderly basis has been the piecemeal allocation of dollar resources by higher headquarters, particularly at year end. This pattern of behavior has retained discretion and control at higher levels while leaving the installation commander constrained by the uncertainty of his actual resources. This measure will monitor the actual commitment of TRADOC program managers to the strengthening of the installation commander's role. It will also identify the order of magnitude of funds made available to installation commanders late in the fiscal year. A certain level of year-end allocations is expected since program slippages and cancellations or price changes can generate dollars that should be applied to high priority unfinanced requirements. The level of such funding, however, should be predictable and in a manageable proportion to total spending.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Total TRADOC OMA funding programs	TRADOC DCSRM	X		Annually
2. Amount of dollars distributed during final two months of fiscal year		X		Annually

DATA ANALYSIS

The desired percentage figure may be constructed by dividing element 2 by element 1. The absolute percent will indicate the order of magnitude and identify unusual circumstances requiring special analysis. Trends over time will reflect actions to improve performance or highlight possible needs for management action.

LEVEL OF EFFORT REQUIRED

Minimal effort will be requir ! from HQ TRADOC DCSRM to develop this measure.

PERFORMANCE MEASURE

7.5 The percent of the installations' annual funding program that is obligated in the last thirty (30) days of the fiscal year.

DESCRIPTION

This measure addresses two distinct, but related, issues. Both concern themselves with the question of the installation commander's authority to control available resources. One issue is the capability of the installation commander to develop and implement a balanced management program that spreads resource obligations across the fiscal year in accordance with established priorities and requirements and with minimal turbulence to administrative procedures. The second issue addressed here is the distribution of year-end funds to installations taken as a factor tending to unbalance installation planning in the direction of those areas—typically the BEMAR list—where large expenditures can be made, or delayed, with least impact on mission quality.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Total OMA funding program for TRADOC installations	TRADOC DCSRM	X		Annually
2. Amount of dollars obligated during final month of fiscal year		X		Annually

DATA ANALYSIS

The desired percentages may be constructed by dividing element 2 by element 1. The absolute percent will indicate the order of magnitude of the problem, if any, by its variance from 8.3 percent (straight line projection since a large portion of funds is for civilian pay and operating supplies and costs). Trends over time will reflect actions at the installation level to improve performance, assuming measure 7.4 is compatible. A comparative analysis by installation also should be made by HQ TRADOC for its internal management purposes.

LEVEL OF EFFORT REQUIRED

Minimal effort will be required from HQ TRADOC DCSRM to develop this measure.

PERFORMANCE MEASURE

7.6 The extent of modification (average number of changes) of installation resource contracts.

DESCRIPTION

Installation resource contracts set forth the primary workload to be accomplished and the resources to be provided. They are a valuable aid to planning and programming. They are not intended to inhibit the flexibility of the installation commander (or the MACOM staff). They can serve this flexibility function most effectively if contract modifications in response to changing resource requirements and actual operational experience can be easily made. The purpose of this measure, then, is to determine whether or not these contracts are subject to modification, i.e., the responsiveness of the contract approach.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Number of modifications to installation resource management contracts	FORSCOM DCS Comptroller, TRADOC DCSRM	X		Annually

DATA ANALYSIS

On an overall command basis, summary information for this measure can be obtained by dividing element 1 by the number of installations commanded. This will provide an average number of modifications for the command. A small value for this average (2 or less) may indicate that the contract approach is not being used in a flexible and responsive manner. This should be analyzed in conjunction with the number of requests to DA for additional resources during budget execution and the unobligated funds released during the last two months of the fiscal year. A comparative analysis by installation should be made by the MACOMs for internal management purposes.

LEVEL OF EFFORT REQUIRED

Minimal effort will be required from FORSCOM DCS Comptroller/ TRADOC DCSRM to develop this measure.

PERFORMANCE MEASURE

7.7 The release of unobligated funds by installations during the last two months of the fiscal year.

DESCRIPTION

A potential problem in the management of financial resources involves either the over or under budgeting of financial resources in relation to installation requirements. This measure considers the question of the extent to which budgeted financial resources exceed installation requirements. It also provides information on the response of installation management to such over budgeting, program slippages, or altered requirements. The release of excess financial resources in a timely fashion permits their redistribution by MACOMs or DA to meet priority requirements of the Army.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Funds released by installation to HQ FORSCOM/TRADOC	FORSCOM DCS Comptroller/ TRADOC DCSRM	X		Annually

DATA ANLYSIS

Data analysis efforts for this measure should consider the extent to which over programming/budgeting is a problem. In particular, analysis by installation of reasons for release of unobligated funds (e.g., modified requirements, program slippages, over budgeting) should be conducted. Of additonal interest is the timeliness of release of funds. A macro measure of timeliness on a command basis would be the percentage of funds released during the last two months of the fiscal year. Trend analysis and comparative analysis are recommended.

LEVEL OF EFFORT REQUIRED

Minimal effort will be required from FORSCOM DCS Comptroller/ TRADOC DSCRM to develop the measure.

PERFORMANCE MEASURE

7.8 Percent of stock fund obligations to sales and stock fund obligations to demands.

DESCRIPTION

This measure monitors the installation level management of the FORSCOM/TRADOC portion of the Army Stock Fund. The scale of resources flowing through the fund and the importance of stock-funded items to adequate support of readiness and training make this an area of management concern. The objective of the stock fund system is to provide timely service to customers in the filling of legitimate orders. In a perfectly fluid stock fund system, obligations would equal 100 percent of demands and 100 percent of sales. Slight inbalances in the system may occur for a number of legitimate reasons. The installation retailer may want to anticipate future sales by placing an order with the wholesaler before a formal customer demand is received. Such an action would minimize the delay experienced by the customer, although it would also temporarily create obligations in excess of both demands and sales. Increases in "dues out" would result in a higher ratio of obligations to sales. The building of inventories at the retail level would also result in higher ratios of obligations to sales and demands, whereas the depletion of existing inventories would be accomplished by filling demands from items on hand rather than placing new obligations. Therefore, the measure is only meaningful when placed in the context of policies and conditions existing at the time covered by the data gathered.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Dollar value of stock fund sales	FORSCOM and TRADOC DCSLOG records	X		Quarterly
2. Dollar value of stock fund obligations		X		Quarterly
3. Dollar value of stock fund demands		X		Quarterly

(cont'd)

Elements	Source	Currently reported Yes	No	Collection frequency
4. Ratio of obligations to sales		X		Quarterly
5. Ratio of obligations to demands		X		Quarterly

DATA ANALYSIS

The desired percentages can be computed by dividing item 1 into item 2 (obligations to sales) and item 3 into item 2 (obligations to demands). This information can be provided by installation or by MACOM. The meaningfulness of the measure, of course, will depend on the quality of additional information explaining the conditions affecting installation level management of the stock fund supply system. A deviation of plus or minus 5 percent is the normal performance range; larger deviations should be analyzed for specific causes. Both trend and comparative analysis should be used.

LEVEL OF EFFORT REQUIRED

Minimal effort will be required from TRADOC/FORSCOM DCSLOG to provide this measure.

PERFORMANCE MEASURE

7.9 Percent of pay changes rejected (JUMPS-Army Status report).

DESCRIPTION

This measure is one indicator of installation and command level administration of payroll matters. Installations submit pay changes to the US Army Finance Support Agency at Fort Benjamin Harrison. Submitted changes which are rejected for incompleteness, inaccuracies, or other reasons cause delays in the implementation of changes and require additional, duplicative work throughout the finance system. Delays in pay are a prime cause of morale problems and often create hardships for the individuals affected. The duplicative work involved is a costly and wasteful use of resources.

The percent of pay changes rejected may be a function of the number of pay changes submitted. Moreover, the submission of a pay change may be delayed by several months at the installation level with consequent impact on morale, yet never be reflected in this measure. Information regarding the lateness of pay changes submitted, the numbers of pay changes submitted, and the numbers of inquiries received at the installation is available on computer-generated reports at the MACOM level.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Number of pay changes submitted	FORSCOM DCS Comptroller/ TRADOC DCSRM records	X		Quarterly
2. Number of pay changes rejected		X		Quarterly

DATA ANALYSIS

The desired percentage can be computed directly from the two data elements by dividing item 1 into item 2. The percentage can be provided for individual installations or for the MACOM as a whole. The meaningfulness of the measure will depend on the consideration of such additional factors as those discussed above. The data are available on a monthly basis but

need be reported only quarterly for purposes of this evaluation plan. The acceptable performance range is up to 4 percent rejections; however 2 percent or less is desirable. With less turbulence under the all-volunteer Army concept and more experience with JUMPS, the reject rate should continue downward. Both trend and comparative analysis should be used.

LEVEL OF EFFORT REQUIRED

Minimal effort will be required from FORSCOM Comptroller/TRADOC DCSRM to provide this measure.

PERFORMANCE MEASURE

7.10 Percent of financed requirements to total requirements for maintenance of real property.

DESCRIPTION

This measure gives a view of the met requirements to the total (met and unmet) requirements for maintenance of real property (MRP). The installation commander has flexibility to affect both. Mission or other base operations funds can be shifted to meet maintenance needs, thereby increasing the financed portion. Self-help programs or other measures can be initiated to reduce the total requirement. The backlog of maintenance requirement (BMAR) is a difficult concept that can be altered significantly by changes in definitions or subjective judgments; it also affects stated total requirements.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Dollar value of financed maintenance of real property requirements	FORSCOM/ TRADOC Engineer	X		Annually
2. Dollar value of total maintenance of real property requirements		X		Annually

DATA ANALYSIS

The desired percentage is computed by dividing element 1 by element 2. The meaningfulness of this measure depends to a large degree on the precision used to define BMAR. The desired performance level is at least 75 percent. Both trend and comparative analysis should be used.

LEVEL OF EFFORT REQUIRED

Minimal effort will be required from the FORSCOM/TRADOC Engineer to provide this measure.

PERFORMANCE MEASURE

7.11 Percent of minor construction (direct expenses) to maintenance of real property (MRP) (direct expenses).

DESCRIPTION

On 7 September 1973 HQ DA raised the allowable ratio from 8 percent to 15 percent. The intention behind this change was to give maximum flexibility to the installation commander. The purpose of this measure is to monitor installation level minor construction. Such construction is defined by a dollar-ceiling of not more than $50,000 per project. The minor construction category has a great appeal to installation commanders as funds are spent from the OMA budget rather than from the MCA budget which may take up to two years or more to receive. Installation commanders may naturally tend to maximize the use of minor construction funds for their installations. From the point of view of higher headquarters, however, the excessive use of OMA funds for this purpose is disruptive of other management responsibilities, particularly the maintenance and repair of real property, and also could result in underutilization of MCA funds.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Minor construction direct expenses	FORSCOM/ TRADOC Engineer	X		Quarterly
2. MRP direct expenses		X		Quarterly

DATA ANALYSIS

The desired percent can be constructed directly from the data elements by dividing element 1 by element 2. Both trend and comparative analysis should be used.

LEVEL OF EFFORT REQUIRED

Minimal effort will be required from the FORSCOM/TRADOC Engineer to provide this measure.

PERFORMANCE MEASURE

7.12 Percent of occupancy of family housing.

DESCRIPTION

This performance measure monitors the occupancy rate of adequate government-owned family housing. It has implications for two basic management concerns: military morale and cost effectiveness. Morale is affected when delays in the availability of government housing create major inconveniences and expenses for the families of military personnel. Costs are affected when available housing is left idle or when needed housing is left unrepaired and therefor unavailable for assignment. For these reasons the desired performance level for this measure has regularly been set at a high level (DA target of 99 percent, Fiscal Year 1975). As a monitor of actual performance, this measure alerts MACOM and HQ DA managers to changing conditions, some within installation management control and some not within control. For example, the prompt filling of vacancies and timely accomplishment of repair and improvement projects are matters within installation control. On the other hand, if housing is in excess of demand and a waiting list cannot be maintained, then the filling of vacancies will be a matter beyond the direct control of management.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Number of occupancy days available	FORSCOM/ TRADOC DCSLOG	X		Semiannually
2. Number of days of actual occupancy		X		Semiannually

DATA ANALYSIS

The desired percent figure, available for both installation and MACOM levels, may be computed directly from the data elements by dividing element 2 by element 1. The measure should be computed semiannually in order to

provide visibility to cyclical variations. Annual comparisons of the cumulative rate will have to be considered in light of additional information concerning any special conditions affecting individual installations. Both trend and comparative analysis should be used.

LEVEL OF EFFORT REQUIRED

Minimal effort will be required from FORSCOM/TRADOC DCSLOG to provide this measure.

PERFORMANCE MEASURE

7.13 The ratio of current assigned strength compared to July 1973 authorized TDA strength for TRADOC installation garrisons.

DESCRIPTION

This measure will track increases or decreases in the manpower resources available at the installation garrison level. The baseline for comparison is the July 1973 authorized TDA developed in accordance with the command, control, and support functions and workload anticipated for TRADOC's 20 installations. Neither a negative nor positive judgment should be assigned to either an increase or decrease in the ratio. It is understood that changes in authorized and assigned strength can occur for many reasons. It is also understood that changes in mission, functions, and/or workload are not always reflected in changes in strength. The purpose of this measure is to focus management attention on the factor of installation level manpower resources relative to past experience, placing this factor in the context of current conditions before reaching final conclusions.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Total current assigned strength for TRADOC installation garrisons	TRADOC DCSPER records	X		Annually
2. Total July 1973 authorized TDA strength for TRADOC installation garrisons	TRADOC DCSRM records	X		Annually

DATA ANALYSIS

The desired ratio can be constructed from the data elements, the second of which remains constant as the denominator for all subsequent comparisons with current assigned strength. Presumably, the derived ratio would be supported by a narrative analysis provided by HQ TRADOC, identifying related changes, if any, in TRADOC missions, functions, and/or

installation-level organization affecting the assigned strength. Trend analysis would be used to monitor for shifts. HQ TRADOC would use comparative analysis to assess individual installation's performance.

LEVEL OF EFFORT REQUIRED

Minimal effort will be required from HQ TRADOC DCSPER and DCSRM to provide this measure.

Annex A.2

MAJOR EXTERNAL VARIABLES
TRAINING AND DOCTRINE COMMAND

1. TRADOC is a processor of trainee and student loads which are defined and assigned by HQ DA (DCSPER). While TRADOC can argue its position and make HQ DA aware of limitations on its resources (particularly at the yearly White Book conference) final decisions regarding the number of trainees for specific courses at specific times are made by HQ DA. Traditionally these programmed loads have exceeded actual loads and resulted in resource imbalances.

2. TRADOC school and training centers lack control over the quality of new accessions assigned for training.

3. TRADOC has limited time and resources with which to prepare individuals for MOS positions in many units with varied requirements. Providing training and instruction specifically appropriate for every unit's peculiar requirements in a given MOS is impossible. On the other hand, providing training of the "broadest common denominator" variety, or focusing training on situations likely to be encountered by the majority of graduates, inevitably displeases some users of TRADOC graduates.

4. Setbacks in the success of the all-volunteer concept as represented by shortfalls in the recruitment/reenlistment of personnel or increased reliance on lower mental categories can markedly influence training requirements and capabilities.

5. Alterations in DOD or DA personnel policies and priorities that restrict assignment of qualified personnel in the numbers required, cause personnel turbulence, or reduce stability in instructor positions will affect training in such ways as training load shortfalls, course cancellations, course length changes with POI modifications, or inadequate instructor/student ratios.

6. The imposition of reduced personnel end strengths for the Army by Congress may result in manpower shortages in schools and training centers or disruptive actions such as "early out" programs.

7. A lack of responsiveness by the wholesale logistical system affects equipment on hand/operational in support of the STRAF, General Support Forces, schools, and Reserve Components and is in many instances beyond the control of installations. (Logistics performance measures used must therefore consider the degree to which performance is degraded by outside influences.)

8. The conflict between the capability of Reserve Components personnel to adjust their civilian job demands in order to attend needed service school training and the capabilities of service schools to allocate quotas and optimize class schedules.

9. A prolonged energy crisis that curtails the use of aircraft, tanks, and vehicles for essential service school instruction.

10. The performance of TRADOC's combat developments mission is especially sensitive to suspense dates and unprogrammed workloads established by external authorities. Resource forecasting in such an environment lacks the precision associated with the training mission and relies more heavily on day-to-day decision making concerning individual task priorities.

11. Because combat developers are frequently innovators in their fields, the combat development community, including TRADOC, is dependent upon state-of-the-art knowledge and applications both for personnel qualifications and for the speed with which appropriate solutions are designed. In this regard, TRADOC is also dependent upon the impact of state-of-the-art on the technical skills contributed by other Army commands and agencies, including CAA, OTEA, and AMC.

12. The inability to recruit or retain qualified civilian scientists and operations research analysts.

13. A high degree of reliance on the close and continuing cooperation of FORSCOM is necessary under the concept of installation operations. Clearly, TRADOC is dependent upon the cooperation of FORSCOM for the support of TRADOC elements on FORSCOM posts and for the coordination of support for FORSCOM elements on TRADOC posts. TRADOC-FORSCOM interdependence

extends into many other areas, of course, including support of Reserve Components and development of unit training materials.

14. The logistics base of TRADOC's installation support mission is sensitive to the frequency of requests from customers. The installation is staffed to perform at a relatively stable rate of workload and unusual demands on those resources can create turbulence. Similarly the abuse by customers of the supply priority request system (i.e., assigning high priorities to inappropriate items) interferes with the proper scheduling of work.

15. The adverse impacts on motivation, morale, and ROTC participation that can result from antipathy towards military service by the public in general or in areas nearby military installations.

16. Continued inflation beyond budgeted rates may reduce TRADOC's effectiveness by increasingly limiting the resources available to perform an unchanged workload.

17. Unanticipated significant or specific reductions in funding levels by Congress after a major portion of the fiscal year has passed has an unbalancing effect on the command program, reducing flexibility and to some extent distorting priorities.

Appendix B

DETAILED ASSESSMENT PLAN FOR FORCES COMMAND

Appendix B

DETAILED ASSESSMENT PLAN FOR FORCES COMMAND

MISSION REFERENCES

Detailed information on the missions and functions of FORSCOM is contained in the following:

- DA AR 10-42, 27 June 1973.
- FORSCOM Regulation 10-5, 5 August 1973.

SELECTED AREAS FOR MEASUREMENT

Measurements in the five areas below are necessary to assess FORSCOM's overall mission performance.

Measurement Area 1: Management of Readiness Resources. FORSCOM's major missions relate to the unit training and combat readiness of assigned forces. This measurement area is concerned with FORSCOM's overall performance in managing resources relating to readiness.

Measurement Area 2: Readiness Status of Active Army Units. A major indication of FORSCOM and installation performance in the readiness area revolves around changes in status of active Army units. This measurement area considers a number of significant aspects of active Army unit readiness.

Measurement Area 3: Readiness of Reserve Components Units. FORSCOM commands the Army Reserve and supervises National Guard training. This measurement area considers aspects of Reserve Components unit readiness that relate to FORSCOM's command and supervisory functions.

Measurement Area 4: CONUSA, ARR, and RG Missions and Functions. The CONUSA, ARR, and RG chain is FORSCOM's organizational mechanism for performing its Reserve Components management and assistance functions. This measurement area provides a means of assessment of performance of these functions.

Measurement Area 5: Installation Management. Competent and responsive installation management has significant impact on the ultimate combat readiness of forces. This measurement area considers a number of key aspects of installation operation and management.

ASSESSMENT PLAN SUMMARY

Table B.1 summarizes the assessment plan for FORSCOM. The individual performance measures to be used in the assessment are specified for each of the areas selected for measurement. Detailed information on each of the performance measures is contained in Annex B.1. This information includes: a description of the measure, supporting data elements, data sources, current reporting status, the recommended collection frequency to support the evaluation, and analytical procedures (method of analysis and level of effort required).

