

ARI Research Note 96-29

# An Application of the High Transfer Training Methodology With Soft Skills Tasks

Arthur J. Ryan III  
U.S. Army Research Institute

Advanced Training Methods Research Unit  
Robert J. Seidel, Chief

March 1996

19960607 162



DTIC QUALITY INSPECTED 3

United States Army  
Research Institute for the Behavioral and Social Sciences

Approved for public release; distribution is unlimited.

# **U.S. ARMY RESEARCH INSTITUTE FOR THE BEHAVIORAL AND SOCIAL SCIENCES**

**A Field Operating Agency Under the Jurisdiction  
of the Deputy Chief of Staff for Personnel**

EDGAR M. JOHNSON  
Director

---

Technical review by

Ok-Choon Park

## **NOTICES**

**DISTRIBUTION:** This report has been cleared for release to the Defense Technical Information Center (DTIC) to comply with regulatory requirements. It has been given no primary distribution other than to DTIC and will be available only through DTIC or the National Technical Information Service (NTIS).

**FINAL DISPOSITION:** This report may be destroyed when it is no longer needed. Please do not return it to the U.S. Army Research Institute for the Behavioral and Social Sciences.

**NOTE:** The views, opinions, and findings in this report are those of the author(s) and should not be construed as an official Department of the Army position, policy, or decision, unless so designated by other authorized documents.

## REPORT DOCUMENTATION PAGE

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                              |                               |                                             |                                                                                                                                                                                       |                                                       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------------------|---------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|
| 1. REPORT DATE<br>1996, March                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                              | 2. REPORT TYPE<br>Final       |                                             | 3. DATES COVERED (from... to)<br>January 1995-December 1995                                                                                                                           |                                                       |
| 4. TITLE AND SUBTITLE<br><br>An Application of the High Transfer Training Methodology With Soft Skills Tasks                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                              |                               |                                             | 5a. CONTRACT OR GRANT NUMBER                                                                                                                                                          |                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                              |                               |                                             | 5b. PROGRAM ELEMENT NUMBER<br>0602785A                                                                                                                                                |                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                              |                               |                                             | 5c. PROJECT NUMBER<br>A791                                                                                                                                                            |                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                              |                               |                                             | 5d. TASK NUMBER<br>2902                                                                                                                                                               |                                                       |
| 6. AUTHOR(S)<br><br>Arthur J. Ryan III                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                              |                               |                                             | 5e. WORK UNIT NUMBER<br>H01                                                                                                                                                           |                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                              |                               |                                             | 8. PERFORMING ORGANIZATION REPORT NUMBER                                                                                                                                              |                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                              |                               |                                             | 10. MONITOR ACRONYM<br>ARI                                                                                                                                                            |                                                       |
| 7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)<br>U.S. Army Research Institute for the Behavioral and Social Sciences<br>ATTN: PERI-II<br>5001 Eisenhower Avenue<br>Alexandria, VA 22333-5600                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                              |                               |                                             | 11. MONITOR REPORT NUMBER<br>Research Note 96-29                                                                                                                                      |                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                              |                               |                                             | 9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)<br>U.S. Army Research Institute for the Behavioral and Social Sciences<br>5001 Eisenhower Avenue<br>Alexandria, VA 22333-5600 |                                                       |
| 12. DISTRIBUTION/AVAILABILITY STATEMENT<br>Approved for public release; distribution is unlimited.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                              |                               |                                             |                                                                                                                                                                                       |                                                       |
| 13. SUPPLEMENTARY NOTES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                              |                               |                                             |                                                                                                                                                                                       |                                                       |
| 14. ABSTRACT ( <i>Maximum 200 words</i> ):<br>The High Transfer Training (HITT) methodology is an extension of the Systems Approach to Training (SAT) that seeks to produce training programs that directly promote transfer of learning. The HITT method adds steps to SAT that identify and codify similarities and differences among objects and then clusters them according to the common skills and knowledge required by the student to operate upon these objects. The HITT procedure thereby aids the training developer in producing generic learning objectives defined at an optimum level of specificity for transfer. The effect of the course developed based on the HITT method exceeded the trainer's expectations. This development effort was, however, highly equipment specific, making the application of HITT suspect to being constrained to hard skills applications only. This report describes the application results of HITT to the training of soft skills tasks at the Ordnance Advanced Noncommissioned Officers Course. The results show that the HITT methodology can be used in all training development efforts. In fact, the HITT methodology is perhaps best suited to training developments in the soft skills area where proficiency with generalizable skills and knowledge are crucial to successful job performance. |                              |                               |                                             |                                                                                                                                                                                       |                                                       |
| 15. SUBJECT TERMS<br>Transfer training      Soft skills      Training methodology      Systems Approach to Training                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                              |                               |                                             |                                                                                                                                                                                       |                                                       |
| SECURITY CLASSIFICATION OF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                              |                               | 19. LIMITATION OF ABSTRACT<br><br>Unlimited | 20. NUMBER OF PAGES<br><br>260                                                                                                                                                        | 21. RESPONSIBLE PERSON<br>(Name and Telephone Number) |
| 16. REPORT<br>Unclassified                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 17. ABSTRACT<br>Unclassified | 18. THIS PAGE<br>Unclassified |                                             |                                                                                                                                                                                       |                                                       |

## FOREWORD

---

The High Transfer Training (HITT) methodology was used to develop a highly successful course of instruction at the Signal School at Fort Gordon. This methodology was developed in conjunction with contractors with help by Signal School personnel at the Fort Gordon Field Unit of the U.S. Army Research Institute for the Behavioral and Social Sciences. The course developed based on the HITT methodology was evaluated both qualitatively and quantitatively, and the effectiveness of the course dramatically exceeded expectations by all measures. This development effort and course was, however, highly equipment specific, making the application of HITT suspect to being constrained to hard skills applications only. The question remained if the methodology was applicable or could be extended to the soft skills arena.

This application of HITT to the Ordnance Advanced Noncommissioned Officers Course shows that applications of HITT are not constrained to hard skills, but that the HITT methodology can be used in all training development efforts. In fact, the HITT methodology is perhaps best suited to training developments in the soft skills area where proficiency with generalizable skills and knowledge are crucial to successful job performance.

ZITA M. SIMUTIS  
Deputy Director  
(Science and Technology)

EDGAR M. JOHNSON  
Director

# AN APPLICATION OF HIGH TRANSFER TRAINING TO ORDNANCE ADVANCED NONCOMMISSIONED OFFICERS COURSE

## EXECUTIVE SUMMARY

---

### Research Requirement:

To investigate the applicability of High Transfer Training (HITT) in the area of soft skills where the objects are not as clearly defined as they are in hard skill technical tasks. The objectives of this study are to (1) develop a systematic way to describe soft skills objects; (2) modify the HITT methodology, as necessary, to accommodate applications to soft skills applications; and (3) align any modifications with current theories and the literature on transfer of learning.

### Procedure:

The Advanced Noncommissioned Officer Course (ANCOC) was selected for this study for two reasons. First, the objective of the study was to investigate HITT in the soft skills and leadership area. These noncommissioned officers (NCOs) meet this criterion. Second, travel restrictions made Aberdeen Proving Ground the most feasible location for this study. Next, the Ordnance ANCOC Job Task Inventory and a Special Text were gathered at the NCO Academy. These documents were reviewed and 14 subject matter experts were interviewed with respect to Ordnance ANCOC, the duties of NCOs, and their concepts of leadership. The current HITT methodology was studied and applied to the Ordnance ANCOC task inventory. The results of the application were documented and are attached to this report.

### Findings:

This application of HITT to the Ordnance ANCOC Course shows that applications of HITT are not constrained to hard skills, but that the HITT methodology can be used in all training developments efforts. In fact, the HITT methodology is perhaps best suited to training developments in the soft skills area where proficiency with generalizable skills and knowledge are crucial to successful job performance.