Table B.1 also classifies each performance measure into one of two categories, i.e., performance measures considered as minimum essential to the assessment and those that are recommended to provide important supplementary support for the essential measures. Within each category and for each measure there is indication as to whether the data are already available, a new report is required, or a special analysis of some type is needed.

RELATIONSHIPS OF PERFORMANCE MEASURES TO THE GOALS OF THE CONUS REORGANIZATION 1973

In Table B.2 the FORSCOM performance measures are cross-referenced with the four major goals of the CONUS Reorganization 1973.

EXTERNAL VARIABLES

Major external variables that can impact on the performance of FORSCOM are contained in Annex B.2.

Table B.1

ASSESSMENT PLAN SUMMARY: FORSCOM

Performance areas and measures	Minimum essential			Recommended supplement		
	Data available	New report	Special analysis	Data available	New report	Special analysis
Measurement Area 1: Management of Readiness Resources						
Performance Measures						
1.1 The percentage achievement of overall unit REDCON in relation to authorized levels of organization (ALO) and the Department of Army Master Priority List (DAMPL).	X					
1.2 The ratio of combat to support personnel strengths.	X					
1.3 The nature and impact of command level efforts (such as the affiliation program) to develop new approaches to improve combat readiness.					X	
Measurement Area 2: Readiness Status of Active Army Units						
Performance Measures						
2.1 The percentage achievement of unit training objectives by units submitting readiness reports.	X					
2.2 The percentage achievement of personnel readiness objectives.				X		
2.3 The percentage of STRAF unit personnel assigned on special duty to installation functions.	X					
2.4 Percentage of materiel operationally ready (OR), not operationally ready maintenance (NORM), and not operationally ready supply (NORS).	X					
2.5 Percentage of Bns and seprate Cos tested and failed (ATT/ORTT).	X					

Table B.1 (continued)

Performance areas and measures	Minimum essential			Recommended supplement		
	Data available	New report	Special analysis	Data available	New report	Special analysis
Measurement Area 3: Readiness of Reserve Components Units						
Performance Measures						
3.1 The percentage of Reserve Components units achieving training objectives (company or comparable level proficiency).	X					
3.2 The percentage of materiel required for training that is operationally ready (OR), not operationally ready maintenance (NORM), and not operationally ready supply (NORS).	X					
3.3 The percentage achievement of personnel readiness objectives.				X		
Measurement Area 4: CONUSA, ARR, and RG Missions and Functions						
Performance Measures						
4.1 The percentage of RG personnel time spent in the field for assistance purposes.		X				
4.2 The timeliness of request satisfaction by RG for valid assistance requests from Reserve Components units.		X				
4.3 The standardization of the approaches utilized by ARRs and RGs in carrying out their missions and functions.			X			
4.4 The assessment of Reserve Components personnel regarding the impacts of the loss of dedicated unit advisors for most battalions and smaller units, the greater availability of technical expertise in functional areas, and the emphasis on "hands on" assistance.			X			
4.5 The character and extent of participation of CONUSA and ARR personnel in the planning, support, and evaluation of Reserve Components training.						X
4.6 The degree of overlap among USAR command/support functions of the CONUSA, ARR, and ARCOMs.						X

Table B.1 (continued)

Performance areas and measures	Minimum essential			Recommended supplement		
	Data available	New report	Special analysis	Data available	New report	Special analysis
Measurement Area 5: Installation Management						
Performance Measures						
5.1 Supply Division Fill Rate (Army Logistics Performance Measure).	X					
5.2 Maintenance Production/Backlog.	X					
5.3 Installation generated recruitment and reenlistment rates.	X	X				
5.4 The percent of FORSCOM's annual funding program that is distributed to subordinate elements in the last two months of the fiscal year.	X					
5.5 The percent of the installations' annual funding program that is obligated in the last thirty (30) days of the fiscal year.	X					
5.6 The extent of modification (average number of changes) of installation resource contracts.	X					
5.7 The release of unobligated funds by installations during the last two months of the fiscal year.	X					
5.8 Percent of stock fund obligations to sales and stock fund obligations to demands.	X					
5.9 Percent of pay changes rejected (JUMPS-Army status report).	X					
5.10 Percent of financed requirements to total requirements for maintenance of real property.	X					
5.11 Percent of minor construction (direct expenses) to maintenance of real property (direct expenses).	X					
5.12 Percent of occupancy of family housing.	X					

Table b.2

RELATIONSHIPS OF FORSCOM PERFORMANCE MEASURES TO REORGANIZATION GOALS

Performance areas and measures	Reorgenizstion goals			
	A	B	C	D
Measurement Area 1: Management of Readiness Resources				
Performance Measuree				
1.1 The percentage achievement of overell unit REDCON in relation to authorized levels of organization (ALO) and the Department of Army Master Priority List (DAMPL).	X		X	
1.2 The ratio of combat to support personnel strengths.	X		X	
1.3 The nature and impact of command level efforts (such as the affiliation program) to develop new approsches to improve combat readiness.	X		X	
Measurement Area 2: Readiness Status of Active Army Units				
Performance Measures				
2.1 The percentage achievement of unit training objectives by units submitting readiness reports.	X		X	X
2.2 The percentage achievement of personnel readiness objectives.	X		X	X
2.3 The percentage of STRAF unit personnel essigned on special duty to installation functions.	X		X	X
2.4 Percentage of materiel operationally ready (OR), not operationelly ready maintenance (NORM), and not operationally ready supply (NORS).	X		X	X
2.5 Percentage of Bne and separate Cos tested and failed (ATT/ORTT).	X			
Measurement Area 3: Readiness of Reserve Components Units				
Performance Measures				
3.1 The percentage of Reserve Components units achieving training objectives (company or comperable level proficiency).	X			
3.2 The percentage of materiel required for training that is operetionally ready (OR), not operetionally ready maintenance (NORM), and not operationally ready supply (NORS).	X			
3.3 The percentage achievement of personnel readiness objectives.	X			

Table B.2 (continued)

Performance areas and measures	Reorganization goals			
	A	B	C	D
Measurement Area 4: CONUSA, ARR, and RG Missions and Functions				
Performance Measures				
4.1 The percentage of RG personnel time spent in the field for assistance purposes.			X	
4.2 The timeliness of request satisfaction by RG for valid assistance requests from Reserve Components units.			X	
4.3 The standardization of the approaches utilized by ARRs and RGs in carrying out their missions and functions.			X	
4.4 The assessment of Reserve Components personnel regarding the impacts of the loss of dedicated unit advisors for most battalions and smaller units, the greater availability of technical expertise in functional areas, and the emphasis on "hands on" assistance.			X	
4.5 The character and extent of participation of CONUSA and ARR personnel in the planning, support, and evaluation of Reserve Components training.			X	
4.6 The degree of overlap among USAR command/support functions of the CONUSA, ARR, and ARCOMs.			X	
Measurement Area 5: Installation Management				
Performance Measures				
5.1 Supply Division Fill Rate (Army Logistics Performance Measure).			X	X
5.2 Maintenance Production/Backlog.			X	X
5.3 Installation generated recruitment and reenlistment rates.			X	X
5.4 The percent of FORSCOM's annual funding program that is distributed to subordinate elements in the last two months of the fiscal year.			X	X
5.5 The percent of the installations' annual funding program that is obligated in the last thirty (30) days of the fiscal year.			X	X

Table B.2 (continued)

Performance areas and measures	Reorganization goals			
	A	B	C	D
5.6 The extent of modification (average number of changes) of installation resource contracts.			X	X
5.7 The release of unobligated funds by installations during the last two months of the fiscal year.			X	X
5.8 Percent of stock fund obligations to sales and stock fund obligations to demands.			X	X
5.9 Percent of pay changes rejected (JUMPS-Army status report).			X	X
5.10 Percent of financial requirements to total requirements for maintenance of real property.			X	X
5.11 Percent of minor construction (direct expenses) to maintenance of real property (direct expenses).			X	X
5.12 Percent of occupancy of family housing.			X	X

Annex B.1

DETAILS OF SELECTED PERFORMANCE MEASURES

FORCES COMMAND

PERFORMANCE MEASURE

1.1 The percentage achievement of overall unit REDCON in relation to authorized levels of organization (ALO) and the Department of Army Master Priority List (DAMPL).

DESCRIPTION

The purpose of this measure is to assess FORSCOM's management of readiness resources in terms of currently authorized capabilities for achieving readiness rather than the ultimate goal of REDCON-1 for all reporting units. Specifically, the problem of achieving combat readiness within the parameters of both authorized level of organization (ALO) and the Department of the Army Master Priority List (DAMPL) is addressed by this measure. Each of the systems serves different purposes and neither one by itself provides the overview necessary for assessment of resource allocation and management. The measure then relates resource allocation, level of organization, and attainment of readiness objectives.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Unit REDCON	Unit Readiness Reports	X		Semiannually
2. Unit ALO		X		Semiannually
3. DAMPL major priority group		X		Semiannually

DATA ANALYSIS

Data are compiled on the number of units that achieve an overall readiness condition which matches or exceeds the lower of their currently authorized levels of personnel and equipment. These data are stratified into groups according to DAMPL (see attached worksheet). Units in major priority groups 1, 2, and 3 that are used for allocation of resources for forces ranging from those in combat to those with a deployment mission of D + 30 are treated together in one group. Major priority groups 4 (D + 31 to D + 90) and 5 (after D + 90) constitute the remaining two groups. Using

the total number of reporting units falling under each classification (for example, DAMPL Group 1 and ALO 1), the percentages of units achieving a REDCON that matches or betters their ALOs are computed.

Stratification by DAMPL permits analysis of the DAMPL's impacts on readiness management. It also provides an indication of the extent to which units with ALOs of 1, 2, or 3 are distributed across DAMPL groups as well as how the achievement of ALO objectives varies across DAMPL groupings. Accordingly, trends in the percentages of units that achieve their REDCON over time is a gross indicator of the overall management of readiness resources within FORSCOM. Since there are differences in the systems of resource management for the Active Army, the USAR, and the ARNG, their units should be analyzed separately.

LEVEL OF EFFORT REQUIRED

A minimal level of effort is expected to be required by HQ FORSCOM to compile and report the information.

ACHIEVEMENT OF ALO CBJECTIVE BY DAMPL GROUPING

(Prepared separately for Active Army, USAR, and ARNG)

DAMPL major priority groups	ALO	Percentage	Total number of reporting units under each classification
Groups 1, 2, 3	1		
	2		
	3		
	Overall		
Group 4	1		
	2		
	3		
	Overall		
Group 5	1		
	2		
	3		
	Overall		
Overall			

PERFORMANCE MEASURE

1.2 The ratio of combat to support personnel strengths.

DESCRIPTION

The considerable pressure on all fronts to reduce overhead was one of the motivating factors in the reorganization. This involved streamlining of support forces and the retention of only those intermediate echelons of command and supervision that are essential. This emphasis exists because of the reduced size of the Armed Forces and the concomitant lessened need for support personnel to maintain a smaller, less geographically dispersed, peacetime Army. At the same time there is a strong interest in utilizing the greatest possible percentage of total forces for combat positions in contrast to support—headquarters, administrative, fiscal—activities. This measure considers FORSCOM's performance in the area of management of readiness resources by noting the extent to which FORSCOM has been able to shift personnel from support to combat positions.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Average FORSCOM combat personnel strength (TPSN less than 30000)	FORSCOM DCSOPS	X		Annually
2. Average FORSCOM support personnel strength (TPSN greater than 29999)		X		Annually

DATA ANALYSIS

The required ratio is formed by dividing element 1 by element 2. Analysis of variations in the ratio over time should be conducted.

LEVEL OF EFFORT REQUIRED

Minimal effort is required.

PERFORMANCE MEASURE

1.3 The nature and impact of command level efforts (such as the affiliation program) to develop new approaches to improve combat readiness.

DESCRIPTION

This measure is concerned with the major actions taken by HQ FORSCOM to strengthen the unit training and combat readiness of Active and Reserve Components. It is not intended to evaluate these actions in order to say that they were good or bad, but rather to ascertain the impacts of these actions on combat training and unit readiness of Active and Reserve Components. As such, the evaluative measurement is of the nature, impact, and extent of major command level actions in the readiness area. This information should clearly outline to various interested parties what the effect of a readiness command has been in terms of major programs and activities to improve Army readiness.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Major command level actions to improve readiness of assigned forces	FORSCOM Chief of Staff		X	Annually
2. Impacts of major command level actions to improve combat readiness of assigned forces (realized and potential	FORSCOM Chief of Staff		X	Annually

DATA ANALYSIS

No further analysis is required. The data, itself, will present the nature and impact of command level efforts to improve combat readiness. Such information, in turn, will provide an overall indication of the impact of establishing a readiness command. Major actions that are of particular interest at DA level could be subjected to in-depth analyses by their designation as special items of interest for the annual US Army Inspector General and US Army Audit Agency work programs.

LEVEL OF EFFORT REQUIRED

The level of effort requirement for this measure should be minimal. It is likely that much of the information already is being collected for use in the command historical report.

PERFORMANCE MEASURE

2.1 The percentage achievement of unit training objectives by units submitting readiness reports.

DESCRIPTION

FORSCOM's responsibilities for the conduct of unit training that will assure unit readiness are shared with no other command. This is in contrast to other factors affecting readiness status of Active Army units such as personnel strengths, MOS qualification, equipment availability, and equipment serviceability which involve shared responsibilities with others. Accordingly, this measure is essential to any consideration with regard to the effectiveness of FORSCOM and the readiness status of Active Army units. For Active Army units, a training REDCON equal or greater than that of the unit ALO is the objective against which measurements will be taken. It is recognized, however, that personnel turbulence, mission diversions, and available resources can prevent the attainment of this ideal.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Number of FORSCOM units reporting readiness	Unit Readiness Reports	X		Monthly
2. Number of reporting units attaining training REDCON objective		X		Monthly

DATA ANALYSIS

The percentage of achievement of unit training objectives is calculated by dividing element 2 by element 1. Trends in the percentage will indicate progress of unit training and reflect in significant measure the results of training management within FORSCOM. Analyses of unit performance by individual installations will provide some measure of the management effectiveness at that level.

LEVEL OF EFFORT REQUIRED

Minimal effort is required since the desired information is now reported.

PERFORMANCE MEASURE

2.2 The percentage achievement of personnel readiness objectives.

DESCRIPTION

The impacts of personnel on readiness are influenced by actions of both HQ DA and FORSCOM commanders. Although the bulk distribution of individually qualified personnel assets is centralized and based on specific vacancies, field commanders can by actions such as diversions of personnel from training and malassignments of individuals adversely affect readiness. The Army uses strength and individual skill qualifications as the personnel resource measures in reporting readiness. The lower of the two indicators, strength REDCON and MOS REDCON, is reported as the unit personnel REDCON. The objective is to achieve a personnel REDCON that matches or exceeds the unit ALO.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Number of FORSCOM units reporting readiness	Unit Readiness Reports	X		Monthly
2. Number of reporting units attaining personnel readiness objective		X		Monthly

DATA ANALYSIS

The percentage of achievement of unit personnel objectives is calculated by dividing element 2 by element 1. Trends in the percentage will provide an indication of overall performance in personnel management within the command. Analysis of unit performance by individual installation would provide some measure of the management effectiveness at that level.

LEVEL OF EFFORT REQUIRED

Minimal effort is required since the desired information is now reported. Aggregating the data by installation would be a new requirement but could be easily done using the unit stationing list as the basis.

PERFORMANCE MEASURE

2.3 The percentage of STRAF unit personnel assigned on special duty to installation functions.

DESCRIPTION

The special duty assignment of STRAF unit personnel to installation functions keeps these personnel away from their TOE duties and training to support combat readiness of their assigned units. Resource limitation at the installation level may make such special duty assignment necessary at times, however, massive use of STRAF unit personnel for installation functions may indicate poor management of command/installation resources. The information provided by this measure will show, by installation, the size of this problem. It also is a major indicator of installation management effectiveness.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Number of STRAF unit personnel	FORSCOM DCSOPS	X		Quarterly
2. Number of STRAF unit personnel assigned on special duty to installation functions		X		Quarterly

DATA ANALYSIS

The required measure, percentage of STRAF unit personnel assigned on special duty to installation functions, can be obtained by dividing data element 2 by data element 1. This information should be maintained on both an overall FORSCOM and installation basis in order to assess command and installation performance. Command or overall performance can best be considered by analysis of trends over time. Installation performance will require comparative analysis across installations. This will provide an indication of that proportion of the special duty assignment of personnel that is reasonably unavoidable as well as those cases where such assignment is excessive.

LEVEL OF EFFORT REQUIRED

The effort required to obtain, maintain, and analyze the information for this measure is expected to be minimal.

PERFORMANCE MEASURE

2.4 Percentage of materiel operationally ready (OR), not operationally ready maintenance (NORM), and not operationally ready supply (NORS).

DESCRIPTION

The operational readiness of materiel is an important factor both from the standpoint of FORSCOM's management of readiness and unit/installation-level activities in support of readiness. Whereas the issue of materiel is largely a responsibility of DA and AMC, maintenance (other than depot) and to a lesser extent supply is affected by HQ FORSCOM, installation management, and the units. Accordingly, data on the OR, the NORM, and the NORS reflect performance at all levels.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Number of units of materiel	Materiel Readiness Reports	X		Monthly
2. Number of units of materiel operational		X		Monthly
3. Number of units of materiel not operational because of maintenance		X		Monthly
4. Number of units of materiel not operational because of supply		X		Monthly

DATA ANALYSIS

The required measures are computed as follows:

$$OR = \frac{\text{element 2}}{\text{element 1}}$$

$$NORM = \frac{\text{element 3}}{\text{element 1}}$$

$$NORS = \frac{\text{element 4}}{\text{element 1}}$$

This information should be obtained on both an overall FORSCOM and an installation basis in order to assess performance at both levels. Trend

analysis would be used for the command-wide data and comparative analysis for installation evaluations.

LEVEL OF EFFORT REQUIRED

The effort required to obtain, maintain, and analyze the information for this measure is expected to be minimal.

PERFORMANCE MEASURE

2.5 Percentage of battalions (Bns) and separate companies (Cos) tested and failed (ATT/ORTT).

DESCRIPTION

Of all of the aspects of combat readiness, unit training is the one that most directly and completely is the responsibility of HQ FORSCOM and the commanders of installations having STRAF units. This measure addresses two factors relating to unit training. First is the requirement for at least yearly Bn and separate Co evaluations by means of ATTs or locally developed ORTTs. This requirement provides a standardized approach for determining the training readiness of Bns and separate Cos. As such, it serves as a validity check on Bn and Co commanders' monthly assessments of the training status of their commands. Secondly, the outcomes of the ATTs/ORTTs or the pass rate for Bns and Cos indicates training progress and units requiring special assistance. Both of these factors together provide an important means for assessing HQ FORSCOM and installation management of unit training.

SUPPORTING DATA

Element	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Number of Bns tested	FORSCOM Reg 350-3 Special Reports	X		Annually
2. Number of separate Cos tested		X		Annually
3. Number of Bns		X		Annually
4. Number of separate Cos		X		Annually
5. Number of Bns failing the test		X		Annually
6. Number of separate Cos failing the test		X		Annually

DATA ANALYSIS

The required measures are computed as follows:

Percent tested: $Bn = \frac{\text{element 1}}{\text{element 3}}$ $Co = \frac{\text{element 2}}{\text{element 4}}$

Percent failing: $Bn = \frac{\text{element 5}}{\text{element 1}}$ $Co = \frac{\text{element 6}}{\text{element 2}}$

Information should be analyzed for the command as a whole and by individual installation. Overall performance can be assessed in terms of trends. Comparative analysis will give an indication of installation level performance.

LEVEL OF EFFORT REQUIRED

The effort required to obtain, maintain, and analyze the information for this measure is expected to be minimal.