AN APPLICATION OF HIGH TRANSFER TRAINING TO ORDNANCE ADVANCED  
NONCOMMISSIONED OFFICERS COURSE

CONTENTS

---

|                              | Page |
|------------------------------|------|
| INTRODUCTION .....           | 1    |
| PROCEDURES AND RESULTS ..... | 1    |
| Procedures .....             | 1    |
| Analysis .....               | 2    |
| Results .....                | 2    |
| BIBLIOGRAPHY .....           | 3    |

# AN APPLICATION OF HIGH TRANSFER TRAINING METHODOLOGY WITH SOFT SKILLS TASKS

## Introduction

The High Transfer Training (HITT) developments methodology is an extension of the Systems Approach to Training (SAT) process that seeks to produce training programs that directly promote transfer of learning (Neal, Lowry, & Ryan, 1992). The HITT analysis adds steps to SAT that identify and codify similarities and differences among objects and then clusters these objects according to the common skills and knowledge required by the student to operate upon these objects. The HITT analysis procedure thereby aids the training developer in producing generic learning objectives defined at an optimum level of specificity for transfer.

## HITT Project Background

This project has produced a training developments methodology and training strategy that directly seek to promote transfer of learning within families of related equipment. The U.S. Army Signal School produced a prototype course of instruction using the methodology and implemented a course that used the HITT training strategy. Qualitative and quantitative investigations indicated that the course was achieving its goals and that its students were achieving transfer (Ryan, 1992; Shipman, 1992; Shipman, Lowry, & Sanders, 1992; Singleton, 1992; Singleton, 1993a, Singleton, 1993b). The Fort Gordon application of HITT involved a job specialty considered ideal for HITT in that the job involved operation or maintenance of families of related equipments. The objects involved in this case were easily identified from the job tasks and the skills and knowledge associated with operations on these objects were likewise straight forward due to the concrete nature of the equipments. Because this initial application of HITT involved hard skills only, questions remained with respect to the methodology's applicability to other domains such as jobs with limited items of equipment or jobs involving soft skills like those demanding leadership or management.

## Procedure and Results

### Procedures

1. For this application of HITT, the Advanced Noncommissioned Officer Course (ANCOC) was chosen because the course deals with soft skills only and travel restrictions made Aberdeen Proving Ground the most feasible location for this study. Access to the ANCOC course materials and SMEs was granted by Ordnance School authorities after being briefed on the objectives and conduct of the study and after being informed on their role in the investigation.

2. The NCO Academy provided the Ordnance ANCOC Job Task Inventory, a Special Text (U.S. Army Ordnance Center & School, 1994), and fourteen Subject Matter Experts (SMEs) for interviews.
3. The Job Task Inventory and the Special Text were reviewed.
4. Fourteen SMEs were interviewed individually and in small groups during four interview sessions. The SMEs were questioned on what skills and knowledge NCOs require. Skills and knowledge related to leadership were of particular interest. Preliminary groups of skills and knowledge were developed based on these interviews, review of the Job Task Inventory, and review of the Special Text.
5. The HITT methodology was applied to the Ordnance ANCOC task inventory.

#### Analysis

The analysis consisted of analyzing the current HITT methodology with respect to the tasks on the Ordnance ANCOC Job Task Inventory. Recommended changes to the methodology were made and the revised methodology was applied to the Ordnance ANCOC Job Task Inventory.

#### Results

The current HITT methodology was found to be too oriented towards hard skills applications only. In fact, the latest version of the methodology is probably only usable at the Signal School in a single training department.

The results of the application are attached (Ryan, 1995). The application contains a section on the Front End Analysis and each step of the HITT methodology through development of learning objectives. The analysis of each step of the methodology is documented as follows:

- \* Current HITT Step
- \* Recommended changes to the Step
- \* A recommended, revised HITT Step
- \* Comments of the application of HITT to Ordnance ANCOC
- \* Enclosures with the results of the ANCOC application as required by the revised methodology

The revised HITT methodology can be used to develop training in areas involving soft skills tasks. In fact, the methodology is considered best suited to applications where job proficiency depends on generalizable skills and knowledge.

## Bibliography

- Neal, J. D., Lowry, C. A., & Ryan, A. J. (1992). HITT: High transfer training methodology. Fort Gordon, GA: U.S. Army Research Institute Field Unit.
- Ryan, A. J. (1992). Qualitative evaluation of the 31M10 course of instruction. Falls Church, VA: CAE-Link.
- Ryan, A. J. (1995). An application of the high transfer training (HITT) methodology with soft skills tasks. Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.
- Shipman, M. G. (1992). Application and evaluation of HITT: A generic training methodology. Paper presented at the 100th annual convention of the American Psychological Association, Washington, DC.
- Shipman, M. G., Lowry, C. A., & Sanders, M. G. (1992). How far can military training transfer? Some surprising findings. Fort Gordon, GA: U.S. Army Research Institute Field Unit.
- Singleton, J. M. H. (1992). An assessment of MOS 31M10 training developed and implemented using the high transfer training, HITT methodology. Falls Church, VA: CAE-Link.
- Singleton, J. M. H. (1993). Are soldiers trained in a course developed using the HITT better able to transfer that training to related, but untrained, equipment than soldiers trained in the conventional manner? Falls Church, VA: CAE-Link.
- Singleton, J. M. H. (1993). Can soldiers trained in a course developed using the HITT methodology transfer that training to related, but untrained, equipment? Falls Church, VA: CAE-Link.
- U.S. Army Ordnance Center & School (1994). NCOs make it happen (STM 1-2). U.S. Army: Aberdeen Proving Ground, MD.

An Application of the High Transfer Training  
Methodology With Soft Skills Tasks

Front End Analysis

## FRONT END ANALYSIS (FEA)

### PURPOSE

To gather the data required for the application of the HITT development methodology.

### SUMMARY OF THE STEP

During the FEA, the analyst gathers and assembles existing documentation related to the instruction to be developed. Task inventories, tasks analysis documents, and existing course materials are examples of such documentation. In cases where the documentation is incomplete, the analyst interviews Subject Matter Experts (SMEs) to obtain the needed information.

### INPUTS

- \* Permission for access to the sources of data

### PROCEDURE

1. Negotiate access to documentation and SMEs with the proper authority.
2. Collect documentation.
3. Review documentation.
4. Interview SMEs.

### PRODUCTS

- \* Assembled documents
- \* SME interview notes

### PRODUCT USE IN FUTURE STEPS

The Job Task Inventory is the input to Step A of the HITT methodology. The information gathered from SMEs is used in all steps of the training developments process.

## APPLICATION OF HITT TO ORDNANCE ANCOC

### Procedures:

FEA - Procedure 1. For this application of HITT, the Advanced Noncommissioned Officer Course (ANCOC) was chosen for several reasons. First the objective of the study was to investigate HITT in the soft skills and leadership area. These NCO's meet this criterion. Second, travel restrictions made Aberdeen Proving Ground the most feasible location for this study. Access to the ANCOC course materials and SMEs was granted by Ordnance School authorities after being briefed in the objectives and conduct of the study and after being informed on their role in the investigation.

FEA - Procedure 2. The Ordnance ANCOC Job Task Inventory and a Special Text were gathered at the NCO Academy. No other documentation was available.

FEA - Procedure 3. The Job Task Inventory and the Special Text were reviewed. The Job Task Inventory is at Enclosure 1 to this section.

FEA - Procedure 4. Fourteen SMEs were interviewed individually and in small groups during four interview sessions. The SMEs were questioned on what skills and knowledge NCOs require. Skills and knowledge related to leadership were of particular interest. Preliminary groups of skills and knowledge based on these interviews and review of the Job Task Inventory and the Special Text are found at Enclosure 2 to this section.

### Products:

- \* Job Task Inventory - see Enclosure 1.
- \* Initial listing of skills and knowledge - see Enclosure 2.