PERFORMANCE MEASURE

3.1 The percentage of Reserve Components units achieving training objectives (company or comparable level proficiency).

DESCRIPTION

The attainment and maintenance of company or comparable level proficiency (REDCON 1) is prescribed by AR 350-1 as the minimum training objective of Reserve Components units. During training year 1975, the interim minimum training objective for all company-size units is REDCON 2. Because it is currently infeasible for most armor companies to complete Tank Gunnery Tables VII and VIII until mobilized, a minimum standard of "substantially ready" (REDCON 2) is acceptable for them. The CONUSAs, ARRs, and RGs (through hands on assistance) in addition to HQ FORSCOM have important roles in the supervision and support of Reserve Components training. Commanders of Reserve Components units, however, have the ultimate responsibility for the training of their units.

SUPPORTING DATA

	Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1.	Number of FORSCOM units reporting readiness	NGB, FORSCOM	X		Annually
2.	Number of reporting units attaining training objectives	Reserve Components Annual Training Evaluation (FORSCOM Form 480-R)	X		Annually

DATA ANALYSIS

Separate analysis will be conducted for combat and combat support units. In addition, separate evaluations should be made for the overall performance of the USAR and the ARNG using trend analysis. At least at the HQ FORSCOM level, these data should be stratified by ARCOM, GOCOM, and state for comparative evaluation.

LEVEL OF EFFORT REQUIRED

Minimal effort is required.

PERFORMANCE MEASURE

3.2 The percentage of materiel required for training that is operationally ready (OR), not operationally ready maintenance (NORM), and not operationally ready supply (NORS).

DESCRIPTION

Training time for the Reserve Components is already institutionally constrained. The loss of training time due to inoperable equipment can only seriously hinder the training readiness of the Reserve Components. Accordingly, this measure provides important information with regard to Reserve Components materiel readiness, the magnitude of the influence of inoperable materiel on the state of Reserve Components training and the quality of Reserve Components Resource Management. As a result, it will reflect the character of management by Reserve Components commanders, FORSCOM personnel, and the DA staff in maintaining materiel operability.

SUPPOPTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Number of units of materiel	Materiel Readiness Reports	X		Semiannually
2. Number of units of materiel operational		X		Semiannually
3. Number of units of materiel not operational because of maintenance		X		Semiannually
4. Number of units of materiel not operational because of supply		X		Semiannually

DATA ANALYSIS

The required measures are computed as follows:

$$OR = \frac{\text{element 2}}{\text{element 1}}$$

$$NORM = \frac{\text{element 3}}{\text{element 1}}$$

$$NORS = \frac{\text{element 4}}{\text{element 1}}$$

This information should be analyzed separately for the USAR and the ARNG overall. At least at the FORSCOM level, the data should be stratified by ARCOM, GOCOM, and state for comparative analysis of performance.

LEVEL OF EFFORT REQUIRED

The effort required to obtain, maintain, and analyze the information for this measure is expected to be minimal.

PERFORMANCE MEASURE

3.3 The percentage achievement of personnel readiness objectives.

DESCRIPTION

Reserve Components unit commanders are responsible for the personnel readiness of their units. They must overcome such difficulties as: recruiting or reenlisting adequate numbers, delays in obtaining initial active duty individual training (REP-63) quotas, and frequent conflicts between civilian job demands and unit requirements for its members. The lower of the two indicators, strength REDCON and MOS REDCON, is reported as the unit personnel REDCON. The objective is to achieve a personnel REDCON that matches or exceeds the unit ALO.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Number of FORSCOM units reporting readiness	NGB FORSCOM	X		Semiannually
2. Number of reporting units attaining personnel readiness objective		X		Semiannually

DATA ANALYSIS

The percentage achievement of unit personnel objectives is determined by dividing element 2 by element 1. Trends in the percentage will provide an indication of overall performance in personnel management. Separate analyses should be made for the USAR and the ARNG because of differences in their chain of command. Further stratification of these data by ARCOM, GOCOM, and state and comparative analyses should be done at the FORSCOM level as a minimum.

LEVEL OF EFFORT REQUIRED

Minimal effort is required.

PERFORMANCE MEASURE

4.1 The percentage of RG personnel time spent in the field for assistance purposes.

DESCRIPTION

The primary function of the RG is technical assistance to Reserve Components units. This measure determines in terms of time in the field the extent of actual "hands on" assistance efforts by RG personnel to Reserve Components units. This information should be useful to RG, ARR, CONUSA, HQ FORSCOM, and DA Staff personnel in considering the sufficiency of RG assistance efforts. It also is important since RG personnel have replaced most of the dedicated advisors at battalion level who were available to their units on a daily basis.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Total number of actual days worked for all non-clerical personnel	RG		X	Quarterly
2. Number of man-days spent visiting units for assistance purposes			X	Quarterly

DATA ANALYSIS

The percentage of RG time is computed by dividing element 1 into element 2. For the first two years, data should be collected on a quarterly basis to identify seasonal and cyclical impacts. Trend analysis should be made annually of overall RG performance. At the HQ FORSCOM level, annual comparative analyses should be made of RGs individually, by ARR, and by CONUSA in order to ascertain patterns of performance at these three organizational levels.

LEVEL OF EFFORT REQUIRED

A minimum level of effort is required to establish the new report. The data should currently be available at the RG level in some form but must be formalized for reporting purposes. The analysis requirement can be performed with little effort.

PERFORMANCE MEASURE

4 2 The timeliness of request satisfaction by RG for valid assistance requests from Reserve Components units.

DESCRIPTION

The effectiveness of a readiness group or any other mechanism for providing assistance to Reserve Components (RC) rests on its ability to provide the kinds of assistance needed in time to be of use. This measure relates to the following question: For satisfied requests, what were the time lags between request and satisfaction? This information on the responsiveness of RGs to Reserve Components assistance needs will be useful to RGs, ARRs, CONUSAs, HQ FORSCOM, and the DA Staff in considering whether or not modifications need to be made in the Army's Reserve Components assistance mechanisms (e.g., increased RG manpower, addition of RGs, or realignment of RG territories).

SUPPORTING DATA

Element	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Average number of days between requests for assistance and satisfaction of such requests	RGs		X	Quarterly

DATA ANALYSIS

Data should be collected on a quarterly basis for the first two years of evaluation. Annual trend analysis should be made of overall RG performance. At the HQ FORSCOM level, annual comparative analyses should be made of RGs individually, by ARR, and by CONUSA in order to identify specific modifications, if required, in the assistance mechanism.

Command norms for element 1 should be established based on analysis of the first collection of element 1 data and military judgment. Except for emergency type requests, 30 to 60 days appears reasonable to permit orderly scheduling and economy of travel by consolidating trips where possible.

LEVEL OF EFFORT

A minimum level of effort is required to establish the new report and make the required analyses.

PERFORMANCE MEASURE

4.3 The standardization of the approaches utilized by ARRs and RGs in carrying out their missions and functions.

DESCRIPTION

Both because of the increased part that the Reserve Components are to play in national security and the relative newness of the ARR and RG as Army entities, the question of standardization of ARR and RG activities throughout CONUS is an important one. The major interest in comparing ARRs and RGs is to determine the nature and form of their activities in the areas of training and technical assistance. Similarly, the question of standardization refers not so much to detailed conformance with ARR and RG missions and functions as to the impacts of the various ARR and RG programs on Reserve Components training and technical assistance. This measure will serve two purposes. First, it will uncover cases where ARRs and RGs are utilizing vastly different approaches in dealing with Reserve Components. Secondly, it will highlight those ARR and RG program efforts that are most effective in meeting Reserve Components needs. Based on these, the desirability and extent of standardization can be evaluated.

SUPPORTING DATA

Element	Source	Currently reported Yes	Currently reported No	Collection frequency
(Relevant survey issues)				
1. Ways that ARRs and RGs participate in RC training activities	Sample survey of CONUSA, ARR, RG, and RC personnel		X	One-time requirement
2. Ways that ARR and RG training actions facilitated or improved either AT or IDT scheduled RC training activities			X	

(cont'd)

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
3. Those aspects of RG or ARR operations with regard to training and technical assistance that are particularly helpful or influential in assisting RC units in maintaining or improving unit training and combat readiness			X	
4. Those aspects, if any, of RG or ARR operations that hinder or impede the maintenance or achievement of unit training and combat readiness			X	

DATA ANALYSIS

The actual data elements for this measure will be individual survey questions based on the above relevant issues. Analysis of the various documentation (missions and functions statements, CONUSA, ARR, and RG regulations and procedures) will also be called for. The information obtained from both survey and documentary sources will then be considered from the point of view of differences in the management and operation of ARRs and RGs. The analysis is of interest to DA in terms of the total impacts of the system and the assets allocated to it. It is of interest to HQ FORSCOM because of identification of specific opportunities for improvment.

LEVEL OF EFFORT REQUIRED

A moderate effort will be required to develop, pretest, and administer a reliable and valid survey instrument and to analyze the results. This measure should be developed and implemented by an office within HQ FORSCOM or HQ DA or by an independent review source.

PERFORMANCE MEASURE

4.4 The assessment of Reserve Components personnel regarding the impacts of the loss of dedicated unit advisors for most battalions and smaller units, the greater availability of technical expertise in functional areas, and the emphasis on "hands on" assistance.

DESCRIPTION

This particular measure assesses the effectiveness of existing organizational mechanisms (CONUSA, ARR, and RG) in achieving the objectives of making available broad-based technical expertise and providing "hands on" assistance to Reserve Components. The measure will accomplish this by asking a sample of Reserve Components commanders to compare the previous approach of dedicated unit advisors to the readiness group approach and to provide their judgments regarding the relative impacts of these approaches on the readiness of their units. This information should be of use at various levels of Army command (RG, ARR, CONUSA, FORSCOM, DA Staff) in considering what the nature and form of future organizational modifications regarding interaction between Active and Reserve Components might take if such modifications are in fact required.

SUPPORTING DATA

Elements		Currently reported Yes	Currently reported No	Collection frequency
(Relevant survey issues)				
1. Impacts of the loss of dedicated unit advisors and the establishment of RGs on the Reserve Components units' management and operation	Sample survey of Reserve Components personnel		X	One-time requirememt
2. Useful aspects of the dedicated unit advisor approach that are not available under the RG approach			X	

(cont'd)

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
3. Influence of the "hands on" assistance offerred by RGs on the readiness of RC units			X	
4. Skills required by RC units that are not provided by RG assistance personnel			X	
5. Expertise of RG personnel in the provision of the "hands on" assistance they have been called on to perform based on experience of RC units			X	

DATA ANALYSIS

The actual data elements for this measure will be the individual survey questions based on the above relevant issues. Analysis of the survey responses will emphasize both potential means of improving Active Army assistance to Reserve Components, and the adequacy of performance of presently existing Reserve Components assistance mechanisms. HQ FORSCOM should analyze the results by RG, ARR, and CONUSA for patterns that could indicate management areas for further study.

LEVEL OF EFFORT REQUIRED

A moderate effort will be required to develop, pretest, and administer a reliable and valid survey instrument and to analyze the results. This measure should be developed and implemented by an office within HQ FORSCOM or HQ DA or by an independent review source.

PERFORMANCE MEASURE

4.5 The character and extent of participation of CONUSA and ARR personnel in the planning, support, and evaluation of Reserve Components training.

DESCRIPTION

The training year is crucial to Reserve Components readiness. A major function of the CONUSAs and ARRs is the training of Reserve Components units in their geographical areas. The training of Reserve Components units requires extensive resource commitments, coordination, and planning. The purpose of this measure is to determine the character and extent of CONUSA and ARR involvement in training and to identify individual actions that have been taken by CONUSA and ARR to improve training.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
(Relevant survey issues)				
1. Ways that CONUSA/ARR personnel are involved in the planning, conduct, and evaluation of Reserve Components IDT and annual training	Sample survey of CONUSA, ARR, and Reserve Components personnel		X	One-time requirement
2. Estimated percentage of CONUSA/ARR staff time devoted to Reserve Components training: a. during the summer training period b. the rest of the year			X	
3. Unique actions taken by CONUSA/ARR to improve or facilitate Reserve Components training			X	

DATA ANALYSIS

A sample survey of CONUSA, ARR, and Reserve Components personnel based on the above questions will be required to obtain the information needed for this measure. Analysis of survey responses will emphasize the level of activity, timeliness, and responsiveness of Active Army involvement in the planning, conduct, and evaluation of Reserve Components training.

LEVEL OF EFFORT REQUIRED

A moderate effort will be required to develop, pretest, and administer a reliable and valid survey instrument and to analyze the results. This measure should be developed and implemented by an office within HQ FORSCOM or HQ DA or by an independent review source.

PERFORMANCE MEASURE

4.6 The degree of overlap among the USAR command/support functions of the CONUSA, ARR and ARCOM.

DESCRIPTION

Both the goal of increasing the quality and responsiveness of management and the objective of increasing "tooth" in relation to "tail" suggest the importance of reducing duplication of administrative effort. This performance measure would bring to light the nature and extent of those unnecessary overlaps in CONUSA, ARR, and ARCOM functions that result in duplication of effort, if any, and those necessary ones that represent the exercise of authority and control by one level of command over another. Any necessary modifications of resource allocations or organizational structure and functions could then be taken by the appropriate Army entity.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Published USAR command/support functions of the CONUSA, ARR and ARCOM	Missions and functions of HQ involved	X		One-time requirement.
2. The degree in practice to which shared functions involve similar activities in contrast to complementary or supplementary activities	Sample survey of FORSCOM, CONUSA, ARR, ARCOM, and USAR unit personnel		X	
(Relevant survey issues)				
a. The extent and ways in which the USAR command/support functions performed by the CONUSA/ARR/ARCOM are also performed by others			X	
b. Categorization of shared functions (i.e., duplicative, complementary, or supplementary activities)			X	

(cont'd)

Elements	Source	Currently reported Yes	No	Collection frequency
c. Identification of levels that duplicative activities would best be carried out if the functions were restricted to one level			X	
d. Existing gaps in command/support functions			X	

DATA ANALYSIS

The actual data elements for this measure will be individual survey questions based on the above relevant issues since management as "practiced" rather than as "written" is the key. Information obtained from documentary sources (mission and function statements, regulations, command letters, and SOPs) is also required. The analysis is of interest to HQ DA in terms of total impacts and the assets allocated to USAR command/support functions. It is of interest to HQ FORSCOM because of identification of specific opportunities or need for improvements,

LEVEL OF EFFORT REQUIRED

By itself the level of effort required to obtain the information for this measure would be moderate. The incremental increase in effort, however, would be small if the data collection and analysis required for this measure were accomplished along with that of a related measure (e.g., performance measure 4.3). This measure should be developed and implemented by an office within HQ FORSCOM or HQ DA or by an independent review source.

PERFORMANCE MEASURE

5.1 Supply Division fill rate.

DESCRIPTION

In considering installation performance in providing units with required supply items, the extent that valid demands for stocked and non-stocked items can be filled fully and immediately on request is of importance. Inability to supply valid items can potentially have serious impacts on both combat readiness and the on-going operation of the Army. The fill rate when aggregated and compared over time will also provide an indication of overall Army supply performance. Accordingly, this measure will provide information that will assist installation, command, and Army Staff personnel in considering the impact of supply operations on Army effectiveness and in establishing procedures to improve supply fill, if necessary.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection
1. Number of valid demands received by the installation supply division	FORSCOM and TRADOC installations		X	Quarterly
2. Number of valid demands received by installation supply division that are fully and immediately filled			X	Quarterly

DATA ANALYSIS

DA Circular 700-25, dated 23 April 1974, prescribes selected Army logistics performances measures that include the supply division fill rate (computed by dividing element 2 by element 1). The Circular establishes objective rates of 65 percent for installations supporting more than one division and 70 percent for installations supporting a division or less. Trend analysis of the mean for all FORSCOM installations will

provide an indication of overall FORSCOM performance. At HQ FORSCOM comparative analysis should be made of the installation rates to identify potential problem areas.

LEVEL OF EFFORT REQUIRED

Minimal effort is required. Presumably the installations are already using this measure to monitor logistics performance.

PERFORMANCE MEASURE

5.2 Maintenance Production/Backlog

DESCRIPTION

With regard to installation materiel maintenance activities, the backlog, change in backlog, and production rates are useful measures of performance. Backlog information measures the size of any shortfall in maintenance resources. Change in backlog measures the effectiveness of the installation's response to a backlog problem. Production rate measures the installation's capacity to perform maintenance activities. Taken together this information provides an overview of installation performance in the materiel maintenance area that can serve as the basis for further investigation as required.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Total number of maintenance jobs beginning of month	FORSCOM installations	X		Monthly
2. Number of maintenance jobs at end of month		X		Monthly
3. Number of jobs completed in month		X		Monthly

DATA ANALYSIS

FORSCOM Regulation 750-2, 7 Aug 73, prescribes the purpose, scope, and method of submission of a Monthly Maintenance Production/Backlog Report by FORSCOM installations. It is suggested that special consideration be given to the following information:

Backlog: element 2

Change in backlog: element 2 - element 1

Production: element 3

In particular, trend analysis of the mean for all FORSCOM installations

will provide an indication of overall FORSCOM performance. At HQ FORSCOM comparative analysis should be made of the installation performance to identify potential problem areas and to make decisions concerning installation staffing, programming and allocation of funds, and mission assignments.

LEVEL OF EFFORT REQUIRED

Minimal effort is required. Installations are already using this information to monitor and report maintenance performance.

PERFORMANCE MEASURE

5.3 Installation generated recruitment and reenlistment rates.

DESCRIPTION

With the adoption of the "All Volunteer Army" concept, recruitment and retention became major concerns and responsibilities of installation commanders. The recruitment rate achieved by an installation through the Army's unit-of-choice/station-of-choice programs can significantly influence the capabilities of units stationed at the installation in reaching their personnel ALO objectives. The recruitment rate used here focuses on ranks E-1 through E-4 which make up the bulk of installation recruiting. Exceptions made for individuals in the stripes-for-skills option are omitted from the measure purely for reasons of administrative simplification.

Retention rates are important because they represent a continued return on investment. The resources required to train recruits are large. The experience gained by individuals during a first term of service is an additional "trained" resource that can not be duplicated except by the repeated process of finding replacements. Moreover, the reenlistment rate is an imprecise, but still indicative, measure of motivation, job satisfaction, morale, and the comparative appeal of a military career in comparison to other career alternatives. The reenlistment rate used here focuses on "first termers," individuals with less than 48 months of service, whose decision on a second term of service is really a decision to make the Army a career.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
Recruitment rate:				
1. Number of persons recruited (E-1 through E-4)	FORSCOM DCSPER	X		Monthly
2. Number of authorized enlisted spaces (E-1 through E-4) to be filled through recruitment		X		Monthly

(Cont'd)

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
Reenlistment rate:				
3. Number of "first termers" reenlisted		X		Monthly
4. Number of "first termers eligible for separation who are also eligible for reenlistment			X	Monthly

DATA ANALYSIS

The recruitment rate (element 1 divided by element 2) and the reenlistment rate (element 3 divided by element 4) should be computed for each installation and the command as a whole. The FORSCOM rates should be analyzed through trend analysis and also by comparisons with other CONUS commands. Comparative analysis should be made of the installation rates to identify especially successful programs or potential problem areas requiring assistance/action by HQ FORSCOM, USAREC, or HQ DA.

LEVEL OF EFFORT REQUIRED

Minimal effort is required.

PERFORMANCE MEASURE

5.4 The percent of FORSCOM's annual funding program that is distributed to subordinate elements in the last two months of the fiscal year.

DESCRIPTION

In the past, a limitation on the installation commander's capability to plan and control resources on an orderly basis has been the piecemeal allocation of dollar resources by higher headquarters, particularly at year end. This pattern of behavior has retained discretion and control at higher levels while leaving the installation commander constrained by the uncertainty of his actual resources. This measure will monitor the actual commitment of FORSCOM program managers to the strengthening of the installation commander's role. It will also identify the order of magnitude of funds made available to installation commanders late in the fiscal year. A certain level of year-end allocations is expected since program slippages and cancellations or price changes can generate dollars that should be applied to high priority unfinanced requirements. The level of such funding, however, should be predictable and in a manageable proportion to total spending.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Total FORSCOM OMA and OMAR funding programs	FORSCOM DCS Comptroller	X		Annually
2. Amount of dollars in each funding program distributed during final two months of fiscal year		X		Annually

DATA ANALYSIS

The desired percentage figure may be constructed for each appropriation by dividing element 2 by element 1. The absolute percent will indicate the order of magnitude and identify unusual circumstances requiring

special analysis. Trends over time will reflect actions to improve performance or highlight possible needs for management action.

LEVEL OF EFFORT REQUIRED

Minimal effort will be required from HQ FORSCOM Comptroller to develop this measure.

PERFORMANCE MEASURE

5.5 The percent of the installations' annual funding program that is obligated in the last thirty (30) days of the fiscal year.

DESCRIPTION

This measure addresses two distinct, but related, issues. Both concern themselves with the question of the installation commander's authority to control available resources. One issue is the capability of the installation commander to develop and implement a balanced management program that spreads resource obligations across the fiscal year in accordance with established priorities and requirements and with minimal turbulence to administrative procedures. The second issue addressed here is the distribution of year-end funds to installations taken as a factor tending to unbalance installation planning in the direction of those areas—typically the BEMAR list—where large expenditures can be made, or delayed, with least impact on mission quality.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Total OMA and OMAR funding programs for FORSCOM installations	FORSCOM DCS Comptroller	X		Annually
2. Amount of dollars in each funding program obligated during final month of fiscal year		X		Annually

DATA ANALYSIS

The desired percentages may be constructed for each appropriation by dividing element 2 by element 1. The absolute percent will indicate the order of magnitude of the problem, if any, by its variance from 8.3 percent (straight line projection since a large portion of funds is for civilian pay and operating supplies and costs). Trends over time will reflect actions at the installation level to improve performance, assuming

measure 5.4 is compatible. A comparative analysis by installation also should be made by HQ FORSCOM for its internal management purposes.

LEVEL OF EFFORT REQUIRED

Minimal effort will be required from HQ FORSCOM Comptroller to develop this measure.

PERFORMANCE MEASURE

5.6 The extent of modification (average number of changes) of installation resource contracts.

DESCRIPTION

Installation resource contracts set forth the primary workload to be accomplished and the resources to be provided. They are a valuable aid to planning and programming. They are not intended to inhibit the flexibility of the installation commander (or the MACOM staff). They can serve this flexibility function most effectively if contract modifications in response to changing resource requirements and actual operational experience can be easily made. The purpose of this measure, then, is to determine whether or not these contracts are subject to modification, i.e., the responsiveness of the contract approach.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Number of modifications to installation resource management contracts	FORSCOM DCS Comptroller, TRADOC DCSRM	X		Annually

DATA ANALYSIS

On an overall command basis, summary information for this measure can be obtained by dividing element 1 by the number of installations commanded. This will provide an average number of modifications for the command. A small value for this average (2 or less) may indicate that the contract approach is not being used in a flexible and responsive manner. This should be analyzed in conjunction with the number of requests to DA for additional resources during budget execution and the unobligated funds released during the last two months of the fiscal year. A comparative analysis by installation should be made by the MACOMs for internal management purposes.

LEVEL OF EFFORT REQUIRED

Minimal effort will be required from FORSCOM DCS Comptroller/ TRADOC DCSRM to develop this measure.

PERFORMANCE MEASURE

5.7 The release of unobligated funds by installations during the last two months of the fiscal year.

DESCRIPTION

A potential problem in the management of financial resources involves either the over or under budgeting of financial resources in relation to installation requirements. This measure considers the question of the extent to which budgeted financial resources exceed installation requirements. It also provides information on the response of installation management to such over budgeting, program slippages, or altered requirements. The release of excess financial resources in a timely fashion permits their redistribution by MACOMs or DA to meet priority requirements of the Army.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Funds released by installation to HQ FORSCOM/TRADOC	FORSCOM DCS Comptroller/ TRADOC DCSRM	X		Annually

DATA ANLYSIS

Data analysis efforts for this measure should consider the extent to which over programming/budgeting is a problem. In particular, analysis by installation of reasons for release of unobligated funds (e.g., modified requirements, program slippages, over budgeting) should be conducted. Of additonal interest is the timeliness of release of funds. A macro measure of timeliness on a command basis would be the percentage of funds released during the last two months of the fiscal year. Trend analysis and comparative analysis are recommended.

LEVEL OF EFFORT REQUIRED

Minimal effort will be required from FORSCOM DCS Comptroller/ TRADOC DSCRM to develop the measure.

PERFORMANCE MEASURE

5.8 Percent of stock fund obligations to sales and stock fund obligations to demands.

DESCRIPTION

This measure monitors the installation level management of the FORSCOM/TRADOC portion of the Army Stock Fund. The scale of resources flowing through the fund and the importance of stock-funded items to adequate support of readiness and training make this an area of management concern. The objective of the stock fund system is to provide timely service to customers in the filling of legitimate orders. In a perfectly fluid stock fund system, obligations would equal 100 percent of demands and 100 percent of sales. Slight imbalances in the system may occur for a number of legitimate reasons. The installation retailer may want to anticipate future sales by placing an order with the wholesaler before a formal customer demand is received. Such an action would minimize the delay experienced by the customer, although it would also temporarily create obligations in excess of both demands and sales. Increases in "dues out" would result in a higher ratio of obligations to sales. The building of inventories at the retail level would also result in higher ratios of obligations to sales and demands, whereas the depletion of existing inventories would be accomplished by filling demands from items on hand rather than placing new obligations. Therefore, the measure is only meaningful when placed in the context of policies and conditions existing at the time covered by the data gathered.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Dollar value of stock fund sales	FORSCOM and TRADOC DCSLOG records	X		Quarterly
2. Dollar value of stock fund obligations		X		Quarterly
3. Dollar value of stock fund demands		X		Quarterly

DATA ANALYSIS

The desired percentages can be computed by dividing item 1 into item 2 (obligations to sales) and item 3 into item 2 (obligations to demands). This information can be provided by installation or by MACOM. The meaningfulness of the measure, of course, will depend on the quality of additional information explaining the conditions affecting installation level management of the stock fund supply system. A deviation of plus or minus 5 percent is the normal performance range; larger deviations should be analyzed for specific causes. Both trend and comparative analysis should be used.

LEVEL OF EFFORT REQUIRED

Minimal effort will be required from TRADOC/FORSCOM DCSLOG to provide this measure.

PERFORMANCE MEASURE

5.9 Percent of pay changes rejected (JUMPS-Army Status report).

DESCRIPTION

This measure is one indicator of installation and command level administration of payroll matters. Installations submit pay changes to the US Army Finance Support Agency at Fort Benjamin Harrison. Submitted changes which are rejected for incompleteness, inaccuracies, or other reasons cause delays in the implementation of changes and require additional, duplicative work throughout the finance system. Delays in pay are a prime cause of morale problems and often create hardships for the individuals affected. The duplicative work involved is a costly and wasteful use of resources.

The percent of pay changes rejected may be a function of the number of pay changes submitted. Moreover, the submission of a pay change may be delayed by several months at the installation level with consequent impact on morale, yet never be reflected in this measure. Information regarding the lateness of pay changes submitted, the numbers of pay changes submitted, and the numbers of inquiries received at the installation is available on computer-generated reports at the MACOM level.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Number of pay changes submitted	FORSCOM DCS Comptroller/ TRADOC DCSRM records	X		Quarterly
2. Number of pay changes rejected		X		Quarterly

DATA ANALYSIS

The desired percentage can be computed directly from the two data elements by dividing item 1 into item 2. The percentage can be provided for individual installations or for the MACOM as a whole. The meaningfulness of the measure will depend on the consideration of such additional factors as those discussed above. The data are available on a monthly basis but

need be reported only quarterly for purposes of this evaluation plan. The acceptable performance range is up to 4 percent rejections; however 2 percent or less is desirable. With less turbulence under the all-volunteer Army concept and more experience with JUMPS, the reject rate should continue downward. Both trend and comparative analysis should be used.

LEVEL OF EFFORT REQUIRED

Minimal effort will be required from FORSCOM Comptroller/TRADOC DCSRM to provide this measure.

PERFORMANCE MEASURE

5.10 Percent of financed requirements to total requirements for maintenance of real property.

DESCRIPTION

This measure gives a view of the met requirements to the total (met and unmet) requirements for maintenance of real property (MRP). The installation commander has flexibility to affect both. Mission or other base operations funds can be shifted to meet maintenance needs, thereby increasing the financed portion. Self-help programs or other measures can be initiated to reduce the total requirement. The backlog of maintenance requirement (BMAR) is a difficult concept that can be altered significantly by changes in definitions or subjective judgments; it also affects stated total requirements.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Dollar value of financed maintenance of real property requirements	FORSCOM/ TRADOC Engineer	X		Annually
2. Dollar value of total maintenance of real property requirements		X		Annually

DATA ANALYSIS

The desired percentage is computed by dividing element 1 by element 2. The meaningfulness of this measure depends to a large degree on the precision used to define BMAR. The desired performance level is at least 75 percent. Both trend and comparative analysis should be used.

LEVEL OF EFFORT REQUIRED

Minimal effort will be required from the FORSCOM/TRADOC Engineer to provide this measure.

PERFORMANCE MEASURE

5.11 Percent of minor construction (direct expenses) to maintenance of real property (MRP) (direct expenses).

DESCRIPTION

On 7 September 1973 HQ DA raised the allowable ratio from 8 percent to 15 percent. The intention behind this change was to give maximum flexibility to the installation commander. The purpose of this measure is to monitor installation level minor construction. Such construction is defined by a dollar-ceiling of not more than $50,000 per project. The minor construction category has a great appeal to installation commanders as funds are spent from the OMA budget rather than from the MCA budget which may take up to two years or more to receive. Installation commanders may naturally tend to maximize the use of minor construction funds for their installations. From the point of view of higher headquarters, however, the excessive use of OMA funds for this purpose is disruptive of other management responsibilities, particularly the maintenance and repair of real property, and also could result in underutilization of MCA funds.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Minor construction direct expenses	FORSCOM/ TRADOC Engineer	X		Quarterly
2. MRP direct expenses		X		Quarterly

DATA ANALYSIS

The desired percent can be constructed directly from the data elements by dividing element 1 by element 2. Both trend and comparative analysis should be used.

LEVEL OF EFFORT REQUIRED

Minimal effort will be required from the FORSCOM/TRADOC Engineer to provide this measure.

PERFORMANCE MEASURE

5.12 Percent of occupancy of family housing.

DESCRIPTION

This performance measure monitors the occupancy rate of adequate government-owned family housing. It has implications for two basic management concerns: military morale and cost effectiveness. Morale is affected when delays in the availability of government housing create major inconveniences and expenses for the families of military personnel. Costs are affected when available housing is left idle or when needed housing is left unrepaired and therefor unavailable for assignment. For these reasons the desired performance level for this measure has regularly been set at a high level (DA target of 99 percent, Fiscal Year 1975). As a monitor of actual performance, this measure alerts MACOM and HQ DA managers to changing conditions, some within installation management control and some not within control. For example, the prompt filling of vacancies and timely accomplishment of repair and improvement projects are matters within installation control. On the other hand, if housing is in excess of demand and a waiting list cannot be maintained, then the filling of vacancies will be a matter beyond the direct control of management.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Number of occupancy days available	FORSCOM/ TRADOC DCSLOG	X		Semiannually
2. Number of days of actual occupancy		X		Semiannually

DATA ANALYSIS

The desired percent figure, available for both installation and MACOM levels, may be computed directly from the data elements by dividing element 2 by element 1. The measure should be computed semiannually in order to

provide visibility to cyclical variations. Annual comparisons of the cumulative rate will have to be considered in light of additional information concerning any special conditions affecting individual installations. Both trend and comparative analysis should be used.

LEVEL OF EFFORT REQUIRED

Minimal effort will be required from FORSCOM/TRADOC DCSLOG to provide this measure.

Annex B.2

MAJOR EXTERNAL VARIABLES

FORCES COMMAND

1. Setbacks in the success of the all-volunteer concept as represented by shortfalls in the recruitment of personnel or increased reliance on lower mental categories can markedly influence combat readiness.

2. Alterations in DOD or DA personnel policies and priorities that restrict assignment of qualified personnel in the numbers required, cause personnel turbulence, or reduce stability in command/adviser positions will affect personnel readiness.

3. The imposition of reduced personnel end strengths for the Army by Congress may result in manpower shortages in units or disruptive actions such as "early out" programs.

4. Requirements for large amounts of on-the-job-training (OJT) in units reduces the capabilities for mission-related unit training. Such OJT requirements can arise if individuals in the pipeline are not adequately trained in their MOSs, school training shortfalls occur in critical MOSs, MOS mismatch results from assignments based on compassionate or geographically-oriented (in the case of Reserve Components) reasons, unit TOE conversions, or the introduction of new equipment.

5. The adverse impacts on motivation and morale that can result from antipathy towards military service by the public in general or in areas nearby military installations.

6. Significant changes in the established priorities for issue of new or replacement equipment would alter equipment readiness.

7. A lack of responsiveness by the wholesale logistical system would affect both the amounts of equipment on hand and equipment status.

8. An inability to recruit or retain qualified maintenance technicians due to a general shortage of such personnel and civilian wage scales impacts on equipment readiness.

9. The lack of adequate, readily accessible training facilities, particularly for Reserve Components units, adversely impacts on training readiness.

10. The conflict between the capability of Reserve Components personnel to adjust their civilian job demands in order to attend needed military school training and the availability of school quotas and optimized class schedules.

11. Tactical units are asked to perform several missions that are not readiness related and, if on a prolonged basis, can adversely affect or delay unit readiness. For some of these FORSCOM can influence the impacts by selection of the unit to be involved; for others, circumstances such as geographical location or the nature of the requirement limit this flexibility. Examples of such missions are: user testing, riot control, disaster relief, and requirements placed on National Guard units by the various states.

12. Changes in national strategy or the introduction of new equipment or doctrine can produce revisions to the force structure. Often these result in unanticipated conversions of Reserve Components units to different TOEs with major changes in MOS and unit training and supporting logistical support. The associated reorientation of personnel and equipment is frequently disruptive to command readiness.

13. A prolonged energy crisis that curtails the use of aircraft, tanks, and vehicles for training impairs readiness.

14. Lags in the procurement of materiel and supplies can influence the achievement of readiness of specific units.

15. Continued inflation beyond budgeted rates may reduce FORSCOM's effectiveness by increasingly limiting the resources available to perform an unchanged workload.

16. Unanticipated significant or specific reductions in funding levels by Congress after a major portion of the fiscal year has passed has an unbalancing effect on the command program, reducing flexibility and to some extent distorting priorities.

17. A high degree of reliance on the close and continuous cooperation of TRADOC is necessary under the concept of installation operations. Clearly, FORSCOM is dependent upon the cooperation of TRADOC fcr the support of FORSCOM elements on TRADOC posts and for the coordination of support for TRADOC elements on FORSCOM posts. TRADOC-FORSCOM interdependence extends into many other areas, of course, including support of Reserve Components and development of unit training materials.

18. The logistics base of FORSCOM's installation support mission is sensitive to the frequency of requests from customers. The installation is staffed to perform at a relatively stable rate of workload and unusual demands on those resources can create turbulence. Similarly the abuse by customers of the supply priority request system (i.e., assigning high priorities to inappropriate items) interferes with the proper scheduling of work.

Appendix C

DETAILED ASSESSMENT PLAN FOR HEALTH SERVICES COMMAND

Appendix C

DETAILED ASSESSMENT PLAN FOR HEALTH SERVICES COMMAND

MISSION REFERENCES

Detailed information on the missions and functions of the Health Services Command (HSC) is contained in the following:

- DA AR 10-43, 27 June 1973.
- HSC Regulation 10-1, 30 May 1973.
- HSC Regulation 40-4, 1 April 1973.

SELECTED AREAS FOR MEASUREMENT

Measurements in the four areas below are considered necessary to assess HSC's overall mission performance.

Measurement Area 1: Management of Health Services and Resources. This area relates to HSC's management of health services and supporting resources (personnel and funds), focusing on performance command-wide and generally above installation level. Communications and resource allocations together with consistent application of uniform standards are of concern.

Measurement Area 2: Installation Level Health Services. The provision of quality health services in adequate quantity at the installation level is a primary mission of HSC. This area is concerned primarily with the delivery of health care but also includes other issues such as advice and assistance on health services matters, capitalization on advances in health services technology, and the capability for the supported installation commander to influence the responsiveness of locally provided health services.

Measurement Area 3: Conduct of Medical Training and Education. HSC's responsibility for providing medical education and training is best measured by the performance of graduates trained in its several courses.

Measurement Area 4: Conduct of Assigned Combat/Medical Developments. HSC has responsibility for conducting medical combat developments and other medical developments and studies. Major aspects of the command's performance in this area must be measured in terms of the timeliness and utility of the products resulting from these efforts.

ASSESSMENT PLAN SUMMARY

Table C.1 summarizes the assessment plan for HSC. The individual performance measures to be used in the assessment are specified for each of the areas selected for measurement. Detailed information on each of the performance measures is contained in Annex C.1. This information includes: a description of the measure, supporting data elements, data sources, current reporting status, the recommended collection frequency to support the evaluation, and analytical procedures (method of analysis and level of effort required).

Table C.1 also classifies each performance measure into one of two categories, i.e., performance measures considered as minimum essential to the assessment and those that are particularly recommended to roundout analysis based on the essential measures. Within each category and for each measure there is indication as to whether the data is already available, a new report is required, or a special analysis of some type is needed.

RELATIONSHIPS OF PERFORMANCE MEASURES TO THE GOALS OF THE CONUS REORGANIZATION 1973

In Table C.2 the HSC performance measures are cross-referenced with the four major goals of the CONUS Reorganization 1973.

EXTERNAL VARIABLES

Major external variables that can impact on the performance of HSC are contained in Annex C.2.