## ORDNANCE ANCOC JOB TASK INVENTORY

Solve problems in executing supervisory actions

Administer the unit NCO evaluation report system (NCOERS)

Supervise unit level administrative procedures

Adhere to the responsibilities and authority of NCOs

Apply techniques for motivating soldiers

Review/evaluate single parent/family care plan for accuracy/ correctness of information

Monitor unit equal opportunity (EO) program

Counsel soldiers on career development

Adhere to Army customs and traditions

Assess and develop subordinates for leadership roles

Conduct risk assessment

Ensure operations are in compliance with the Army environmental program

Implement a shop safety program

Coordinate offensive/defense operations

Plan and execute the movement of unit assets

Supervise radiation monitoring

Coordinate with adjacent platoon

Reorganize a platoon following enemy contact while in defense

Direct defense of maintenance platoon

Direct defense of maintenance support team

Select a field maintenance site

Develop plans and programs

Conduct a battle analysis

Coordinate support in the unit trains area

Displace unit

Integrate all combat service support operations within the unit

Establish replacement/reconstitution point

Plan and establish field services

Control flow of work through the maintenance shop

Interpret maintenance reports/forms

Integrate automated log spt sys, including SPBS, TUFMIS, SAMS, SARSS, DS/4, and ULLS

Manage material acquisition and accounting process (TUFMIS), (SAILS) and SFDLR

Supervise battle damage assessment and repair (BDAR)

Determine and establish storage and movement of hazardous materials

Manage prescribed load list (PLL)

Monitor test, measurement and diagnostic equipment (TMDE) program

Administer quality control program

Inspect bench stock listing

Monitor the maintenance of publications library

Inspect open work request reconciliation listing

Inspect completed shop work load summary

Inspect shop deadline and deferred workload listing

Inspect shop work load summary listing

Apply techniques of stress management to prevent, reduce, and manage combat stress casualties

Monitor weight control program (AR 600-9)

Supervise packaging and crating of unit supplies/equipment and SFDLR

Manage standard army maintenance system (SAMS)

Assess unit capabilities to support proposed operations, unit status report (USR)

Monitor logistics support operations (SAILS)

Plan logistics support for maintenance operations

Assess division and corps transportation organization & capabilities

Maintain property accountability

Supervise the application of controlled cannibalization procedures

Monitor the preparation and disposition of the maintenance request (DA form 5504) (SAMS)

Inspect inoperative equipment report (DA Form 5409) (SAMS)

Monitor the preparation and disposition of the equipment control record (DA Form 2408-9)

Implement command and control process

Evaluate PMCS procedures

Monitor the preparation and disposition of the equipment inspection and maintenance worksheet (DA Form 2404)

Monitor TAMMS (manual)

Establish standing operating procedures

Direct preventative maintenance checks and services

Supervise the organization and deployment of maintenance assistance team

Monitor unit oil analysis program

Evaluate RC mobilization plan

Perform reconnaissance of terrain/route to recovery site

Supervise inspection of PLL (DA form 2063R)

Supervise inspection of document register (DA Form 2064)

Supervise inspection of maintenance request(DA Form 5504) (SAMS)

Supervise inspection of inoperative equipment report (DA Form 5409) (SAMS)

Supervise inspection of unit level deadlining parts report (DA Form 5410) (SAMS)

Supervise inspection of PLL change listing (automated)

Supervise inspection of unit demands summary listing (automated)

Direct deployment and defense of recovery teams

Inspect loading plan for vehicle to include its trailer

Supervise inspection of equip modification record (DA Form 2408-9)

Supervise the inventory of tools and equipment

Supervise inspection of weapons data record (DA Form 2408-4)

Supervise the establishment and operation of maintenance facilities

Monitor request for issue/turn-in of supplies and equipment

Supervise inspection of weapons data record (DA Form 2408-4)

Supervise the establishment and operation of maintenance facilities

Maintain publications library

Supervise inspection of calibrated instrument label (DA Label 80)

Monitor the preparation and disposition of the prevention maintenance schedule and record (DD Form 314)

Inspect materiel condition status report (DA Form 2406)

Inspect organizational control record for equipment

Supervise inspection of maintenance request (DA Form 5504)(SAMS)

Inspect inoperative equipment report (DA Form 5409)(SAMS)

Monitor the preparation and disposition of the materiel condition status report (DA Form 2406)

Supervise tool control procedures

Supervise the planning of workflow

Supervise the inspection of equipment operator's qualification record (DA Form 348)

Inspect materiel condition status report (DA Form 2406)

Inspect maintenance request register (DA Form 2405)

Monitor unit oil analysis program

Supervise inspection of modification record (DA Form 2408-5)

## INITIAL LISTING OF ORDNANCE ANCOC SKILLS AND KNOWLEDGE

Evaluate a subordinate's performance  
Identify the characteristics of proficient technical performance  
Identify leadership potential  
Know the consequences of an efficiency rating  
Complete an Enlisted Efficiency Report  
Counsel subordinates on job performance  
Counsel subordinates on career development  
Know the indicators of personal problems  
Identify subordinates with potential personal problems  
Counsel subordinates with personal problems  
Know how to motivate subordinates  
Motivate subordinates  
Develop leadership in subordinates  
Know the objectives of a single parent plan  
Evaluate a single parent plan  
Know the objectives of the equal opportunity program  
Adhere to the principles of equal opportunity  
Know the purpose of the weight control program  
Administer the weight control program  
Know your responsibilities in unit administration  
Review unit administration reports

Know the responsibilities of NCOs  
Know the limits of authority of NCOs  
Identify the characteristics of professionalism  
Act professionally  
Know how to listen to subordinates  
Evaluate others suggestions  
Make on-the-spot corrections  
Know the characteristics of military bearing  
Know the standards of dress  
Know your role in the military justice system  
Know how to discipline subordinates  
Lead groups in physical training  
Lead groups during drill and ceremonies  
Plan technical operations  
Organize subordinates for the conduct of technical operations  
Supervise technical operations

Plan tactical operations  
Organize subordinates for the conduct of tactical operations  
Supervise tactical operations  
Know how to be fair  
Know how to control your emotions  
Know how to plan a unit movement  
Plan a unit movement  
Know how to perform a route reconnaissance  
Perform a route reconnaissance  
Know how to estimate bridge capacities  
Estimate bridge capacities  
Know how to read a topographic map  
Read a topographic map  
Know how to locate your position using a map and compass  
Locate your position using a map and compass  
Know how to locate your position using GPS  
Locate your position using the Global Positioning System  
Know how to perform a map reconnaissance  
Perform a map reconnaissance  
Identify map symbols  
Estimate slopes  
Compute distances  
Know the meaning of map symbols  
Locate map legend  
Read coordinates  
Know the consequences of not spread loading  
Know the purpose of spread loading  
Compute vehicles loads  
Know how to inspect a vehicle loading plan  
Inspect a vehicle loading plan  
Know vehicle capacities - weight & cube  
Know how to move and store hazardous materials  
Know the importance of proper packing and packaging of materials  
Identify how to properly pack and package various materials  
Supervise proper packing and packaging of materials  
Know how to plan a unit defense  
Write a unit defense plan  
Know how to plan an attack  
Write an attack order  
Know how to conduct security operations  
Conduct security operations

Organize a perimeter security  
Know the concept of interlocking fires  
Know the purpose of firing stakes  
Coordinate supporting indirect fires  
Know how to conduct radiation monitoring  
Supervise radiation monitoring  
Coordinate with adjacent units  
Plan for a dismounted patrol  
Conduct a dismounted patrol  
Know how to reorganize unit after enemy contact  
Reorganize unit after enemy contact  
Know the problems of defending maintenance support teams  
Plan for the defense of a maintenance support team  
Direct the defense of a maintenance support team  
Know how to conduct a battle analysis  
Conduct a battle analysis  
Know the techniques of stress management  
Manage stress in combat  
Know the principles of command and control  
Know your role in the command and control process

Know the characteristics of a good field maintenance site  
Plan a field maintenance site  
Select a field maintenance site  
Know how to coordinate logistics operations  
Coordinate logistical operations in a trains area  
Know the purpose of a reconstitution point  
Know the activities that take place in a reconstitution point  
Supervise a reconstitution point  
Control work flow at a field maintenance site  
Know the principles of Battle Damage and Repair  
Know the purpose of Battle Damage and Repair  
Know the objectives of Battle Damage and Repair  
Plan a Battle Damage and Repair operation  
Supervise a Battle Damage and Repair operation  
Know the importance of communications security  
Know how to identify comsec devices  
Use authentication documents  
Direct individuals using communications devices  
Direct groups using communications devices  
Know proper radio/telephone procedures