Table C.1

ASSESSMENT PLAN SUMMARY: HSC

Performance areas and measures	Minimum essential			Recommended supplement		
	Data available	New report	Special analysis	Data available	New report	Special analysis
Measurement Area 1: Management of Health Services and Resources						
Performance Measures						
1.1 Average number of personal staff visits per MEDDAC per quarter by the Regional Coordinator or his staff in the interest of medical professionalism and standardization of health care delivery.	X					
1.2 Percent of supported installation commanders contacted by the Regional Coordinator for the purpose of determining their views on the effectiveness of health care.	X					
1.3 Ratio of HSC HQ actual strength to total HSC actual strength.	X					
1.4 The ratio of actual to authorized of the percents of medical professionals (doctors and nurses) who are not involved in the direct delivery of health care.	X	X				
1.5 The percent of HSC's annual funding program that is distributed to subordinate elements during the last two months of the fiscal year.	X					
1.6 Medical care cost per MCCU.				X		
1.7 Cost per dental treatment.				X		
1.8 The ratio of special duty augmentation personnel to the authorized military strength for the MEDDAC/Medical Centers.				X	X	
1.9 The percent of the annual funding program of HSC's installations and medical activities that is obligated in the last thirty (30) days of the fiscal year.				X		

Table C.1 (continued)

Performance areas and measures	Minimum essential			Recommended supplement		
	Data available	New report	Special analysis	Data available	New report	Special analysis
Measurement Area 2: Installation Level Health Services						
Performance Measures						
2.1 The index of installation commander satisfaction with locally provided health services.			X			
2.2 The index of patient satisfaction with health care and its delivery.			X			
2.3 The index of adequacy of support (personnel, facilities, services, equipment and administration) and cooperation provided to installation level health services activities.						X
Measurement Area 3: Conduct of Medical Training and Education						
Performance Measures						
3.1 The quality of medical education and training course instruction as demonstrated by on-the-job performance of recent graduates.			X			
3.2 Standards attained by students on performance-based tests or MOS tests.						X
Measurement Area 4: Conduct of Assigned Combat/Medical Developments						
Performance Measures						
4.1 The index of the timeliness and utility of medical inputs into the combat developments process managed by TRADOC and medical development activities that are managed by OTSG.			X			
4.2 The index of the timeliness and utility of HSC's integrated study program that is designed to improve the organization and management of health care delivery worldwide.						X
4.3 The index of the timeliness and utility of HSC's materiel health and safety reviews.						X

Table C.2

RELATIONSHIPS OF HSC PERFORMANCE MEASURES TO REORGANIZATION GOALS

Performance areas and measures	Reorganization goals			
	A	B	C	D
Measurement Area 1: Management of Health Services and Resources				
Performance Measures				
1.1 Average number of personal staff visits per MEDDAC per quarter by the Regional Coordinator or his staff in the interest of medical professionalism and standardization of health care delivery.			X	
1.2 Percent of supported installation commanders contacted by the Regional Coordinator for the purpose of determining their views on the effectiveness of health care.			X	X
1.3 Ratio of HSC HQ actual strength to total HSC actual strength.			X	
1.4 The ratio of actual to authorized of the percents of medical professionals (doctors and nurses) who are not involved in the direct delivery of health care.			X	
1.5 The percent of HSC's annual funding program that is distributed to subordinate elements during the last two months of the fiscal year.			X	
1.6 Medical care cost per MCCU.			X	
1.7 Cost per dental treatment.			X	
1.8 The ratio of special duty augmentation personnel to the authorized military strength for the MEDDAC/Medical Centers.			X	
1.9 The percent of the annual funding program of HSC's installations and medical activities that is obligated in the last thirty (30) days of the fiscal year.			X	
Measurement Area 2: Installation Level Health Services				
Performance Measures				
2.1 The index of installation commander satisfaction with locally provided health services.	X		X	X
2.2 The index of patient satisfaction with health care and its delivery.			X	
2.3 The index of adequacy of support (personnel, facilities, services, equipment and administration) and cooperation provided to installation level health services activities.			X	

Table C.2 (continued)

Performance areas and measures	Reorganization goals			
	A	B	C	D
Measurement Area 3: Conduct of Medical Training and Education				
Performance Measures				
3.1 The quality of medicsl education and training course instruction as demonstrated by on-the-job performance of recent graduates.		X	X	
3.2 Standards attained by students on performance-based tests or MOS tests.		X	X	
Measurement Area 4: Conduct of Assigned Combst/Medical Developments				
Performance Measures				
4.1 The index of the timeliness and utility of medical inputs into the combat developments process managed by TRADOC and medical development activities that are managed by OTSG.		X		
4.2 The index of the timeliness and utility of HSC's integrated study program that is designed to improve the organization and management of health care delivery worldwide.		X		
4.3 The index of the timeliness and utility of HSC's materiel health and safety reviews.		X		

PERFORMANCE MEASURE

1.1 Average number of personal staff visits per MEDDAC per quarter by the Regional Coordinator or his staff in the interest of medical professionalism and standardization of health care delivery.

DESCRIPTION

Consolidation of all CONUS health services activities under one commander provides for development and consistent application of uniform standards of health services delivery. Although the HSC commander and staff visit subordinate activities, the span of control necessitates that eight Regional Coordinators on a geographical area basis assist in the coordination and professional technical supervision of health care. This is best accomplished by personal visits of the Regional Coordinator or members of his staff to the MEDDACs which are the principal deliverers of health care. The frequency of such visits generally measures the opportunities for direct observation of professional practices, educational programs, and adequacy of facilities and staffing together with direct interchanges on problem areas and professional techniques.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Total number of visits to MEDDACs by Regional Coordinator or his staff	Regional Coordinator, HSC Reg 40-4	X		Quarterly
2. Number of MEDDACs in each Region		X		As changed

DATA ANALYSIS

The quarterly performance for each Region is computed by dividing element 1 by element 2. The overall command performance is determined by summing the Region's averages and dividing by eight. Analysis of trends over time will reflect command emphasis on the provision of quality health services. Comparative analysis of performance by Region will assist HQ HSC in identifying areas for emphasis at that level.

LEVEL OF EFFORT REQUIRED

Minimal effort is required.

PERFORMANCE MEASURE

1.2 Percent of supported installation commanders contacted by the Regional Coordinator for the purpose of determining their views on the effectiveness of health care.

DESCRIPTION

Supported installation commanders who are responsible for Army mission accomplishment require means to influence the quality and quantity of health services provided to their commands. Regional Coordinators are responsible to coordinate with them to determine the effectiveness of health care, to assure the commanders' understanding of the health services program, and to secure their support of the overall health care program. Such coordination visits also provide the supported commanders with a source to supplement the advice and assistance of their DMEDAs on health services matters. Systematic contact of supported commanders is important to the evaluation and management of health services.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Number of installation commanders contacted by the Regional Coordinator during past 6 months	Regional Coordinator, HSC Reg 40-4	X		Semiannually
2. Number of installation commanders supported		X		As changed

DATA ANALYSIS

The measure is computed by dividing element 2 into element 1. Trend analysis will reflect HSC's performance in the coordination of health care as geared to the users' needs. Comparative analysis by Region should be performed by HQ HSC.

LEVEL OF EFFORT REQUIRED

Minimal effort is required.

PERFORMANCE MEASURE

1.3 Ratio of HSC HQ actual strength to total HSC actual strength.

DESCRIPTION

An objective of the medical reorganization is to provide the most effective health care delivery CONUS-wide with the most efficient use of scarce medical resources. One indicator of its accomplishment is the maintenance of a lean headquarters in comparison with the total strength of the dedicated medical command. Trained medical personnel and dollars to hire civilian staff are scarce and their use for nonpatient care functions should be minimized. Actual rather than authorized strengths are used to more accurately reflect this measure.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. HQ HSC actual assigned strength	ACSFOR 78	X		Annually (12 months average)
2. Total HSC actual assigned strength		X		Annually (12 months average)

DATA ANALYSIS

The required ratio is formed by dividing element 1 by element 2. Analysis of variations in the ratio over time should be conducted.

LEVEL OF EFFORT REQUIRED

Minimal effort is required.

PERFORMANCE MEASURE

1.4 The ratio of actual to authorized of the percents of medical professionals (doctors and nurses) who are not involved in the direct delivery of health care.

DESCRIPTION

A reduction in the total number of AMEDD personnel assigned to nonpatient care functions was one of the guidelines for the Reorganization. Management should be concerned with both the numbers of such positions authorized and the numbers actually assigned. This is particularly vital with the end of the doctor draft and a likely scaracity of doctors to support projected patient loads. The ratio indicates management's success in maintaining such assignments in balance.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Number of medical professionals assigned to nonpatient care functions	HSC DCSPER		X	Annually
2. Total of assigned medical professionals		X		Annually
3. Number of medical professionals authorized for nonpatient care functions			X	Annually
4. Total of authorized medical professionals		X		Annually

DATA ANALYSIS

The ratio is computed as follows:

$$\frac{\frac{\text{element 1}}{\text{element 2}}}{\frac{\text{element 3}}{\text{element 4}}}$$

The absolute ratio will indicate if assignments and assets are in balance. Trend analysis over time would provide indication of developing unfavorable patterns.

LEVEL OF EFFORT REQUIRED

Although additional data must be collected for elements 1 and 3, the total effort required is minimal.

PERFORMANCE MEASURE

1.5 The percent of HSC's annual funding program that is distributed to subordinate elements during the last two months of the fiscal year.

DESCRIPTION

In the past, a limitation on the medical activity commander's capability to plan and control resources on an orderly basis has been the piecemeal allocation of dollar resources by higher headquarters. This pattern of behavior has retained discretion and control at higher levels while leaving the medical activity commander constrained by the uncertainty of his actual resources. Medical activities also were funded by several different commands, reducing the Army's capability to rapidly allocate and reallocate resources to respond to changing requirements. This measure will identify the order of magnitude of funds made available to medical activity commanders late in the fiscal year. A certain level of year-end allocations is expected since program slippages and cancellations or price changes can generate dollars that should be applied to high priority unfinanced requirements. The level of such funding, however, should be predictable and in a manageable proportion to total spending.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Total HSC OMA funding program	HSC, DCS Comptroller	X		Annually
2. Amount of OMA dollars distributed during final two months of fiscal year		X		Annually

DATA ANALYSIS

The desired figure may be constructed for each appropriation by dividing element 2 by element 1. The absolute percent will indicate the order of magnitude and identify unusual circumstances requiring special analysis. Trends over time will reflect actions to improve performance or highlight possible needs for management action.

LEVEL OF EFFORT REQUIRED

Minimal effort will be required.

PERFORMANCE MEASURE

1.6 Medical care cost per MCCU.

DESCRIPTION

The OMA costs of medical care (excluding base operations) are one overall indicator of command-wide management of resources for health services.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Total quarterly cost for AMS 841211 less 841211.18 and 841211.Z	HSC MED 302, MED 304	X		Quarterly
2. Average daily MCCU for quarter times number of calendar days in quarter		X		Quarterly

DATA ANALYSIS

The measure is computed by dividing element 1 by element 2. Trend analysis should be made of command performance. Percent changes should be compared with percent changes in civilian medical costs. Comparative analysis and trend analysis should be conducted by HQ HSC for the individual medical activities.

LEVEL OF EFFORT REQUIRED

Minimal effort will be required.

PERFORMANCE MEASURE

1.7 Cost per dental treatment.

DESCRIPTION

The OMA costs of dental care are an overall indicator of command-wide management of resources for operation of hospital dental services and dental clinics.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Total quarterly cost for AMS 841211.18	HSC MED 304	X		Quarterly
2. Total quarterly dental treatments		X		Quarterly

DATA ANALYSIS

The measure is computed by dividing element 1 by element 2. Trend analysis should be made of command performance. Percent changes should be compared with percent changes in civilian dental care costs. Comparative analysis and trend analysis should be conducted by HQ HSC for the individual medical activities.

LEVEL OF EFFORT REQUIRED

Minimal effort will be required.

PERFORMANCE MEASURE

1.8 The ratio of special duty augmentation personnel to the authorized military strength for the MEDDAC/Medical Centers.

DESCRIPTION

Augmentation of MEDDAC/Medical Center military staffs by special duty personnel is frequently done for training purposes or to overcome resource deficiencies. Personnel from TOE or TDA units at the installation, Reserve Components units on annual training or Reserve Components units on inactive duty training are the most common sources. The information provided by this measure will show the magnitude of this practice and indicate the numbers that are temporarily working in providing health services.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Average daily number of augmentation personnel on special duty to MEDDAC/ Medical Centers	HSC DCSPER		X	Quarterly
2. Authorized military strength of MEDDAC/ Medical Centers		X		Quarterly

DATA ANALYSIS

The ratio can be obtained by dividing element 1 by element 2. This information should be obtained for the MEDDAC/Medical Centers as a whole plus on an individual medical activity basis. Overall performance can be considered by analysis of trends over time. Comparative analysis should be used by HQ HSC for evaluation of the MEDDAC/Medical Centers situations. High ratios should be investigated for excessive use of special duty or the need for review of authorized and assigned strengths.

LEVEL OF EFFORT REQUIRED

The effort required to obtain, maintain, and analyze the information for this measure is expected to be minimal.

PERFORMANCE MEASURE

1.9 The percent of the annual funding program of HSC's installations and medical activities that is obligated in the last thirty (30) days of the fiscal year.

DESCRIPTION

This measure addresses two distinct, but related, issues. Both concern themselves with the question of the medical commander's authority to control available resources. One issue is the capability of the installation or military activity commander to develop and implement a balanced management program that spreads resource obligations across the fiscal year in accordance with established priorities and requirements and with minimum turbulence to administrative procedures. The second issue is the distribution of year-end funds taken as a factor tending to unbalance planning.

SUPPORTING DATA

	Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1.	Total annual OMA funding for medical centers, installations, MEDDACs, RDAs, AMLs, Academy of Health Sciences, and other medical activities	HSC Comptroller	X		Annually
2.	Amount of dollars obligated by the above during final month of the fiscal year		X		Annually

DATA ANALYSIS

The desired percentage may be computed by dividing element 2 by element 1. The absolute percent will indicate the order of magnitude of the problem, if any, by its variance from 8.3 percent (straight line projection since a large portion of the funds is for civilian pay and

operating supplies and costs). Trends over time will reflect actions at the installation/medical activity level to improve performance, assuming measure 1.5 is compatible. Comparative analysis by installation/medical activity also should be made by HQ HSC for its internal management purposes.

LEVEL OF EFFORT REQUIRED

Minimum effort will be required from HQ HSC Comptroller to develop this measure.

PERFORMANCE MEASURE

2.1 The index of installation commander satisfaction with locally provided health services.

DESCRIPTION

The provision of health services which optimize both the care of the individual patient and the overall health of the command is desirable. The installation commander who has responsibility for conduct of the Army's day-to-day operations at a particular installation is in the best position to assess the impacts of the health of the command and support by installation medical activities on Army mission requirements and accomplishments. Based on his serving as the rating officer of the DMEDA, it was intended under the Reorganization that the installation commander retain the degree of influence necessary to ensure responsive support. This measure focuses on several areas that primarily reflect the various types of support to be provided by the DMEDA and the supporting medical activity. The index constructed from unweighted evaluations of performance in these areas and using a satisfaction scale of five (ranging from completely dissatisfied to completely satisfied) will serve as a valuable tool for assessing the quality of installation level health services.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
(Relevant survey issues)				
1. Maintenance of overall health of the command	Survey of installation commanders supported by MEDDAC and MEDCENs		X	Annually for two successive years
2. Responsiveness to the installation community's health needs/problems			X	
3. Implementation of measures for prevention and control of disease			X	

(Cont'd)

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
4. Minimization of loss of training/duty time (i.e., operational efficiency of sick call, emergency room, and clinics)			X	
5. Advice/assistance in training of nonmedical troops in military sanitation, personal hygiene, and emergency medical training			X	
6. Supervision of medical training of medical troops, except for those organic to a nonmedical TOE unit			X	
7. Support of health services activities by their higher headquarters (i.e., dollars, manpower, facilities)			X	
8. Extent to which requests for health services cannot be handled locally			X	
9. Utility of the installation commander's evaluation of the DMEDA as a control mechanism			X	

DATA ANALYSIS

Trend analysis over time should be conducted to assess improvements in health services support. The index numbers also should be used for comparative evaluations by installation and Region. Analysis of individual areas will indicate any need for special command emphasis. The results are of interest at both DA and MACOM levels.

LEVEL OF EFFORT REQUIRED

Substantial effort will be required to develop, pretest, and administer a reliable and valid survey instrument and to analyze the results.

Therefore, this measure should be developed and implemented by an independent office or ad hoc group within HQ HSC or HQ DA or by some other independent review source. The survey should be extended in some form beyond two years if significant unfavorable trends are identified.

PERFORMANCE MEASURE

2.2 The index of patient satisfaction with health care and its delivery.

DESCRIPTION

The quality of health care and its delivery as sensed by the patients who are its users is a key indicator of installation level health services. The strong emphasis traditionally placed on the doctor-patient relationship by the medical community reflects the importance of patient attitudes towards the source of health care. This measure focuses on several factors that influence patient satisfaction with health services, recognizing that there will always be some portion of patients who expect "more" or "better" treatment regardless of what is done. The measure also will indicate performance in the case of special emphasis that has been placed on upgrading ambulatory care through the Reorganization. The index constructed from evaluations of unweighted indicators using a satisfaction scale of five (ranging from completely dissatisfied to completely satisfied) will serve as another valuable tool for assessing the quality of installation level health services.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
(Relevant survey issues)				
1. Courteous treatment (receptionist, doctors, nurses, other medical personnel)	Sample survey of all types of patients (active military, retirees, dependents of both groups, and civilians authorized care)		X	Annually for two successive years
2. Interest in medical/dental problem (doctors, nurses, other medical personnel)			X	
3. Convenience of location of clinic/hospital			X	

(Cont'd)

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
4. Convenience of operating hours			X	
5. Waiting time for treatment			X	
6. Adequacy of clinic/ hospital physical (seating, comfort, decor, cleanliness) facilities			X	
7. Adequacy of information furnished to patient about medical/dental problem (doctors, nurses, other medical personnel)			X	
8. Quality of health care (medical/ dental)			X	
9. Continuity of health care provided			X	
10. Quality of laboratory services			X	
11. Quality of pharmacy services (waiting time, availability of prescribed medicine)			X	
12. Quality of x-ray services			X	
13. Advice and assistance with CHAMPUS			X	

DATA ANALYSIS

Trend analysis over time should be conducted to assess improvement in health services delivery. The index numbers also should be used for comparative evaluations by installation and Region. Analysis of individual factors will indicate the strengths and weaknesses of various Army programs and policies. The results are of interest at both DA and MACOM levels.

LEVEL OF EFFORT REQUIRED

Substantial effort will be required to develop, pretest, and administer a reliable and valid survey instrument and to analyze the results. Therefore, this measure should be developed and implemented by an independent office or ad hoc group within HQ HSC or HQ DA or some other independent review source. The survey should be extended in some form beyond two years if significant unfavorable trends are identified.

PERFORMANCE MEASURE

2.3 The index of adequacy of support (personnel, facilities, services, equipment and administration) and cooperation provided to installation level health services activities.

DESCRIPTION

The commanders of medical activities and the professionals (doctors and nurses) who are the direct providers of health services have a keen awareness of the adequacy of the various types of support and cooperation needed for effective and efficient health care delivery. This measure focuses on various aspects of support (personnel, facilities, services, equipment, and administration) and cooperation, recognizing that their levels of control vary. Some are controllable at the installation level, some at HQ HSC, and others at DA level. The index constructed from unweighted evaluations of these support and cooperation areas and using a satisfaction scale of five (ranging from completely dissatisfied to completely satisfied) will serve as a valuable aid in assessing installation level health services as viewed by the providers. It also will provide some indication of the communications and resource flow essential to an integrated health services program and the capability to capitalize on advances in health services technology.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
(Relevant survey issues)				
1. Size and composition of authorized staff	Sample survey of medical professionals (doctors and nurses) assigned to MEDDAC/MEDCENs and commanders of medical activities (i.e., MEDCENs, MEDDACs, RDAs, AMLs, the Environmental Hygiene Agency, and the US Army Optical Fabrication Activity)		X	Annually for two successive years
2. Assignment of adequate numbers of medical personnel for normal workload			X	
3. Assignment of qualified technicians and support personnel			X	

(Cont'd)

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
4. Availability, if required, of supplemental medical personnel (consultants, members TOE medical units—Active Army or Reserve Components, others)			X	
5. Control over diversions of medical personnel to tasks not involved in the direct delivery of health care			X	
6. General physical layout of medical facilities			X	
7. Cleanliness of medical facilities			X	
8. Installation support services (utilities, maintenance, supply, other)			X	
9. Availability of medical equipment			X	
10. Availability of drugs and medicines			X	
11. Availability of medical-related supplies (gloves, soap, other)			X	
12. Availability, if required, of medical air evacuation units			X	
13. Patient cooperation and courtesy			X	
14. Opportunities for keeping abreast with latest professional technology (visiting consultants, attendance at training conferences or short courses)			X	

(Cont'd)

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
15. Allocation of proper mixture of facilities, equipment, and skills required to implement advanced health services technology			X	
16. Extent to which requests for health services cannot be handled locally			X	
17. Responsiveness of HQ HSC staff to local recommendations/ problem areas			X	
18. Noninterference with health care delivery by outside pressures			X	

DATA ANALYSIS

Trend analysis over time should be conducted to assess improvements in health services support. The index numbers also should be used for comparative evaluations by installation. Analysis of individual areas will indicate any need for special command emphasis. The results are of interest at both DA and MACOM levels.

LEVEL OF EFFORT REQUIRED

Substantial effort will be required to develop, pretest, and administer a reliable and valid survey instrument and to analyze the results. Therefore, this measure should be developed and implemented by an independent office or an ad hoc group within HQ HSC or HQ DA or by some other independent review source. The survey should be extended in some form beyond two years if significant unfavorable trends are identified.

PERFORMANCE MEASURE

3.1 The quality of medical education and training course instruction as demonstrated by on-the-job performance of recent graduates.

DESCRIPTION

The ultimate purpose of medical training conducted by HSC is to produce individuals who can perform their assigned duties in an acceptable manner. The training facilities' role in this process is conditioned by many assumptions, including such crucial ones as: (1) individuals meet minimum ability criteria, (2) individuals are assigned to jobs in which their skills will be utilized, and (3) the skills exhibited on the job by those individuals were learned as a result of service school instruction. Also, on-the-job performance is conditioned by the attitude and motivation of individuals and, possibly, locally unit/mission unique factors. This measure employs survey methods to assess, on a sample basis, the actual performance of service school graduates in appropriate MOS positions within 3-6 months of their graduation from training courses. Samples of both immediate job supervisors and the graduates themselves will be analyzed for their perceptions of the appropriateness of training. It is expected that the sample survey approach will enable analysts to separate unit-unique criticisms from more basic and widespread concerns.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
(Relevant survey issues)				
1. Rated performance of recent graduate	Sample of recent course graduates (3-6 months) and their immediate supervisors		X	Annually
2. Rated ability of recent graduate			X	
3. Rated motivation of recent graduate			X	
4. Identification of positive and negative aspects of school instruction affecting performance			X	
5. Identification of unit/mission unique factors affecting performance			X	

DATA ANALYSIS

Comparative analysis should be made of the survey results by course. The analysis should center on those MOSs in which the overall rated performance is unsatisfactory. The survey results are of interest to DA because of HSC's responsibility for medical training and education of individuals who serve Army wide and because of the overall impacts on military readiness of TOE medical units. The HSC analysis should be on a course-by-course basis to identify need for changes in course content or length or revisions of course entrance requirements.

LEVEL OF EFFORT REQUIRED

Substantial effort will be required to develop, pretest, and administer a reliable and valid survey. This measure should be developed and implemented by either an independent office within HQ HSC or HQ DA or by some other independent review source.

PERFORMANCE MEASURE

3.2 Standards attained by students on performance-based tests or MOS tests.

DESCRIPTION

This measure seeks to identify in some degree the actual contribution of HSC conducted training to the skill levels of students by measuring what was added to students' knowledge through participation in the training programs. Standardized Army MOS tests or skill performance tests, if available, are administered to students at the beginning and upon conclusion of selected courses in order to provide a measure of learning. The results also furnish some indication of the adequacy of the contents of HSC's courses and the quality of instruction.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
(Relevant survey issues)				
1. Pretest performances for sample of students	Survey of selected courses		X	Annually
2. Posttest performances for sample of students			X	Annually

DATA ANALYSIS

Results of testing prior to school training (element 1) will be compared to results of testing following training (element 2). Analysis should center on any learning areas that reflect little progress. The survey results are of interest to DA because of HSC's responsibility for medical training and education of individuals who serve Army wide. Also changes in policies—for example, on recruitment, civilian acquired skills, or educational levels—could be signaled by the survey results. The HSC analysis should be on a course-by-course basis to identify need for possible changes such as a restratification of skill levels, alteration of course content or length, or revision of course entrance requirements.

LEVEL OF EFFORT REQUIRED

Substantial effort will be required to develop, pretest, and conduct the survey effort. The use of MOS or other performance-based tests already developed by the Army will considerably reduce the effort required for this measure that should be administered by HQ HSC or an independent review source.

PERFORMANCE MEASURE

4.1 The index of the timeliness and utility of medical inputs into the combat developments process managed by TRADOC and medical development activities that are managed by OTSG.

DESCRIPTION

Within the guidelines established by The Surgeon General and the Commander of TRADOC, the Academy of Health Sciences for HSC develops the concepts, doctrine, materiel requirements, and organizations for the health care system in support of the Army in the field. Consequently there is considerable interaction with these agencies as well as with TRADOC's functional centers and service schools. Both programmed and unprogrammed workloads are involved. The quality of HSC's conduct of medical combat developments activities and other medical developments is represented by the timeliness and utility of HSC's inputs into the process. The index constructed from unweighted evaluations of performance in these areas for each type of workload and using a "customer" satisfaction scale of five (ranging from completely dissatisfied to completed satisfied) will serve as a valuable tool for assessing HSC's performance in this area.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
(Relevant survey issues)				
1. General timeliness of programmed inputs into the combat/medical developments process	Survey of OTSG, TRADOC HQ, Functional Centers, and Service schools		X	Annually
2. General timeliness of unprogrammed inputs into the combat/medical developments process			X	
3. General utility (substance, documentation, and suitability) of programmed inputs into the combat/medical developments process			X	

(Cont'd)

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
4. General utility (substance, documentation, and suitability) of unprogrammed inputs into the combat/medical developments process			X	

DATA ANALYSIS

Trend analysis over time should be conducted to assess HSC's contribution to the combat/medical developments process. Analysis of individual issue areas by HQ HSC will indicate any need for special command emphasis.

LEVEL OF EFFORT REQUIRED

Minimal effort will be required to develop, pretest, and administer a reliable and valid survey instrument and to analyze the results. This measure should be developed by an independent office or ad hoc group with HQ HSC or HQ DA or by some other independent review source.

PERFORMANCE MEASURE

4.2 The index of the timeliness and utility of HSC's integrated study program that is designed to improve the organization and management of health care delivery worldwide.

DESCRIPTION

Health care delivery is extremely costly in terms of resources that are becoming increasingly rare. Consequently, there is strong need for actions that improve the organization and management of such care. Under the Reorganization HSC has been given the responsibility to conduct a study program towards this end. The studies impact worldwide; many result from tasks assigned by The Surgeon General. The quality of HSC's conduct of an integrated study program designed to improve the organization and management of health care delivery worldwide for all beneficiaries is represented by the timeliness and utility of the study results. The index constructed from unweighted evaluations of performance in these areas and using a "customer" satisfaction scale of five (ranging from completely dissatisfied to completely satisfied) will serve as a valuable tool for assessing HSC's performance in this area.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
(Relevant survey issues)				
1. Relevancy of study topics	Survey of OTSG and MACOM surgeons		X	Annually
2. Study documentation			X	
3. Comprehensiveness of treatment of the subject			X	
4. Clarity of conclusions and recommendations			X	
5. Utility of reccomendations			X	
6. Timeliness of the availability of study results			X	

(Cont'd)

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
7. Overall contribution of study program to improvement of health care delivery			X	

DATA ANALYSIS

Trend analysis over time should be conducted to assess HSC's conduct of an integrated study program geared to improve the organization and management of health care delivery. Analysis of individual issue areas by HQ HSC will indicate any need for special command emphasis to improve the study program.

LEVEL OF EFFORT REQUIRED

Minimal effort will be required to develop, pretest, and administer a reliable and valid survey instrument to analyze the results. This measure should be developed by an independent office within HQ HSC or HQ DA or by some other independent review source.

PERFORMANCE MEASURE

4.3 The index of the timeliness and utility of HSC's materiel health and safety reviews.

DESCRIPTION

The technical review and evaluation of nonmedical Army materiel to determine the existence of possible health hazards is performed for HSC by the United States Army Environmental Hygiene Agency. The conservation of sight and hearing and protection from the hazards from ionizing, laser, and microwave radiation are examples of particular areas of concern. The quality of HSC's reviews of materiel for health and safety hazards is represented by the timeliness and utility of HSC's inputs into the materiel testing process. The index constructed from unweighted evaluations of performance in these areas and using a "customer" satisfaction scale of five (ranging from completely dissatisfied to completely satisfied) will serve as a valuable tool for assessing HSC's performance in this area.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
(Relevant survey issues)				
1. General timeliness of programmed materiel reviews	Survey of OTEA and MACOMs		X	Annually
2. General timeliness of unprogrammed materiel reviews			X	Annually
3. General utility (substance, documentation, and suitability) of programmed materiel review reports			X	Annually
4. General utility (substance, documentation, and suitability) of unprogrammed materiel review reports			X	Annually

DATA ANALYSIS

Trend analysis over time should be conducted to assess HSC's performance in the review of materiel for health and safety aspects.

LEVEL OF EFFORT REQUIRED

Minimal effort will be required to develop, pretest, and administer a reliable and valid survey instrument and to analyze the results. This measure should be developed by an independent office within HQ HSC or HQ DA or by some other independent review source.

Annex C.2

MAJOR EXTERNAL VARIABLES
HEALTH SERVICES COMMAND

1. Major increases or shifts in requirements for health care caused by factors such as: epidemics, new diseases, changes by Congress in the categories of personnel authorized treatment in military medical facilities or the types of care authorized, significant reductions in CHAMPUS, or the DOD Regionalization Program.

2. Setbacks in the success of the all-volunteer concept as represented by shortfalls in the recruitment of enlisted personnel and doctors, dentists, and nurses, despite various incentive programs, can markedly influence HSC's capabilities for health care delivery.

3. Alterations in DOD or DA personnel policies and priorities that restrict assignment of qualified personnel in the numbers required, cause personnel turbulence, or reduce stability in key professional and instructor positions will affect health services delivery.

4. The imposition of reduced personnel end strengths for the Army by Congress may result in manpower shortages in medical facilities or disruptive actions such as "early out" programs.

5. The inability to recruit or retain qualified civilian staff and consultants.

6. Deployments or restationing of TOE medical units so that they are no longer available as supplements to HSC's facilities staffing.

7. The adverse impacts on motivation and morale of health care delivery personnel that can result from antipathy towards military service by the public in general or in areas nearby military installations.

8. A lack of responsiveness by the wholesale logistical system could affect both the delivery of health care and the implementation of advanced health services technology.

9. The performance of HSC's combat developments mission is especially sensitive to suspense dates and unprogrammed workloads established by external authorities.

10. Because combat developers are frequently innovators in their fields, the combat development community, including HSC, is dependent upon state-of-the-art knowledge and applications both for personnel qualifications and for the speed with which appropriate solutions are designed. In this regard, HSC is also dependent upon the impact of state-of-the-art on the technical skills contributed by other Army commands and agencies, including OTSG, CAA, OTEA, and AMC.

11. Continued inflation beyond budgeted rates may reduce HSC's effectiveness by increasingly limiting the resources available to perform an unchanged workload.

12. Unanticipated significant or specific reductions in funding levels by Congress after a major portion of the fiscal year has passed has an unbalancing effect on the command program, reducing flexibility and to some extent distorting priorities.

Appendix D

DETAILED ASSESSMENT PLAN FOR

CONCEPTS ANALYSIS AGENCY

Appendix D

DETAILED ASSESSMENT PLAN FOR CONCEPTS ANALYSIS AGENCY

MISSION REFERENCES

Detailed information on the missions and functions of the Concepts Analysis Agency (CAA) is contained in:

- DA AR 10-38, 6 July 1973.
- CAA Memorandum 10-1, 10 August 1973, subject: "Organization and Functions."

SELECTED AREAS FOR MEASUREMENT

Measurements in the three areas listed below are necessary to assess CAA's overall mission performance.

Measurement Area 1: Demand on CAA Resources for Support of Decisions at HQDA and MACOM Levels. The proper functioning of CAA requires that its capabilities be found useful by HQDA and MACOM decision makers. The extent to which Army decision makers come to CAA for assistance is a strong, though partial, demonstration of their need for CAA's services.

Measurement Area 2: The Operation of an Analytical Support Agency Both Independent in Judgment and Responsive to Command Direction and the Needs of HQDA. CAA's most valuable contribution to decision making should be the capability to analyze alternative future opportunities in the context of realistic data. In order to provide accurate estimates of risks and benefits, CAA must be independent of biased subjective pressures, yet adequately supervised to assure responsiveness to decision requirements.

Measurement Area 3: The Interaction of CAA with TRADOC and Other Army Force/Combat Developers. CAA must rely on the entire force/combat development community for accurate and comprehensive data. Similarly, other force/combat developers must rely on CAA for model development,

sophisticated analytical studies, and studies in the mid-to-long range time frame.

ASSESSMENT PLAN SUMMARY

Table D.1 summarizes the assessment plan for CAA. The individual performance measures to be used in the assessment are specified for each of the areas selected for measurement. Detailed information on each of the performance measures is contained in Annex D.1. This information includes: a description of the measure, supporting data elements, data sources, current reporting status, the recommended collection frequency to support the evaluation, and analytical procedures (method of analysis and level of effort required).

Table D.1 also classifies each performance measure into one of two categories, i.e., performance measures considered as minimal essential to the assessment and those that are recommended to provide important supplementary support for the essential measures. Within each category and for each measure there is indication as to whether the data are already available, a new report is required, or a special analysis of some type is needed.

RELATIONSHIPS OF PERFORMANCE MEASURES TO THE GOALS OF THE CONUS REORGANIZATION 1973

In Table D.2 the CAA performance measures are cross-referenced with the four major goals of the CONUS Reorganization 1973.

EXTERNAL VARIABLES

Major external variables that can impact on the performance of CAA are contained in Annex D.2.

Table D.1

ASSESSMENT PLAN SUMMARY: CAA

Performance areas and measures	Minimum essential			Recommended supplement		
	Data available	New report	Special analysis	Data available	New report	Special analysis
Measurement Area 1: Demand on CAA Resources for Support of Decisions at HQDA and MACOM Levels						
1.1 The distribution of the fiscal year CAA work effort.	X	X				
1.2 The extent of actual utilization of CAA task products in support of high level Army decision making.		X	X			
Measurement Area 2: The Operation of an Analytical Support Agency Both Independent in Judgment and Responsive to Command Direction and the Needs of HQDA						
2.1 The ratio of current assigned strength for CAA compared to July 1973 authorized TDA strength.	X					
2.2 The allocation and expenditure of CAA resources for model improvement and development.	X					
2.3 The percent of total TMM work effort utilized in direct support of the HQDA staff office to which CAA is assigned.	X					
2.4 "Slippage" from established schedules for tasks being performed by CAA.	X					
2.5 The ratio of study contract funds to total CAA costs.	X					
Measurement Area 3: The Interaction of CAA with TRADOC and Other Army Force/Combat Developers						
3.1 Tasking between CAA and other Army force/combat developers.	X	X				
3.2 The utilization of common scenarios by CAA as a basis for coordinating CAA studies with TRADOC and other commands and agencies.					X	X

Table D.2

RELATIONSHIPS OF CAA PERFORMANCE MEASURES TO REORGANIZATION GOALS

Performance areas and measures	Reorganization goals			
	A	B	C	D
Measurement Area 1: Demand on CAA Resources for Support of Decisions at HQDA and MACOM levels				
1.1 The distribution of the fiscal year CAA work effort.			X	
1.2 The extent of actual utilization of CAA task products in support of high level Army decision making.			X	
Measurement Area 2: The Operation of an Analytical Support Agency Both Independent in Judgment and Responsive to Command Direction and the Needs of HQDA				
2.1 The ratio of current assigned strength for CAA compared to July 1973 authorized TDA strength.			X	
2.2 The allocation and expenditure of CAA resources for model improvement and development.			X	
2.3 The percent of total TMM work effort utilized in direct support of the HQDA staff office to which CAA is assigned.			X	
2.4 "Slippage" from established schedules for tasks being performed by CAA.			X	
2.5 The rstio of study contract funds to totsl CAA costs.			X	
Measurement Area 3: The Interaction of CAA with TRADOC and Other Army Force/Combat Developers				
3.1 Tasking between CAA and other Army force/combat developers.		X	X	
3.2 The utilization of common scenarios by CAA as a basis for coordinating CAA studies with TRADOC and other commands and agencies.		X	X	

Annex D.1

DETAILS OF SELECTED PERFORMANCE MEASURES

CONCEPTS ANALYSIS AGENCY

PERFORMANCE MEASURE

1.1 The distribution of the fiscal year CAA work effort.

DESCRIPTION

This measure provides a concise outline of the scale and function of CAA's role. It is designed to place boundaries on the evaluation problem by asking two questions: (1) how much work is CAA doing? and (2) who is using CAA resources for what purposes? If CAA is to support HQDA as it was designed to do, its clients should be both varied and at a level capable of making decisions affecting large amounts of resources. Moreover, these clients should be utilizing CAA's skills for a variety of purposes; for example: PPBS cycle decisions, materiel development and milestone reviews, OT and FDTE analysis, and the development of alternatives in force analysis, planning, and programming.

SUPPORTING DATA

Element	Source	Currently reported Yes	Currently reported No	Collection frequency
(For entire CAA workload and for rapid reaction portion only:)				
1. Number of projects completed	CAA-PUR	X		Annually
2. Project sponsor	CAA-Form 60	X		Annually
3. Project user			X	Annually
4. Type of project	CAA-Form 60	X		Annually
5. Technical man-months (TMM) performed	CAA-PUR	X		Annually
6. Cost of completed projects	CAA-PUR	X		Annually

Sources: Personnel Utilization Report (CAA-PUR)
Project Assessment Sheet (Form 60)

DATA ANALYSIS

Two basic parameters are established for reporting purposes. One parameter will compile data for the rapid-reaction portion of the CAA work effort; the other will cover the entire CAA work effort. Data will be

collected by the elements shown here. In addition to simple total figures for these elements, it is necessary to cross-tabulate the various elements. For example, the number of projects completed by type, TMM required, and cost should be available for each project sponsor and project user. The distinction between "sponsor" and "user" is needed because the organizational element responsible for the tasking directive is not always the actual user of the task product. For example, ODCSOPS often is used as a tasking sponsor by the Army Secretariat or OSD. Project cost figures are based on CAA's formula which includes grade/rank averaged OMA and MPA costs and computer support costs.

LEVEL OF EFFORT REQUIRED

Minimal effort would be required. CAA would be responsible for the data collection effort. Following collection of basic data, analysis could be done by HQDA or HQDA could instruct CAA to analyze the data in response to specific questions.

Cross-tabulation of the elements will prove enormously time-consuming unless a new program is written for the CAA management information system. Such a program would have to select and collate the required data elements found in both Form 60 and the PUR. The new element "project user" would be best collected by adding this item to Form 60 where the project team leader could enter the information. The information could then be transposed to computer card format along with other required data from Form 60.

PERFORMANCE MEASURE

1.2 The extent of actual utilization of CAA task products in support of high level Army decision making.

DESCRIPTION

Data collected for this measure will describe patterns of utilization of CAA products by principal user organizations. Direct survey of project user will be made to substantiate the basic assumption of Measurement Area 1; i.e., that the extent of HQDA utilization of CAA resources is an indication of the actual value of CAA products to HQDA decision making. Direct contact with principal users is the only way of knowing with any assurance what is the value of CAA to HQDA, or of confirming at a qualitative level many of the interpretations which can be drawn from the quantitative data of Performance Measure 1.1

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Force Design and Concepts products	Survey of user organizations		X	Annually
2. Operational/Strategic Plans and Concepts products			X	Annually
3. Objective Force Design products			X	Annually
4. Materiel and Systems Mix Analysis products			X	Annually

DATA ANALYSIS

Users will be asked questions related to four factors: the estimated importance of CAA products for the decision(s) affected, the judged quality of the products, the identification of the highest organizational level directly using the products, and the span of time over which CAA products are used. These four factors will be used to structure questions in each of four product areas (above data elements): Army Force Design and Concepts, Operational/Strategic Plans and Concepts, Army Objective Force

Designs, and Materiel and Systems Mix Analysis. Analysis of the objective and subjective information obtained by the survey would also identify significant patterns of product utilization and important obstacles to more effective utilization.