Know how to organize a recovery team  
Deploy a recovery team  
Direct recovery operations  
Know how to compute mechanical advantage  
Direct maintenance operations  
Organize a maintenance operation  
Know how to evaluate a maintenance operation  
Know the purpose of Preventative Maintenance Checks and Services  
Know the importance of Preventative Maintenance Checks & Services  
Establish a Preventative Maintenance Checks and Services program  
Evaluate a Preventative Maintenance Checks and Services program  
Direct a Preventative Maintenance Checks and Services program  
Know the purpose of a maintenance assistance team  
Organize a maintenance assistance team  
Coordinate the visit of a maintenance assistance team  
Direct a maintenance assistance team  
Know how to report the results of an assistance visit  
Know how to conduct unit training exercises  
Know the safety considerations required on small arms ranges  
Compute ammunition requirements for small arms training  
Analyze local range safety SOPs  
Plan a training road march  
Conduct a training road march  
Know your role in an ARTEP  
Evaluate subordinates individual training requirements  
Plan on-the-job training  
Supervise on-the-job training  
Evaluate on-the-job training efforts  
Know the purpose of standing operating procedures  
Identify when a standing operating procedure is required  
Develop a standing operating procedure  
Know the principles of backward planning  
Evaluate plans  
Conduct a risk assessment  
Know how to inspect personal appearance  
Know how to inspect personal knowledge  
Know how to inspect personal equipment  
Know how to inspect weapons  
Know how to inspect vehicles  
Know how to inspect communications equipment  
Know how to inspect administrative records

Know how to inspect maintenance records  
 Know how to inspect personnel records  
 Know how to inspect supply records  
 Know how to inspect areas for proper sanitation  
 Know how to inspect for proper safety precautions  
 Supervise the inspection of manual maintenance records  
 Supervise the inspection of automated maintenance records  
 Supervise the inspection of manual supply records  
 Supervise the inspection of automated supply records  
 Supervise the inspection of manual financial records  
 Supervise the inspection of automated financial records  
 Inspect manual maintenance records  
 Inspect automated maintenance records  
 Inspect manual supply records  
 Inspect automated supply records  
 Inspect manual financial records  
 Inspect automated financial records  
 Monitor preparation/disposition of manual maintenance records  
 Monitor preparation/disposition of automated maintenance records  
 Monitor preparation/disposition of manual supply records  
 Monitor preparation/disposition of automated supply records  
 Monitor preparation/disposition of manual financial records  
 Monitor preparation/disposition of automated financial records  
 Know the purpose of manual maintenance records  
 Know the purpose of automated maintenance records  
 Know the purpose of manual supply records  
 Know the purpose of automated supply records  
 Know the purpose of manual financial records  
 Know the purpose of automated financial records  
 Evaluate readiness by review of manual maintenance records  
 Evaluate readiness by review of automated maintenance records  
 Evaluate readiness by review of manual supply records  
 Evaluate readiness by review of automated supply records  
 Evaluate readiness by review of manual financial records  
 Evaluate readiness by review of automated financial records  
 Know the material acquisition and accounting process  
 Know the purpose of the material acquisition & accounting process  
 Manage the material acquisition and accounting process  
 Know the technical inspection process  
 Know the purpose of the technical inspection process  
 Manage the unit technical inspection process

Know the elements of the quality control program  
Know the purpose of the quality control program  
Administer the unit quality control program  
Know the requirements of the oil analysis program  
Know the purpose of the oil analysis program  
Manage the unit oil analysis program  
Know the requirements for maintaining a publications library  
Know the purpose of the publications library  
Maintain the unit oil publications library  
Know the requirements of a shop safety program  
Implement a shop safety program  
Manage a shop safety program  
Know the requirements of the property accountability program  
Know the purpose of the property accountability program  
Manage the unit property accountability program  
Know the requirements of the TMDE program  
Know the purpose of the TMDE program  
Manage the unit TMDE program  
Know how to control tools and equipment  
Know the purpose tool control program  
Manage the unit tool control program  
Know the concept of controlled cannibalization  
Know the purpose of controlled cannibalization  
Know the problems associated with controlled cannibalization  
Supervise controlled cannibalization procedures

An Application of the High Transfer Training (HITT)  
Methodology with Soft Skills Tasks

Step A

## CURRENT STEP A

### PREPARE OBJECTS AND ACTION VERBS LISTS

#### PURPOSE

To prepare a list of objects and a list of action verbs where the objects and the action verbs are each sorted into functional groups.

#### SUMMARY OF THE STEP

In Step A, the analyst reviews the Critical Task List and the Job Task Inventory for the skill level of the MOS to ensure that the Critical Task List is complete. From the Critical Task List, the analyst identifies the objects and actions for which the MOS is responsible. The analyst creates functional groups of objects and of the action verbs related to these objects.

#### INPUTS

- \* Current Critical Task List
- \* Current Job Task Inventory

#### PROCEDURE

1. Review the current Critical Task List and Job Task Inventory, for the skill level course to be developed, to insure that the Critical Task List includes:
  - (a) All objects in the MOS.
  - (b) All actions performed on the objects.
2. Determine functional groups of objects.
  - (a) List all objects from the Critical Task List.
  - (b) Group the objects according to their general use.

For example, all communications shelters have the same general use, all reports have the same general use, and all receiver/

transmitter units have the same general use. If an object is unique and will not group with any other object(s), then list it as a functional group and treat it as such during the remainder of the course development process.

(c) Assign a name to each group of objects.

### 3. Determine functional groups of actions.

(a) List all action verbs from the Job Task Inventory that are to be performed on the objects.

(b) Sort the action verbs into groups according to their general purpose. Assign a name, a functional label, to each group of action verbs. For example, a group label of "repair" might include "remove and replace", "diagnose", "disassemble", "assemble", and "test".

### 4. Create a document which lists the task level objects and task level action verbs by functional groupings.

## PRODUCTS

- \* List of Objects organized into functional groups
- \* List of Action Verbs organized into functional groups

## PRODUCT USE IN FUTURE STEPS

The List of Objects contains all objects to be analyzed in Step B - Develop Generalized Components and Objects Lists. The List of Action Verbs contains all verbs to be analyzed in Step C - Describe Generic Action Statements.

## RECOMMENDED CHANGES TO STEP A:

### 1. General.

\* All references to the Critical Task List should be deleted from this step and replaced with the Job Task Inventory. It is a fundamental premiss of HITT that the methodology deal with all of the skills and knowledge associated with the job and not an artificial sub-set of the skills and knowledge as reflected in the Critical Task List.

### 2. Based on this Application of HITT.

\* There are multiple actions and objects listed in single tasks in the Ordnance ANCOC Job Task Inventory. It is not known if this is a characteristic of soft skills inventories or just the way this inventory was written. In either case, the HITT procedures should recognize this possibility and provide direction on handling such cases.

\* In procedures 2 and 3 replace the terms "general use" with "similar nature". The term "general use" restricts the methodology to applications involving equipment.

\* Replace any references to MOS or skill level with the term "current application of HITT". This application, as with many potential others, deals with multiple MOSs and several skill levels. The reference to a single MOS and skill level artificially constrains the methodology.

## COMMENTS:

### 1. General.

\* This inventory shares a similar problem with the Signal School inventory in that precise definitions of many verbs are unclear. For instance, with respect to hard skills equipment maintenance actions it is unclear if the term "troubleshooting" includes repair actions or if the term "repair" includes diagnostics. In this inventory, the question arises if "supervise" subsumes "direct" or the other way around. This problem is not viewed as a dilemma with the HITT methodology, but as a decision that the analyst has to resolve on a case-by- case basis.

2. Based on this Applications of HITT.

\* The lists of objects and action verbs in a soft skills inventory will probably greatly exceed the lists of objects in an equipment related inventory. It is, therefore, recommended that the clusters of objects and verbs be displayed in the "related to" format shown in Enclosures 1 and 2.