LEVEL OF EFFORT REQUIRED

Substantial effort will be required to develop, pretest, and administer a reliable and valid survey instrument, and to analyze the results. Neither CAA nor any of CAA's Army customers should be responsible for this effort, as all could have vested interests in the results. Therefore, this measure should be developed and implemented by either an independent office within HQDA, or an independent review source.

PERFORMANCE MEASURE

2.1 The ratio of current assigned strength for CAA compared to July 1973 authorized TDA strength.

DESCRIPTION

This measure will track increases or decreases in the manpower resources available to CAA. The baseline for comparison is the July 1973 authorized TDA developed in accordance with the organization's originally designed mission, functions, and workload. It is understood that changes in both authorized and assigned strength can occur for many reasons. It is also understood that changes in mission, functions, and/or workload are not always reflected in changes in strength. The purpose of this measure is simply to focus attention on the factor of size (i.e, resources actually allocated to CAA's role), not on those of responsibilities or accomplishments. However, as information will be provided both for CAA as a whole and for its component directorates, HQDA will have some insight into the sources of strength changes within functional areas.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Total CAA current assigned strength	Administrative records	X		Annually
2. Total July 1973 authorized TDA strength		X		Annually
3. Current assigned strength, by Directorate		X		Annually
4. July 1973 authorized TDA strength, by Directorate		X		Annually

DATA ANALYSIS

Individual changes of 5 percent or cumulative changes of 10 percent should be examined. Explanations of trends should be provided by CAA managers to identify specific changes, if any, in CAA missions, functions, and organization affecting assigned strength.

LEVEL OF EFFORT REQUIRED

Minimal effort will be required from CAA's Administrative Division.

PERFORMANCE MEASURE

2.2 The allocation and expenditure of CAA resources for model improvement and development.

DESCRIPTION

This measure will track the use of resources within CAA for the specialized purposes of model improvement and development. Such resources are aimed primarily at the maintenance of comprehensive and accurate data bases for various models and at the development and refinement of analytical methods. Failure to learn from experience and to incorporate new data and new analytical approaches would result eventually in the inability of CAA to offer realistic responses to the Army's changing decision requirements.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Programmed allocations for model improvement/development a. TMM b. Funded dollars c. Ratio of TMM programmed for model improvement/development effort to TMM for total CAA work program	Command forecast of the fiscal year work program	X		Annually
2. Actual performance expenditures for model improvement/development a. TMM b. Funded dollars c. Ratio of actual TMM model improvement/development effort to TMM for total actual CAA work program	CAA-PUR	X		Annually

DATA ANALYSIS

Analysis will consist of constructing the desired ratios from data located in each of the two sources. For the purposes of this measure, allocations are taken as indications of intentions to perform. Expenditures are taken as indications of actual performance priorities in relationship to other expenditures. The gap between allocated and expended resources will be viewed as a gap between intended and actual priorities. This comparison is included because of the likelihood that external pressures will tend to minimize the internal operational priority assigned to these areas. Analysis should include both current and constant dollars.

LEVEL OF EFFORT REQUIRED

Minimal additional effort is required as these data are presently available at CAA. The ratio of actual manpower expenditures is already maintained by CAA.

PERFORMANCE MEASURE

2.3 The percent of total TMM work effort utilized in direct support of the HQDA staff office to which CAA is assigned.

DESCRIPTION

This measure is intended to track any tendency on the part of DA DCSOPS, or of whichever HQDA agency happens to have jurisdiction over CAA, to monopolize CAA resources for its own parochial uses. CAA's ability to maintain its credibility as an independent problem-solving organization, providing unbiased analysis of decision alternatives, is dependent on its not being perceived as an instrument of any one staff office within HQDA. It is assumed here that the perception of such a bias would result in the decline of tasking to CAA from other organizations, and thus in an imbalance of total CAA work effort in the direction of the dominant customer. If this situation develops at all, the greatest probability is that the imbalance would be in favor of the HQDA staff office to which CAA is assigned.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. TMM supporting projects for which assigned office is principal user	CAA-PUR and project files	X		Annually
2. TMM study effort total	CAA-PUR	X		Annually

DATA ANALYSIS

The Personnel Utilization Report (PUR) is the source of approximate TMM figures for both individual projects and for the total CAA study effort. User organizations for each project, however, are not identified in the PUR. Instead, the PUR lists each project by an assigned project number, the link between information in the PUR and the project file, which contains information identifying the user organization. Thus studies performed in direct support of CAA's assigned DA staff office can be identified and the ratio of TMM effort can be computed.

LEVEL OF EFFORT REQUIRED

Minimal effort is required. Data elements required for this measure duplicate some of the data required for Performance Measure 1.1 and can be extracted from that data with minimal effort. The effort required could be further reduced if the study user (in addition to the study sponsor) is identified on CAA Form 60 (Project Assessment Sheet). This would reduce the effort required in the review of project files. Identification of the user by a coded item on the PUR would further reduce the required effort.

PERFORMANCE MEASURE

2.4 "Slippage" from established schedules for tasks being performed by CAA.

DESCRIPTION

This measure compares scheduled project completion dates, or scheduled major milestone dates (such as ASARC/DSARC/IPR milestones), with actual completion dates. It does not identify causes of delay or revision, a matter requiring case-by-case investigation. CAA's control over the timeliness of product completion and delivery is exercised at two points: first, through influencing the establishment of attainable suspense and milestone dates, and second, through the efficient management of project performance within the given constraints of schedule and resources. More significant than any one or two delays—which may be unavoidable and justifiable—would be a pattern of delays. Such a pattern confuses future planning and creates negative expectations about CAA performance.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Number of projects affected	CAA Forms 59 and 60	X		Annually
2. Total number of days delayed		X		Annually

DATA ANALYSIS

Both data elements can be constructed from a review of the original and revised CAA Forms 59 and 60 contained in project files. The meaningfulness of the "total number of days delayed" figure would be enhanced by further analysis of the total into its mean, range, and standard deviation in order to give some sense of the distribution of delays among projects.

LEVEL OF EFFORT REQUIRED

A minimal level of effort will be required to review CAA project files and to identify specific changes in scheduling. This effort could

be substantially reduced by the creation of a concise reporting item on days of "slippage" for separate filing within the CAA project control system.

PERFORMANCE MEASURE

2.5 The ratio of study contract funds to total CAA costs.

DESCRIPTION

This measure monitors CAA's use of contractors for study support by means of a simple budget analysis. The proper use of outside contractors depends on many factors, including: problem complexity, internal CAA workload, state-of-art development, CAA staff capabilities, HQDA policy, and budgetary considerations. The relative weights assigned to these and other factors will vary from year to year and manager to manager. This measure serves to place resources for contract studies within the perspective of CAA's total resources and thereby to enable HQDA managers to raise questions concerning the changed or continued status of the contract/in-house relationship given the objective of maintaining a strong in-house capability.

SUPPORTING DATA

Elements	Source	Current reported Yes	No	Collection frequency
1. CAA study contract funds: OMA, RDTE	CAA budget records	X		Annually
2. Total CAA costs: OMA, RDTE, MPA (unfunded)	CAA budget records	X		Annually

DATA ANALYSIS

Trends will consist of past actual costs and the projected costs for the current fiscal year. The study contract portion of CAA's OMA budget will be added to the available RDTE funded contractor support for CAA's annual study program.

LEVEL OF EFFORT REQUIRED

Minimal effort will be required for CAA to extract the relevant figures from CAA budget records or from records maintained by other Army offices in the Washington area. The desired ratio can then be easily computed.

PERFORMANCE MEASURE

3.1 Tasking between CAA and other Army force/combat developers.

DESCRIPTION

This measure identifies the scale of interaction between CAA and other Army force/combat developers. It does so through a direct count of tasks and workload. While it is recognized that this measure does not account for much interaction—both formal and informal—between CAA and other force/combat development organizations, it is assumed that the extent of this interaction will be in rough proportion to task-associated workload. The intent is to provide HQDA managers with a basis for judging the frequency and importance of CAA relationships to non-HQDA organizations. By design, CAA must draw on other Army organizations for its primary data. On the other hand, CAA was also designed to support Army MACOMs and agencies with specialized analytical skills as the Army's lead developer of models, simulations, and war games, and as the Army's long-range force developer.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Number of tasks performed by others for CAA	CAA Form 59 and records of performing organizations	X		Annually
2. Number of tasks performed by CAA for others	CAA Form 59	X		Annually
3. TMM expended on tasks performed by others for CAA	Records of performing organizations	X		Annually
4. TMM expended on tasks performed by CAA for others	CAA PUR	X		Annually

DATA ANALYSIS

As the objective of this measure is to outline workload relationships between CAA and other force/combat developers, no analysis is required beyond the computation of the four data elements annually and trend analysis over time to identify significant shifts that might indicate special biases in CAA's workload or deficiencies in its organizational structure. Such shifts would require investigation to determine their causes.

LEVEL OF EFFORT REQUIRED

Information concerning the number of tasks and TMM performed by CAA will be duplicative of sections of Performance Measure 1.1 and can be extracted from that data with minimal effort. Data required from other force/combat developers will have to be collected separately from each organization. TRADOC, and presumably other organizations, maintain this data, but their level of effort required to isolate it is uncertain. Performing organizations should report their TMM expenditures to CAA who would consolidate the total data. Overall it is estimated that a moderate level of effort would be required for this performance measure.

PERFORMANCE MEASURE

3.2 The utilization of common scenarios by CAA as a basis for coordinating CAA studies with TRADOC and other commands and agencies.

DESCRIPTION

This measure uses survey methods to identify the purpose and evaluated utility of common scenarios as used by CAA. Common scenarios—developed by TRADOC—are of interest because they are designed to be the principal mechanism for standardizing force/combat development guidance, for permitting comparability among the results of different studies, and for structuring the entire force/combat development effort according to the broad requirements of high level Army decision makers. Rather than attempt to measure the many and complex aspects of interorganization coordination related to force/combat developments, this measure is limited in scope to the more tangible, yet still crucial, target of a single major coordinating concept. If that concept proves over time to be inefficient or inflexible, then HQDA managers may assume that the overall problem of study coordination needs special attention.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Frequency of utilization	CAA Forms 59 and 60; tasking directives	X		Annually
2. Survey of scenario utilization (Relevant survey issues:) a. Start-up time required on new studies b. Ease of up-dating to incorporate new threat or capability information	Survey of scenario users in CAA, TRADOC and other selected commands and agencies		X	Annually

(cont'd)

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
c. Ease of coordination with other studies and other force/combat developers				
d. Ability to identify crucial issues				
e. Ability to suggest alternatives				

DATA ANALYSIS

The first element of this measure is a simple summation of instances, meant only to indicate the extent of activity, and requires no special analysis. Strictly defined, the actual data elements for the survey instrument will be the individual questions contained in that instrument. For presentation purposes, however, the survey results would be organized around the basic issues affected by scenario utilization. The subjective data obtained through the survey would be analyzed for trends, strengths, and weaknesses of current procedures.

LEVEL OF EFFORT REQUIRED

Some additional effort will be required to review CAA Forms 59 and 60 in order to identify CAA projects employing common scenarios. This review, however, could be coordinated with reviews of these forms for information required to support other performance measures.

Substantial effort will be required to develop, pretest, and administer a realiable and valid survey instrument as required by the evaluative portion of this measure. Neither CAA nor CAA's customers should be responsible for this effort as both sides could have vested interests in the results. Rather, this measure should be developed and implemented by either an independent office with HQDA, or by an independent review source.

Annex D.2

MAJOR EXTERNAL VARIABLES
CONCEPTS ANALYSIS AGENCY

1. Customer expectations of CAA performance, while partially controllable by CAA, are an important exogenous variable. These expectations operate at several levels. Customers may require suspense dates which can only be met by sacrificing various degrees of quality control. Customers may expect CAA to provide sharply defined decisions rather than alternatives with attached risks still requiring final decisions from the customer. Customers may lack sufficient experience with operations research products to know how to specify a problem or to use study results. Customers with immediate requirements may unbalance CAA's work program by changing priorities in mid-stream, or by loosing interest in a project once described as high priority. CAA, on the other hand, has some responsibility to "educate" and persuade its customers of its point of view while still performing in a responsive manner.

2. The quality of raw data and supportive studies provided by other organizations, both within and outside the Army, affects CAA's performance. This factor is partially within CAA's control through review and analysis of the data received. But resources devoted to quality control of outside effort diminish the resources available for CAA's own work. Chronically inadequate raw data or studies would create turbulence damaging to CAA's own capabilities.

3. CAA is particularly subject to the general state-of-the-art within the operations research/systems analysis community. Even with the most qualified personnel and the most adequate of budgets, CAA's products will be no better than the thinking and workmanship that goes into its models and analysis. State-of-the-art becomes a more important factor when it is negatively affected by budgetary and manpower constraints.

4. Changes in national strategy that render CAA's models and data base obsolete, whether by changes in technological or geopolitical assumptions.

5. Technological breakthroughs that alter military capabilities, rendering tactical and strategic models obsolete.

6. Assignment by the Military Personnel Center of military personnel to CAA that have neither qualification nor appreciation for operations research/systems analysis work.

7. The inability to recruit or retain qualified civilian scientists.

8. Budget allocations, established first by Congress and then by DOD and HQDA, create the basic resource framework within which CAA must operate. This factor impacts on CAA most crucially in three areas: manpower authorizations, contract funds, and large-scale model improvement efforts.

Appendix E

DETAILED ASSESSMENT PLAN FOR OPERATIONAL TEST AND EVALUATION AGENCY

Appendix E

DETAILED ASSESSMENT PLAN FOR
OPERATIONAL TEST AND EVALUATION AGENCY

MISSION REFERENCES

Detailed information on the missions and functions of the Operational Test and Evaluation Agency (OTEA) is contained in the following:

- DA AR 10-4, 15 January 1974 (under revision).
- Letter, HQDA ACSFOR (DAFD-SDY), 23 August 1972, subject: "Letter of instructions (LOI) for Implementing the New Materiel Acquisition Guidelines."

SELECTED AREAS FOR MEASUREMENT

Measurements in the five areas below are considered necessary to assess OTEA's overall mission performance:

Measurement Area 1: User Testing Resource Management. This area relates to OTEA's management of user testing resources such as funds, instrumentation equipment, and supporting personnel. It is concerned both with OTEA's own testing activities and those managed by OTEA and conducted by other test units.

Measurement Area 2: Utility of OTEA's Independent Evaluations. OTEA's major functions and products relate to the planning, conduct, and reporting of user tests. A major aspect of the agency's performance, then, must be measured in terms of the usefulness of the ultimate product of these activities, the independent evaluation.

Measurement Area 3: Independence and Objectivity of OTEA. OTEA's performance as the Army's operational test and evaluation agency is very much dependent on the confidence that Army decision makers have in OTEA's products. This measurement area investigates OTEA's independence and objectivity as intervening variables that ultimately affect the adequacy

and utility of its products and influence their use by Army decision makers.

Measurement Area 4: OTEA Actions to Manage Major and Selected Nonmajor Systems OT, Major FDTE, and Joint User Testing. OTEA's functions include sole responsibilities for managing designated segments of the user testing process (major systems/concepts testing including major FDTE, selected nonmajor OT, and joint user testing). The Agency's performance with regard to conducting these segments can seriously influence the adequacy of its products. This measurement area, therefore, considers its management process.

Measurement Area 5: OTEA Actions to Manage Nonselected Nonmajor Systems OT and Nonmajor FDTE. OTEA has responsibility for managing those aspects of the user testing process that it does not conduct, specifically nonselected nonmajor systems OT and nonmajor FDTE.

ASSESSMENT PLAN SUMMARY

Table E.1 summarizes the assessment plan for OTEA. The individual performance measures to be used in the assessment are specified for each of the areas selected for measurement. Detailed information on each of the performance measures is contained in Annex E.1. This information includes: a description of the measure, supporting data elements, data sources, current reporting status, the recommended collection frequency to support the evaluation, and analytical procedures (method of analysis and level of effort required).

Table E.1 also classifies each performance measure into one of two categories, i.e., performance measures considered as minimum essential to the assessment and those that are particularly recommended to roundout analysis based on the essential measures. Within each category and for each measure there is indication as to whether the data is already available, a new report is required, or a special analysis of some type is needed.

RELATIONSHIPS OF PERFORMANCE MEASURES TO THE GOALS OF THE CONUS REORGANIZATION 1973

In Table E.2 the OTEA performance measures are cross-referenced with the four major goals of the CONUS Reorganization 1973.

Table E.1

ASSESSMENT PLAN SUMMARY: OTEA

Performance areas and measures	Minimum essential			Recommended supplement		
	Data available	New report	Special analysis	Data avsilable	New report	Special anslysis
Measurement Area 1: Uaer Testing Resource Management						
Performance Measures						
1.1 The ratio of OTEA estimates of user testing ccst requirements to actual teet costs.	X					
1.2 The percentage of test findings qualified by insufficient personnel, training, time, equipment, or instrumentation.		X				
1.3 The establishment of priorities by OTEA for the allocation of existing instrumentation equipment for user testing.						X
Measurement Area 2: The Utility of OTEA's Independent Evaluations						
Performance Measures						
2.1 The effect of OTEA independent evaluations on decision making in the materiel acquisition process and the development of concepts, doctrinc, and organizations.			X			
2.2 The extent that the operational test plan conforms to the combat or operational situations the test item is likely to face.						X
Measurement Area 3: The Independence and Objectivity of OTEA in Performing its User Testing Missiona and Functions						
Performance Measures						
3.1 The number of times statements baaed on other than findinga of fact appear in test reports and evaluations.			X			
3.2 The extent to which OTEA ia able to perform its user testing functions (teet design, conduct, review and evaluation) independent from external pressure.						X

Table E.1 (continued)

Performance areas and measures	Minimum essential			Recommended supplement		
	Data available	New report	Special analysis	Data available	New report	Special analysis
Measurement Area 4: OTEA Actions to Manage Major and Selected Nonmajor Systems OT, Major FDTE, and Joint User Testing						
Performance Measures						
4.1 The utility of the FYTP as a tool for managing resources for major and selected nonmajor systems OT, major FDTE, and joint user testing by OTEA.			X			
4.2 The timeliness (completion in sufficient time to be of use) of test design plans and independent evaluations.						X
Measurement Area 5: OTEA Actions to Manage Nonselected Nonmajor Systems OT and Nonmajor FDTE						
Performance Measures						
5.1 The adequacy of OTEA management (regulations, policies, procedures) and organization (structure, personnel, occupational specialities) for intercommand user-developer-tester coordination.			X			
5.2 The adequacy of the FYTP as a means of managing nonselected nonmajor OT and nonmajor FDTE.						X

Table E.2

RELATIONSHIPS OF OTEA PERFORMANCE MEASURES TO REORGANIZATION GOALS

Performance areas and measures	Reorganization goals			
	A	B	C	D
Measurement Area 1: User Testing Resource Management				
Performance Measures				
1.1 The ratio of OTEA estimates of user testing cost requirements to actual test costs.			X	
1.2 The percentage of test findings qualified by insufficient personnel, training, time, equipment or instrumentation.			X	
1.3 The establishment of priorities by OTEA for the allocation of existing instrumentstion equipment for user testing.			X	
Measurement Area 2: The Utility of OTEA's Independent Evaluations				
Performance Measures				
2.1 The effect of OTEA independent evaluations on decision making in the materiel acquisition process and the development of concepts, doctrine, and organizations.			X	
2.2 The extent that the operational test plan conforms to the combat or operational situations the test item is likely to face.			X	
Measurement Area 3: The Independence and Objectivity of OTEA in Performing its User Testing Missions and Functions				
Performance Measures				
3.1 The number of times statements based on other than findings of fact appear in test reports and evaluations.			X	
3.2 The extent to which OTEA is able to perform its user testing functions (test design, conduct, review and evaluation) independent from external pressure.			X	

Table E.2 (continued)

Performance areas and measures	Reorganization goals			
	A	B	C	D
Measurement Area 4: OTEA Actions to Manage Major and Selected Nonmajor Systems OT, Major FDTE, and Joint User Testing				
Performance Measures				
4.1 The utility of the FYTP as a tool for managing resources for major and selected nonmajor systems OT, major FDTE, and joint user testing by OTEA.		X	X	
4.2 The timeliness (completion in sufficient time to be of use) of test design plans and independent evaluations.			X	
Measurement Area 5: OTEA Actions to Manage Nonselected Nonmajor Systems OT and Nonmajor FDTE				
Performance Measures				
5.1 The adequacy of OTEA management (regulations, policies, procedures) and organization (structure, personnel, occupational specialities) for intercommand user-developer-tester coordination.		X	X	
5.2 The adequacy of the FYTP as a means of managing nonselected nonmajor OT and nonmajor FDTE.		X	X	

EXTERNAL VARIABLES

Major external variables that can impact on the performance of OTEA are contained in Annex E.2.

PERFORMANCE MEASURE

1.1 The ratio of OTEA estimates of user testing cost requirements to actual test costs.

DESCRIPTION

OTEA's actions in planning, programming, and budgeting OMA Program 2 funds and coordinating funding for requirements financed by other appropriations are of extreme importance because of the high costs and limited resources surrounding user testing. OTEA's role of coordinating funding is accomplished largely through the Army Five Year Test Program (FYTP). Its role of managing OMA Program 2 funds is accomplished in a much more complex fashion—partly through detailed test design plans, partly through the FYTP, partly through the management of the conduct of the test itself. This measure simply looks at the results of OTEA's resource management activities. The purpose of this measure is to determine the extent to which OTEA's final estimates of user testing resource requirements for test costs over which OTEA has budget authority match the actual test costs.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Final budgeted test cost	FYTP	X		Annually
2. Actual test costs	OTEA test reports	X		Annually

DATA ANALYSIS

The measure, by itself, provides an overall indication of OTEA's resource management capabilities. Further analysis in the form of trends over time would be useful in assessing OTEA's performance on an on-going basis.

LEVEL OF EFFORT REQUIRED

While the information required for this measure is available, the required ratio is not now part of a regular report. Preliminary analysis of data elements by OTEA would, therefore, be required. Minimal effort is involved.

PERFORMANCE MEASURE

1.2 The percentage of test findings qualified by insufficient personnel, training, time, equipment, or instrumentation.

DESCRIPTION

Lack of adequate management or coordination of resources for user testing can have serious effects on the quality and utility of user testing activities. For instance, the absence of sufficient personnel or needed instrumentation, having relatively small cost in comparison to total test costs, could cause invalidation of an entire test. While OTEA is not responsible for managing all resource inputs to its tests, it is responsible for coordinating those inputs that it does not manage. Therefore, this measure in terms of total tests qualified determines on an overall basis the impact of OTEA resource management and coordination on test validity, quality, and utility. If inadequacies are found to arise from resource insufficiencies, the measure also will help determine those categories. Such information would be useful to OTEA management and the users of OTEA's independent evaluations.

SUPPORTING DATA

Element	Source	Currently reported Yes	Currently reported No	Collection frequency
1. Number of tests	Testing agencies: OTEA, MASSTER, CDEC, Test Reports	X		Annually
2. Number of tests qualified by insufficient:			X	Annually
a. personnel			X	Annually
b. training			X	Annually
c. time			X	Annually
d. equipment			X	Annually
e. instrumentation			X	Annually

DATA ANALYSIS

Initial analysis will determine the magnitude of the problems and reasons therefor. Analysis of trends over time would reflect the impacts of OTEA's management. The analysis should be in terms of total tests qualified as well as by reason for qualification. (Percents by causative factor are nonadditive since some tests may be impacted by insufficiencies

in more than one category.) OTEA level analysis should consider differences by testing agencies.

LEVEL OF EFFORT REQUIRED

The information required should be available in the test limitation section of test reports. It could be extracted and reported by each testing agency or on a centralized basis by OTEA. The latter is recommended since test reports are already reviewed for other purposes. Minimal effort is required.

PERFORMANCE MEASURE

1.3 The establishment of priorities by OTEA for the allocation of existing instrumentation equipment for user testing.

DESCRIPTION

Instrumentation is expensive; its availability is necessarily limited. Part of OTEA's responsibility involves the establishment of priorities regarding the allocation of instrumentation resources. This measure investigates the extent to which such priorities have been established and followed. It also determines how such priorities have influenced the user testing activities of those entities requiring instrumentation. An additional output of this measure could be recommendations by the users of instrumentation as to how the priorities might be made more responsive to their needs or how the management and coordination of instrumentation might be made better. This information would be of use to OTEA management and Army staff personnel in considering the management and coordination of the use of instrumentation.

SUPPORTING DATA

Element	Source	Currently reported Yes	Currently reported No	Collection frequency
(Relevant survey issues)				
1. Extent established priorities for allocating instrumentation are followed	Survey of MASSTER, CDEC TECOM personnel		X	Annually
2. Circumstances under which these priorities are not followed			X	Annually
3. Kinds of instrumentation for which there are no established priorities			X	Annually
4. Instances that instrumentation priorities resulted in unavailability of necessary instrumentation, delays in testing, or wasted resources			X	Annually

Element	Source	Currently reported Yes	Currently reported No	Collection frequency
5. Additional circumstances where instrumentation priorities adversely influence the testing activities			X	Annually

DATA ANALYSIS

The actual data elements for this measure will be the individual survey questions based on the above relevent issues. Following the administration of the initial survey and evaluation of its results, a decision can be made as to whether a second survey is required. If found necessary, the follow-on survey should be delayed at least 1 year to allow for implementation of changes resulting from the results of the initial survey.

LEVEL OF EFFORT REQUIRED

Moderate effort will be required to develop, pretest, and administer a reliable and valid survey instrument and to analyse the results. This measure should be developed and implemented by OTEA, an independent office within HQDA, or an independent review source.

PERFORMANCE MEASURE

2.1 The effect of OTEA independent evaluations on decision making in the materiel acquisition process and the development of concepts, doctrine, and organizations.

DESCRIPTION

The fundamental reason for an OTEA is to ensure the military utility, operational effectiveness, and operational suitability of new systems/concepts. The influence that OTEA activities have on the operational capabilities of new systems/concepts rests on the user testing process. The influence that OTEA has in modifying, if necessary, the system/concept under consideration depends on the impact of its independent evaluations on ASARC/DSARC/IPR decisions. The purpose of this measure is to determine the actual impacts of OTEA user testing activities as presented to an ASARC/DSARC/IPR through the OTEA independent evaluations of system/concept developments. If the independent evaluation indicates that some change in a system/concept development is required to improve its operational capabilities, was the system/concept modified? If not, why wasn't it modified? This information should be useful to personnel at all levels and segments of the force development process, for it will show the impact that OTEA is having on systems/concepts developments as well as the credibility of OTEA independent evaluations as seen by an ASARC/DSARC/IPR.

SUPPORTING DATA

Element	Source	Currently reported Yes	Currently reported No	Collection frequency
1. The outcomes of OTEA conducted testing	OTEA independent evaluations		X	Annually
2. The utilization of OTEA independent evaluations in ASARC/DSARC/IPR deliberations	ASARC/DSARC/IPR minutes		X	Annually

DATA ANALYSIS

This measure will require analysis of both OTEA independent evaluations and ASARC/DSARC/IPR minutes in order to determine the impact of OTEA's user testing activities on the future development of systems/concepts. This analysis will be confined to tracing the influence of military utility, operational effectiveness, and operational suitability of an item as established by OTEA testing on the decisions made by an ASARC/DSARC/IPR regarding further development.

LEVEL OF EFFORT REQUIRED

The required analysis of documentation necessitates a moderate level of effort. This effort should be accomplished by a source independent from OTEA and others involved in ASARC/DSARC/IPR proceedings. In-depth knowledge of the Army's force development process by a source such as the Deputy Chief of Staff, Research, Development, and Acquisition would assist in facilitating the analysis.

PERFORMANCE MEASURE

2.2 The extent that the operational test plan conforms to the combat or operational situations the test item is likely to face.

DESCRIPTION

New systems/concepts are developed to fit the requirements of various combat o. operational situations. Accordingly, the operational test situation must be closely related to the combat or operational situations the system/concept is designed to face. This measure will require comparisons between the operational test situations and the actual combat or operational situations for which they are designed. The information provided by this measure will prove useful to managers of all aspects of the force development process in interpreting operational test results.

SUPPORTING DATA

Element	Source	Currently reported Yes	Currently reported No	Collection frequency
1. The operational environment of the test item	TRADOC test support package		X	Annually
2. The situation chosen for the user test to replicate the operational environment	OTEA test design plan		X	Annually

DATA ANALYSIS

Analysis will consist of side-by-side comparisons of a representative sample of OTEA test design plans and TRADOC test support packages which include scenarios associated with the operational situations a system/concept is designed to face. The object of this investigation is to determine whether the test situation and the operational situation are similar enough to justify confidence in the OTEA test approach. Analyze samples for each of the next 2 years.

LEVEL OF EFFORT REQUIRED

The analysis of documentation for this measure requires a moderate level of effort. This effort should be accomplished by a source independent from OTEA but with knowledge of the user testing process and problem. A military background also is desirable.

PERFORMANCE MEASURE

3.1 The number of times statements based on other than findings of fact appear in test reports and evaluations.

DESCRIPTION

Clearly, the final product of OTEA user testing activities—the independent evaluation—must be as objective as possible in presenting facts regarding the military utility, operational effectiveness, and operational suitability of the system/concept being tested. The purpose of this measure is to determine whether or not statements presented in the independent evaluation are based on facts established during the testing process or from other valid sources (COEA, studies, etc.). This information should be useful to all users of OTEA independent evaluations in validating OTEA's products.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
1. The statements made in OTEA's independent evaluations regarding the military utility, operational effectiveness, and operational suitability of the test item	OTEA test reports, independent evaluations, and other supporting reports.	X		Annually
2. The existence of supporting data for the test findings directly resulting from the test exercise itself		X		Annually

DATA ANALYSIS

This measure requires analysis of a sample of representative OTEA test reports and independent evaluations to determine whether or not statements regarding the military utility, operational effectiveness, and operational suitability of systems/concepts, in fact, are derived from the performance of the item during testing and from other valid sources (COEA, studies, etc.).

LEVEL OF EFFORT REQUIRED

A moderate level of effort will be required to perform the analysis of documentation needed for this measure. The analysis should be performed by a source independent from OTEA but with knowledge and understanding of the user testing process.

PERFORMANCE MEASURE

3.2 The extent to which OTEA is able to perform its user testing functions (test design, conduct, review and evaluation) independent from external pressure.

DESCRIPTION

To a great extent OTEA's value to the Army's force development process is dependent on its ability to arrive at independent estimates of the military utility, operational effectiveness, and operational suitability of the systems/concepts being tested. Therefore, it is important that OTEA's activities be carried out and its estimates made without external pressure. OTEA's evaluations need to rest solely on the system's/concept's operational performance in relation to test objectives during testing. This measure will determine the nature and form of external inputs that influence OTEA's evaluations. The information provided should be of interest both to OTEA management and the personnel of agencies and commands that depend on OTEA's services by establishing the nature and form of external inputs to its user testing process.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
(Relevant survey issues)				
1. Circumstances under which sources external to OTEA provide inputs influencing OTEA's test design, test conduct, and/or independent evaluations	Survey of OTEA test managers and division chiefs of Test Design, Evaluation, Field Test, and Plans and Operations Divisions		X	Annually
2. Areas most likely affected by such inputs			X	Annually
3. Circumstances under which external inputs are necessary in order to ensure high quality user tests			X	Annually
4. Circumstances under which proposed external inputs to OTEA's user testing have been rejected			X	Annually

DATA ANALYSIS

A survey of OTEA test managers and other responsible officers based on the above relevant issues will be required for this measure. The analysis of survey responses will emphasize the character and influence of external inputs on the assessment of operational capabilities of test items. Unless the initial survey results indicate that external pressures are affecting OTEA's test results, there should be an interval of at least 12 months before the follow-on survey.

LEVEL OF EFFORT REQUIRED

Moderate effort will be required to develop, pretest, and administer a reliable and valid survey instrument and to analyze the results. The measure should be developed and implemented by either an independent office within HQDA or an independent review source.

PERFORMANCE MEASURE

4.1 The utility of the Army Five Year Test Program (FYTP) as a tool for managing resources for major and selected nonmajor systems OT, major FDTE, and joint user testing by OTEA.

DESCRIPTION

The FYTP provides OTEA with an overall picture of resource requirements and commitments for user testing projected over a 5 year period both for those tests that OTEA conducts and those conducted by other commands/agencies. This overall picture is in contrast to the final test design plans that are prepared for each item to be tested by OTEA. The value of the FYTP is that it shows the relationships among tests in terms of time, dollars, and manpower requirements—information needed by OTEA and others for managing the user testing process. A fundamental question is whether the FYTP as developed by OTEA provides the information OTEA needs to manage user testing as well as necessary information to user, developer, and Army Staff personnel to facilitate their participation in the user testing process.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
(Relevant survey issues)				
1. Ways that the FYTP is used in managing or controlling user testing and user testing resources	Survey of OTEA, user, materiel developer, combat developer, and Army Staff personnel		X	Every 24 months
2. Aspects of the format, the periodicity, the preparation and review procedures, and information provided by the FYTP that limit its usefulness			X	Every 24 months
3. Kinds of information provided by the FYTP that are not used in managing or coordinating user testing			X	Every 24 months

Elements	Source	Currently reported Yes	No	Collection frequency
4. Changes in the FYTP that would increase its utility			X	Every 24 months

DATA ANALYSIS

A sample survey based on the above issues is required. Analysis of the subjective data collected by this approach should be in terms of how well the FYTP serves as a mechanism for managing user testing and user testing resources. At least two iterations of the survey, 24 months apart, are recommended.

LEVEL OF EFFORT REQUIRED

A moderate level of effort is required for the sample survey which should be conducted by a source independent of OTEA and others involved in user testing.

PERFORMANCE MEASURE

4.2 The timeliness (completion in sufficient time to be of use) of test design plans and independent evaluations.

DESCRIPTION

A good portion of OTEA's resources are devoted to the preparation of various plans or reports necessary both for the conduct of user tests and the reporting of test results. Just as important as the quality of these plans and reports is the timeliness of their production. For the force development process is already sufficiently lengthy that any unnecessary delay is to be avoided. This measure is, therefore, concerned with OTEA's test design plans and independent evaluations and the determination of the timeliness of their production. Two major considerations with regard to this measure relate to: (1) whether or not the independent evaluations are completed in sufficient time to be of use, and, if not, (2) what aspects of OTEA's management and organization contribute to the delay. This information should be of use to both OTEA and Army Staff personnel in considering the nature and form of the user testing component of the force development process.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
(Relevant survey issues)				
1. Frequency of cases where either a scheduled test or a decision milestone has been delayed because an OTEA independent evaluation or test design was not available in time to support the next required action or decision	Survey of OTEA test managers; ASARC/DSARC members		X	Every 24 months
2. Indicated reasons why the plan or report was delayed			X	Every 24 months

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
3. Impacts in terms of delay in time on the development of the test item			X	Every 24 months

DATA ANALYSIS

A sample survey based on the above issues is required. The subjective data collected by this approach should be used for both performance evaluation and management improvement purposes. At least two iterations of the survey, 24 months apart, are recommended.

LEVEL OF EFFORT REQUIRED

A moderate level of effort is required for the sample survey which should be conducted by a source independent of OTEA.

PERFORMANCE MEASURE

5.1 The adequacy of OTEA management (regulations, policies, procedures) and organization (structure, personnel, occupational specialities) for intercommand user-developer-tester coordination.

DESCRIPTION

Many of OTEA's user testing functions relate to inter-command user-developer-tester coordination. This measure is designed to attack the question of whether or not OTEA's management of an organization for this intercommand coordination is sufficient to provide the Army with competent evaluations of the military utility, operational effectiveness, and operational suitability of nonselected nonmajor OT and nonmajor FDTE.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
(Relevant survey issues)				
1. Influence of OTEA user testing coordination activities on the performance of assigned user testing, testing participation, or system/concept development functions	Survey of cognizant HQ Staff of AMC, TRADOC, FORSCOM, and USACC; ASA, COE, and TSG		X	Every 24 months
2. Activities relating to user testing coordination—either performed by no one or performed by another Army entity—that OTEA should perform in addition to its present coordination activities			X	Every 24 months
3. Activities presently performed by OTEA with regard to coordinating user testing that should be performed either by another entity or not at all			X	Every 24 months

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
4. Ways that modifications in user testing regulations, policies, and procedures have affected user testing			X	Every 24 months
5. Ways that OTEA organizational mechanisms and staffing patterns (numbers and occupational specialities) have either promoted or hindered user testing coordination			X	Every 24 months

DATA ANALYSIS

A sample survey based on the above issues is required. The subjective data collected by this approach should be used for both performance evaluation and management improvement actions. At least two iterations of the survey, 24 months apart, are recommended.

LEVEL OF EFFORT REQUIRED

A moderate level of effort is required. This measure should be developed and implemented by either an independent office within HQDA or an outside contractor under the supervision of such an office.

PERFORMANCE MEASURES

5.2 The adequacy of the Army Five Year Test Program (FYTP) as a means of managing nonselected nonmajor OT and nonmajor FDTE.

DESCRIPTION

The FYTP, prepared and published by OTEA, is the major vehicle for coordinating nonselected nonmajor OT and nonmajor FDTE activities throughout the Army. As the key to operational test resource coordination and commitment, the FYTP is designed to ensure that operational testing is carried out in a time frame and within resource constraints commensurate with the system/concept to be tested. Accordingly, it is important that the nature, form, and adequacy of the FYTP as a coordination and resource allocation tool be validated periodically and revised as necessary to reflect changing requirements.

SUPPORTING DATA

Elements	Source	Currently reported Yes	Currently reported No	Collection frequency
(Relevant survey issues)				
1. Ways that the FYTP as both a scheduling and resource allocation device assists or impedes user testing activities managed by OTEA	Survey of OTEA, user, materiel developer, combat developer, and Army Staff personnel		X	Every 24 months
2. Changes in the FYTP that would increase its utility			X	Every 24 months

DATA ANALYSIS

A sample survey based on the above issues is required. Analysis of the subjective data collected by this approach should be in terms of how well the FYTP serves as a mechanism for coordinating user testing and user testing resources. At least two iterations of the survey, 24 months apart, are recommended.

LEVEI OF EFFORT REQUIRED

A moderate level of effort is required for the sample survey which should be conducted by a source independent of OTEA and others involved in user testing.

Annex E.2

MAJOR EXTERNAL VARIABLES

OPERATIONAL TEST AND EVALUATION AGENCY

1. Delays in the development of new concepts/systems or accelerations because of technological breakthroughs that can reduce OTEA's effectiveness by causing continual readjustments of plans and shifts in resource requirements.

2. Major changes in Army priorities or missions such as the deployment of Army forces in response to a combat or potential combat situation that may limit the availability of user personnel required for the testing process.

3. The imposition of reduced funding levels for the Army by Congress or DOD that in turn limit the funds available for operational testing leading to a reduction in effectiveness of OTEA's user testing functions.

4. Continued high rates of inflation might similarly restrict the availability of testing resources. Inflation could also limit OTEA's effectiveness in the resource management area by making its budget estimates low in comparison to actual costs.

5. The inability to recruit or retain qualified civilian scientists.

6. Assignment by the Military Personnel Center of military personnel to OTEA that are inexperienced and unable to adapt to the technical requirements of field testing.

7. Changes by the other services in joint tests.

8. The imposition by an external authority of modifications in an OTEA test plan, exercise, report, or independent evaluation.

9. The absence of coordination or cooperation by user or developer personnel that is required for the design or conduct of user testing.