REVISED STEP A

PREPARE OBJECTS AND ACTION VERBS LISTS

PURPOSE

To prepare a list of objects and a list of action verbs where the objects and the action verbs are each sorted into functional groups.

SUMMARY OF THE STEP

In Step A, the analyst reviews the Job Task Inventory for the current application of HITT to ensure that the inventory is complete. From the Job Task Inventory, the analyst identifies the objects and actions for which the job incumbent is responsible. The analyst creates functional groups of objects and of the action verbs related to these objects.

INPUTS

- \* Current Job Task Inventory

PROCEDURE

1. Review the current Job Task Inventory, for the course to be developed, to insure that the inventory includes:
  - (a) All objects related to the job.
  - (b) All actions performed on the objects.
2. Determine functional groups of objects.
  - (a) List all objects from the Job Task Inventory. If tasks have multiple objects, list all objects separately.
  - (b) Group the objects according to their similar nature.

For example, all communications shelters have the same general use, all reports have the same general use, and all receiver/

transmitter units have the same general use. If an object is unique and will not group with any other object(s), then list it as a functional group and treat it as such during the remainder of the course development process.

(c) Assign a name to each group of objects.

3. Determine functional groups of actions.

(a) List all action verbs from the Job Task Inventory that are to be performed on the objects. If tasks have multiple action verbs, list all verbs separately.

(b) Sort the action verbs into groups according to their general purpose. Assign a name, a functional label, to each group of action verbs. For example, a group label of "repair" might include "remove and replace", "diagnose", "disassemble", "assemble", and "test".

4. Create a document which lists the task level objects and task level action verbs by functional groupings.

## PRODUCTS

- \* List of Objects organized into functional groups
- \* List of Action Verbs organized into functional groups

## PRODUCT USE IN FUTURE STEPS

The List of Objects contains all objects to be analyzed in Step B - Develop Generalized Components and Objects Lists. The List of Action Verbs contains all verbs to be analyzed in Step C - Describe Generic Action Statements.

## APPLICATION OF HITT TO ORDNANCE ANCOC

### Procedures:

STEP A - PROCEDURE 1. Reviewed the Ordnance ANCOC Job Task Inventory for the course to be developed and identified all objects and actions performed on the objects included in the list.

STEP A - PROCEDURE 2. Determined functional groups of objects for the objects on the Job Task Inventory. The objects were grouped according to their similar nature. Assigned a name to each group of objects.

STEP A - PROCEDURE 3. Determined functional groups of actions. Listed all action verbs from the Job Task Inventory that are to be performed on the objects. Sorted the action verbs into groups according to their similar nature. Labeled each group of action verbs.

STEP A - PROCEDURE 4. Created documents which list the task level objects and task level action verbs by functional groupings.

### Products:

- \* List of Objects organized into functional groups - see Enclosure 1.
- \* List of Action Verbs organized into functional groups - see Enclosure 2.

## OBJECTS FUNCTIONAL GROUPS

### OBJECTS RELATED TO QUALITY CONTROL:

Calibrated instrument label, Quality control program, Test, measurement and diagnostic equipment (TMDE) program

### OBJECTS RELATED TO FORMS:

Document register, Equipment modification record, Equipment control record, Equipment operator's qualification record, Equipment inspection and maintenance worksheet, Inoperative equipment report (SAMS), Maintenance reports/forms, Maintenance request register, Maintenance request (SAMS), Bench stock listing, Open work request reconciliation listing, Organizational control record for equipment, Unit demands summary listing (automated), Shop work load summary listing, Shop deadline and deferred workload listing, Material condition status report, PLL change listing (automated), Prescribed load list (PLL), Request for issue/turn-in of supplies and equipment, TAMMS (manual), Unit level deadlining parts report (SAMS), Unit status report (USR), Weapons data record

### OBJECTS RELATED TO PERSONNEL:

Career development, Equal opportunity program, Weight control program, Combat stress casualties, Techniques of stress management, Techniques for motivating soldiers, Authority of NCOs, Army traditions, Army customs, Army environmental program, Problems in executing supervisory actions, Shop safety program, Single parent/family care plan, Unit NCO evaluation report system (NCOERS), Subordinates for leadership roles, Responsibilities of NCOs, Unit level administrative procedures, Programs

### OBJECTS RELATED TO TACTICS:

Adjacent platoon, Battle analysis, Defense of recovery teams, Defense of maintenance platoon, Defense of maintenance support team, Defense of a maintenance platoon following enemy contact, Defensive operations, Command and control, Offensive operations, Radiation monitoring

### OBJECTS RELATED TO PROPERTY ACCOUNTABILITY:

Inventory of tools and equipment, Property accountability, Controlled cannibalization procedures, Material acquisition and accounting process, SFDLR, Tool control procedures, Publications library

### OBJECTS RELATED TO PREVENTATIVE MAINTENANCE:

Preventative maintenance checks and services, Prevention maintenance schedule and record, Oil analysis program, PMCS procedures

**OBJECTS RELATED TO MOVEMENT:**

Deployment of recovery teams, Division and corps transportation capabilities, Division and corps transportation organization, Loading plan for vehicle to include its trailer, Movement of hazardous materials, Storage of hazardous materials, Movement of unit assets, Packaging and crating of unit supplies/equipment, Reconnaissance of terrain/route to recovery site

**OBJECTS RELATED TO FIELD MAINTENANCE:**

Battle damage assessment and repair, Field services, Field maintenance site, Replacement/reconstitution point, Unit trains area, Maintenance assistance team, Work flow

**OBJECTS RELATED TO LOGISTICS OPERATIONS:**

Logistics support for maintenance operations, Logistics support operations (SAILS), Combat service support operations, Maintenance facilities

**OBJECTS RELATED TO AUTOMATED SYSTEMS:**

Automated logistics support systems, DS/4, SAILS, SAMS, SARSS, TUFMIS, ULLS, SPBS

**OBJECTS RELATED TO PLANNING:**

Plans, RC mobilization plan, Risk assessment, Standing operating procedures, Unit capabilities to support proposed operations

## ACTION VERBS FUNCTIONAL GROUPS

### ACTION VERBS RELATED TO LEADING:

Direct, Conduct, Control, Manage, Administer, Supervise

### ACTION VERBS RELATED TO FOLLOWING:

Adhere, Apply

### ACTION VERBS RELATED TO PREPARING:

Plan, Develop, Organize, Reorganize, Establish, Select

### ACTION VERBS RELATED TO DOING:

Execute, Implement, Perform, Deploy, Displace, Coordinate, Integrate

### ACTION VERBS RELATED TO JUDGING:

Inspect, Assess, Evaluate, Interpret, Determine

### ACTION VERBS RELATED TO SUSTAINING:

Maintain, Monitor, Review, Ensure

### ACTION VERBS RELATED TO INFLUENCING:

Counsel, Motivate

### ACTION VERBS RELATED TO PROBLEM SOLVING:

Prevent, Reduce, Solve

An Application of the High Transfer Training (HITT)  
Methodology with Soft Skills Tasks

Step B

## CURRENT STEP B

### DEVELOP GENERALIZED COMPONENTS AND OBJECTS LISTS

#### PURPOSE

To analyze the commonalities and differences in objects and components of objects.

#### SUMMARY OF THE STEP

Use the TRADOC Forms 550s (Task Analysis Worksheets), Master Data Lists (MDLs), or the Technical Manuals (Tms) related to the Objects List to determine the components of the objects. Use the 550s, MDLs, and Tms to identify the controls, indicators, or parts of the components with which the soldier interfaces. Determine whether components are functionally and physically unique or common. Develop matrices that compare the operational commonality of components. After judging functional and operational commonality, cluster and name the groups of functionally and operationally common components. Assemble the Generalized Components List. Develop matrices of objects versus the generalized components to compare commonality and differences at the objects level. Identify commonalities and differences. Rename objects or groups of objects based on the commonalities or differences, as needed. Prepare the Generalized Objects List.

#### INPUTS

- \* List of Objects from Step A
- \* Technical Manuals (TMs)
- \* TRADOC Forms 550s or MDLs from SAT

#### PROCEDURE

1. Determine the components of all of the objects for which the MOS is responsible. These objects are obtained from the List of Objects from Step A. Components are defined as objects that serve a distinct purpose and constitute the lowest level, and no lower, of the soldiers' interface with the equipment when performing their tasks. For instance, a heading block is a component (section) of a report. A multiplexer is a component of an assemblage, a circuit card is a component (module) of a multiplexer, and a transistor is a component (part) of a circuit card. If, for example, the level of actual operational soldier-machine interface while performing a task is no lower than the multiplexer - then training analysts should not include circuit cards or

transistors in their listing of components for the assemblage object. They would only list the multiplexer.

Summarize the components in matrices or spreadsheets of components versus the individual objects to assist the following analyses. Order the individual objects such that members of functional groups from Step A are placed next to each other.

2. Determine and list the functional groups of components. Component functional groups work in the same general manner and serve the same purpose. Delete any components that were identified as objects in Step A. Once as a component has been identified as belonging to a functional group, do not consider it for any remaining groups.
3. Identify and list all functionally unique components that cannot be entered into any of the functional groups created in Step B-2. Functionally unique components serve a single purpose among the objects and are associated with only one object.
4. Determine functionally and physically common components.  
Functionally and physically common components serve a single purpose, are associated with more than one object, are physically the same and have the same nomenclature, configuration, sub-components, and operational controls and indicators. Functionally and physically common components need not be identical makes or models and slight variations in size, shape, and the location or arrangement of parts are acceptable. Judge functional and physical commonality. If members within a functional group are found to share functional and physical commonalities then form one or more groups as appropriate and assign group names. If a component has been identified as functionally and physically common with others, it is assumed to also be operationally common and is not considered for inclusion in Step B-5.
5. Determine functionally and operationally common components. Functionally and operationally common components serve the same purpose and are manipulated in the same fashion. They have the same general types of controls, indicators, and connectors. This is done by developing matrices of controls, indicators, and parts (at the lowest level of the soldier interface) of the remaining components (after Steps B-3 and B-4) versus the components of the component functional groups. This aids the analyst of the operational commonality of the components. Judge the functional and operational commonality based on the presence or absence of sub-components. Name and list the groups of functionally and operationally common components.
6. Prepare Generalized Components List. Assemble the lists from Steps B-3, -4, and -5. The Generalized Components List is comprised of these lists and organized accordingly.
7. Objects are compared using the generalized components of the objects. To identify the

commonalities or differences in the objects, matrices of objects versus generalized components are developed. Rename objects or groups of objects based on the commonalities or differences shown in the matrices. Prepare the Generalized Objects List.

8. Determine which of the objects and components are to be trained in the resident - versus unit-only environments. Delete all objects and components that are to be unit-only trained from the Generalized Objects and Components Lists. These deleted objects and components lists can be used to determine the requirements for exportable training packages. If your requirement is to develop both resident and non-resident training, annotate the affected items as such and retain them so that you can develop the Learning Specification Worksheets (LSW) for the unit trained packages.

## PRODUCTS

- \* Generalized Components List
- \* Generalized Objects List

## PRODUCT USE IN FUTURE STEPS

The Generalized Objects List provides direct input into Step C - Describe Generic Action Statements. The Generalized Components List provides one basis for the determination of Knowledge and Skills in Step D, Describe Knowledge and Skills Groups Associated with the Generic Action Statements.

## RECOMMENDED CHANGES TO STEP B:

### 1. General.

- \* Remove all references to inputs from SAT. Very little data is available from this source.
- \* Do not provide rigid procedures for the analysis of the objects list. There are too many ways that this analysis can be successfully accomplished.

### 2. Based on this Application of HITT.

- \* Replace all references to technical manuals with "data sources." Technical manuals constricts the methodology to hard skill applications only.
- \* Remove all references to controls and indicators. These references constrain the methodology to hardware applications.

## COMMENTS:

### 1. General.

- \* None.

### 2. Based on this Application of HITT.

- \* None.

## REVISED STEP B

### DEVELOP GENERALIZED COMPONENTS AND OBJECTS LISTS

#### PURPOSE

To analyze the commonalities and differences in objects and components of objects.

#### SUMMARY OF THE STEP

Use available data sources related to the Objects in the Functional Groups from Step A to determine the Components of the Objects. The Components of Objects are constituent parts of the Objects. Compare the Objects based on the similarity or differences of their Components and combine, split, or otherwise rearrange the Objects based on this analysis. Use matrices, databases, or any other means available to conduct this analysis. Label new Objects. Likewise, merge, divide, or rearrange the Functional Groups according to differences and commonalities. Label any new Functional Groups. Summarize the Objects and Components for each Functional Group and summarize the Objects and Components for all Functional Groups.

#### INPUTS

- \* List of Objects from Step A arranged in Functional Groups
- \* Data collected during the Front End Analysis

#### PROCEDURE

1. Use available data sources related to the Objects in the Functional Groups from Step A to determine the Components of the Objects.
2. Compare the Objects based on the similarity or differences of their Components and combine, split, or otherwise rearrange the Objects based on this analysis. Label new Objects.
3. Merge, divide, or rearrange the Functional Groups according to differences and commonalities. Label any new groups.
4. Summarize the Objects and Components for each Functional Group.
5. Summarize the Objects and Components for all Functional Groups.

## PRODUCTS

- \* Lists of Components for each Object by Functional Group
- \* Lists of Components for each generalized Object in each Functional Group
- \* Lists of Components for each new generalized Object in each new Functional Group
- \* Summaries of generalized Objects and Components for each new Functional Group
- \* Summary of all generalized Objects and Components

## PRODUCT USE IN FUTURE STEPS

The Generalized Objects List provides direct input into Step C - Describe Generic Action Statements.

## APPLICATION OF HITT TO ORDNANCE ANCOC

### Procedures:

1. Used interview notes and the ANCOC Special Text to determine the Components of the Objects.
2. Compared the Objects based on the similarity or differences of their Components and combined many Objects based on similar Components. Labeled all new Objects.
3. Merged several Functional Groups according to commonalities. Labeled the new groups.
4. Summarized the Objects and Components for each Functional Group.
5. Summarized the Objects and Components for all Functional Groups.

### Products:

- \* Lists of Components for each Object by Functional Group - see Enclosure 1
- \* Lists of Components for each generalized Object in each Functional Group - see Enclosure 2
- \* Lists of Components for each new generalized Object in each new Functional Group - see Enclosure 3
- \* Summaries of generalized Objects and Components for each new Functional Group - see Enclosure 4
- \* Summary of all generalized Objects and Components - see Enclosure 5

## OBJECTS RELATED TO QUALITY CONTROL

### Calibrated instrument label

- Nomenclature block
- NSN block
- Serial number block
- Signature block
- Date block

### Quality control program

- Technical inspectors
- Informal inspections
- Formal inspections
- Initial inspections
- In-process inspections
- Final inspections
- Inspection worksheets
- In-person conversations
- Telephone conversations
- Informal correspondence
- Notes
- Memos
- Formal correspondence
- Letters
- Reports
- Electronic correspondence
- Faxes
- E-mail
- Inspection standards
- Technical manuals
- SOPs
- Calibration schedules
- Training schedules
- Production schedules
- Inspection schedules
- Customers
- Calibration program
- Calibration schedules
- Calibration labels
- Calibration technicians
- Test, measurement, and diagnostic equipment

## OBJECTS RELATED TO QUALITY CONTROL (Cont)

- Automated maintenance management forms
- Automated maintenance management reports
- Automated maintenance management schedules
- Manual maintenance management forms
- Manual maintenance management reports
- Manual maintenance management schedules

- Test, measurement and diagnostic equipment (TMDE) program
  - Calibration program
  - Calibration schedules
  - Calibration labels
  - Calibration technicians
  - Test, measurement, and diagnostic equipment

## OBJECTS RELATED TO FORMS

### Document register

- Heading
- Data sections
- Signature block

### Equipment modification record

- Heading
- Nomenclature block
- Unit identification block
- NSN block
- Serial number block
- Data section
- Signature block
- Date block

### Equipment control record

- Heading
- Data sections
- Signature block

### Equipment operator's qualification record

- Heading
- Operator's name block
- Unit block
- Date block
- Data section
- Equipment blocks
- Date blocks
- Restriction blocks
- Signature block
- Printed name block
- Rank block
- Unit block
- Date block

### Equipment inspection and maintenance worksheet

- Heading
- Nomenclature block
- Unit designation block

## OBJECTS RELATED FORMS (Cont)

- Unit identification code block
- NSN block
- Serial number block
- Type of inspection block
- Data section
- Discrepancy blocks
- Maintenance code blocks
- Equipment status blocks
- Initials blocks
- Signature section
- Signature block
- Printed name block
- Rank block
- Unit block
- Date block

### Inoperative equipment report (SAMS)

- Computer system
- Monitor on-off switch
- Monitor brightness control
- Monitor contrast control
- Computer on-off switch
- Floppy drives
- Key board
- Function keys
- Caps lock
- Number key pad
- Letters
- Space bar
- Enter key
- Print outs
- Heading
- Unit block
- Period covered block
- Data section
- Unit identification blocks
- Equipment blocks
- Nomenclature blocks
- NSN blocks

## OBJECTS RELATED TO FORMS (Cont)

- Serial number blocks
- Signature block
- Rank block
- Date block

### Maintenance reports/forms

- Automated maintenance management reports
- Automated maintenance management forms
- Automated maintenance management listings
- Manual maintenance management reports
- Manual maintenance management forms
- Manual maintenance management listings
- Automated repair parts supply reports
- Automated repair parts supply forms
- Automated repair parts supply listings
- Manual repair parts supply reports
- Manual repair parts supply forms
- Manual repair parts supply listings
- Computer systems
- Monitors
- Computers
- Keyboards
- Print outs
- Headings
- Data sections
- Signature blocks
- Date blocks

### Maintenance request register

- Heading
- Nomenclature block
- Unit identification block
- NSN block
- Serial number block
- Data section
- Equipment identification section
- Type of request section
- Condition code block
- Fault identification block

## OBJECTS RELATED TO FORMS (Cont)

Signature block

Date block

### Maintenance request (SAMS)

Computer systems

Monitors

Computers

Key boards

Print outs

Heading

Nomenclature block

Unit identification block

NSN block

Serial number block

Priority code block

Data section

Equipment identification section

Type of request section

Condition code block

Fault identification block

Disposition block

Signature section

Signature block

Date block

### Bench stock listing

Heading

Unit identification block

Unit location block

Date block

Data sections

Stock description blocks

NSN blocks

Quantity authorized block

Authorization section

Signature block

Rank block

Unit block

Date block

## OBJECTS RELATED TO FORMS (Cont)

### Open work request reconciliation listing

- Heading
- Work request number block
- Unit identification block
- Unit identification code block
- Priority code block
- Data section
- Repairs required blocks
- Repair parts required blocks
- NSN blocks
- Date ordered blocks
- Signature section
- Signature block
- Date block

### Organizational control record for equipment

- Heading
- Unit identification block
- Date block
- Equipment listing section
- Nomenclature blocks
- NSN blocks
- Quantity blocks
- Authorization section
- Signature block
- Rank block
- Date block

### Unit demands summary listing (automated)

- Computer systems
- Monitors
- Computers
- Key boards
- Print outs
- Heading
- Date block
- Unit identification block
- Data section
- Pert number blocks

## OBJECTS RELATED TO FORMS (Cont)

- NSN blocks
- Number of demands blocks
- Signature section
- Signature block
- Date block

### Shop work load summary listing

- Heading
- Unit identification block
- Unit identification code block
- Priority codes section
- Data section
- Equipment status section
- NSN blocks
- Signature section
- Signature block
- Date block

### Shop deadline and deferred workload listing

- Heading
- Unit identification block
- Unit identification code block
- Priority codes section
- Data section
- Equipment status section
- NSN blocks
- Signature section
- Signature block
- Date block

### Material condition status report

- Heading
- Unit identification block
- Unit identification code block
- Priority codes section
- Data section
- Equipment status section
- NSN blocks
- Signature section

## OBJECTS RELATED TO FORMS (Cont)

- Signature block
- Date block

### PLL change listing (automated)

- Computer systems
- Monitors
- Computers
- Key boards
- Print outs

### Prescribed load list (PLL)

- Unit block
- Unit identification code
- Parts listing section
- Quantity authorized section
- Authorization signature
- Authorization date

### Request for issue/turn-in of supplies and equipment

- Unit block
- Unit identification code
- Item description section
- NSN blocks
- Quantity section
- Priority block
- Technical manual block
- Reason for turn-in block
- Signature block
- Date block
- Approval block

### TAMMS (manual)

- Manual maintenance management reports
- Manual maintenance management forms
- Manual maintenance management listings
- Manual repair parts supply reports
- Manual repair parts supply forms
- Manual repair parts supply listings

## OBJECTS RELATED TO FORMS (Cont)

### Unit level deadlining parts report (SAMS)

- Computer systems
- Monitors
- Computers
- Key boards
- Print outs

### Unit status report (USR)

- Computer systems
- Monitors
- Computers
- Key boards
- Print outs

### Weapons data record

- Heading
- Data section
- Signature section

## OBJECTS RELATED TO PERSONNEL

### Career development

- Observations of subordinates
- Conversations with subordinates
- Correspondence with subordinates
- Formal counseling sessions
- Informal counseling sessions
- Efficiency reports
- Personnel reference materials
- Personnel records
- Training reference materials
- Training records

### Equal opportunity program

- Observations of subordinates
- Conversations with subordinates
- Correspondence with subordinates
- Formal counseling sessions
- Informal counseling sessions
- Efficiency report entries
- Program reference materials
- Program records

### Weight control program

- Observations of subordinates
- Conversations with subordinates
- Correspondence with subordinates
- Formal counseling sessions
- Informal counseling sessions
- Efficiency report entries
- Program reference materials
- Personnel records
- Medical records
- AR 600-9
- Calibrated scales
- Fat density measurement tool

### Combat stress casualties

- Observations of subordinates
- Conversations with subordinates

## OBJECTS RELATED TO PERSONNEL (Cont)

- Reference materials
- Training sessions
- Counseling sessions
- Health care providers
- Unit ministry team
- Medical records
- FM 26-2
- Community recreational professionals

### Techniques of stress management

- Reference materials
- FM 26-2
- Health care providers
- Unit ministry team
- Community recreational professionals
- Education programs
- Treatment programs
- Training programs
- Suicide prevention
- Spiritual fitness
- Hypertension identification
- Health risk appraisal
- Family fitness program
- Observation of subordinates
- Conversations with subordinates
- Counseling sessions

### Techniques for motivating soldiers

- Principles of motivation
- Maslows' hierarchy of needs theory
- Professional ethics
- Team spirit activities
- Conversations with individuals
- Conversations with groups
- Correspondence with individuals
- Correspondence with groups
- Reference materials
- FM 22-100
- FM 22-102

## OBJECTS RELATED TO PERSONNEL (Cont)

FM 22-103

### Authority of NCOs

- Army reference materials
- Sergeants Major Academy reference materials
- NCO Academy reference materials
- Unit standing operating procedures
- Conversations with superiors
- Correspondence with superiors
- Conversations with peers
- Correspondence with peers
- Conversations with subordinates
- Correspondence with subordinates
- Uniform Code of Military Justice

### Army traditions

- Army reference materials
- Sergeants Major Academy reference materials
- NCO Academy reference materials
- Conversations with superiors
- Correspondence with superiors
- Conversations with peers
- Correspondence with peers
- Historical publications

### Army customs

- Army reference materials
- Sergeants Major Academy reference materials
- NCO Academy reference materials
- Unit standing operating procedures
- Conversations with superiors
- Correspondence with superiors
- Conversations with peers
- Correspondence with peers
- Historical publications

### Army environmental program

- Army reference materials
- Sergeants Major Academy reference materials
- NCO Academy reference materials

## OBJECTS RELATED TO PERSONNEL (Cont)

- Conversations with superiors
- Correspondence with superiors
- Conversations with peers
- Correspondence with peers
- Environmental awareness
- Environmental laws
- Environmental regulations
- Environmental policies
- Environmental goals
- Maneuver damage
- Field sanitation
- Noise pollution
- Training plans
- Environmental protection
- Historic preservation
- Solid waste
- Hazardous materials

### Problems in executing supervisory actions

- Conversations with subordinates
- Correspondence with subordinates
- Observations of subordinates
- Uniform Code of Military Justice
- Motivation
- Leadership
- Technical competence
- Stress management
- Resource limitations
- Risk assessment
- Fear
- Insubordination

### Shop safety program

- Safety regulations
- Unit standing operating procedures
- Shop safety plan
- Observations of personnel
- Foreign object damage program
- Fire fighting equipment

## OBJECTS RELATED TO PERSONNEL (Cont)

- Tool control procedures
- Personal protective gear
- Warning labels
- Ventilation
- Lifting devices

- Single parent/family care plan
  - Army reference materials
  - Sergeants Major Academy reference materials
  - NCO Academy reference materials
  - Conversations with subordinates
  - Correspondence with subordinates
  - Formal counseling sessions
  - Informal counseling sessions
  - Personnel reference materials

- Unit NCO evaluation report system (NCOERS)
  - Observations of subordinates
  - Conversations with subordinates
  - Correspondence with subordinates
  - Formal counseling sessions
  - Informal counseling sessions
  - Efficiency reports
  - Personnel reference materials
  - Personnel records
  - Training reference materials
  - Training records
  - Army reference materials
  - Report forms

- Subordinates for leadership roles
  - Army reference materials
  - Sergeants Major Academy reference materials
  - NCO Academy reference materials
  - Observations of subordinates
  - Conversations with subordinates
  - Correspondence with subordinates
  - Formal counseling sessions
  - Informal counseling sessions

## OBJECTS RELATED TO PERSONNEL (Cont)

- Efficiency reports
- Personnel reference materials
- Personnel records
- Training reference materials
- Training records

### Responsibilities of NCOs

- Army reference materials
- Sergeants Major Academy reference materials
- NCO Academy reference materials
- Unit standing operating procedures
- Conversations with superiors
- Correspondence with superiors
- Conversations with peers
- Correspondence with peers
- Conversations with subordinates
- Correspondence with subordinates
- Uniform Code of Military Justice

### Unit level administrative procedures

- Army reference materials
- Sergeants Major Academy reference materials
- NCO Academy reference materials
- Unit standing operating procedures
- Office management
- Filing systems
- Office management reports

### Programs

- Army reference materials
- Sergeants Major Academy reference materials
- NCO Academy reference materials
- Unit standing operating procedures

## OBJECTS RELATED TO TACTICS

### Adjacent platoon

- Coordination
- Defense
- Offense
- Topographic maps
- Map reading
- Terrain analysis
- Mission
- Dismounted patrols
- Interlocking fires
- Indirect fire support
- Communications
- Verbal orders
- Written orders

### Battle analysis

- Military decision making
- Terrain analysis
- Coordination
- Defense
- Offense
- Topographic maps
- Map reading
- Mission
- Direct fires
- Indirect fire support
- Communications
- Verbal orders
- Written orders
- Maneuver
- Air support
- Reconnaissance
- Operational readiness
- Enemy capabilities
- Intelligence
- Supply
- Transportation
- Maintenance support
- Logistical planing

## OBJECTS RELATED TO TACTICS (Cont)

- Maneuver planning
- Fire support planning
- Command and control

- Defense of recovery teams
  - Perimeter security
  - Interlocking fires
  - Indirect fire support
  - Military decision making
  - Terrain analysis
  - Coordination
  - Topographic maps
  - Map reading
  - Communications
  - Verbal orders
  - Written orders
  - Air support
  - Enemy capabilities
  - Intelligence
  - Command and control

- Defense of maintenance platoon
  - Perimeter security
  - Interlocking fires
  - Indirect fire support
  - Military decision making
  - Terrain analysis
  - Coordination
  - Topographic maps
  - Map reading
  - Communications
  - Verbal orders
  - Written orders
  - Air support
  - Enemy capabilities
  - Intelligence
  - Command and control

## OBJECTS RELATED TO TACTICS (Cont)

### Defense of maintenance support team

- Perimeter security
- Interlocking fires
- Indirect fire support
- Military decision making
- Terrain analysis
- Coordination
- Topographic maps
- Map reading
- Communications
- Verbal orders
- Written orders
- Air support
- Enemy capabilities
- Intelligence
- Command and control

### Defense of a maintenance platoon following enemy contact

- Perimeter security
- Interlocking fires
- Indirect fire support
- Military decision making
- Terrain analysis
- Coordination
- Topographic maps
- Map reading
- Communications
- Verbal orders
- Written orders
- Air support
- Enemy capabilities
- Intelligence
- Command and control

### Defensive operations

- Perimeter security
- Interlocking fires
- Indirect fire support
- Military decision making

## OBJECTS RELATED TO TACTICS (Cont)

- Terrain analysis
- Coordination
- Topographic maps
- Map reading
- Communications
- Verbal orders
- Written orders
- Air support
- Enemy capabilities
- Intelligence
- Command and control

- Command and control
  - Written orders
  - Verbal orders in person
  - Verbal orders by radio
  - Verbal orders by telephone
- Direct fires
- Indirect fires
- Mounted maneuver
- Dismounted maneuver
- Communications devices
- Secure communications
- Hand and arm signals

- Offensive operations
  - Frontal attacks
  - Turning movements
  - Envelopments
  - Air Land Battle principles
  - Mounted maneuvers
  - Dismounted maneuvers
  - Air support
  - Command and control
  - Objectives
  - Intelligence
  - Communications
  - Avenues of approach
  - Military decision making

## OBJECTS RELATED TO TACTICS (Cont)

- Terrain analysis
- Coordination
- Topographic maps
- Map reading
- Mission
- Direct fires
- Indirect fire support
- Verbal orders
- Written orders
- Reconnaissance
- Operational readiness
- Enemy capabilities
- Supply
- Transportation
- Maintenance support
- Logistical planing
- Maneuver planning
- Fire support planning
- Command and control

- Radiation monitoring
  - Monitoring plan
  - Dosimeters
  - Radiac meters
  - Levels of radiation
  - Protective clothing
  - Terrain analysis
  - Topographic maps
  - Map reading
  - Warning devices
  - Alarms
  - Alarm signals
  - Plotting

## OBJECTS RELATED TO PROPERTY ACCOUNTABILITY

### Inventory of tools and equipment

- Tool identification
- Equipment identification
- Serial numbers
- Technical manuals
- Supply bulletins
- Technical bulletins
- Property books
- Serviceability
- Storage of equipment
- Packing
- Preservation
- Packaging
- National stock numbers

### Property accountability

- Army publications
- Local publications
- Army regulations
- Local regulations
- Inventories
- Inventory schedules
- Serial numbers
- Technical manuals
- Supply bulletins
- Technical bulletins
- Property books
- Serviceability
- Storage of equipment
- Packing
- Preservation
- Packaging
- National stock numbers

### Controlled cannibalization procedures

- Army regulations
- Local standing operating procedures
- Problems with cannibalization
- Purpose of cannibalization

## OBJECTS RELATED TO PROPERTY ACCOUNTABILITY (Cont)

- Documentation required
- Turn-in of unserviceables
- Estimated cost of damage inspections
- Actual cost of damage inspections
- Battle Damage Assessment and Repair
- Hanger queens

### Material acquisition and accounting process

- Property accountability
- Demand data
- Major items of equipment
- Depot level repairables
- Stock funding of depot level repairables
- Packing
- Preservation
- Packaging
- Inventories
- Storage
- Transportation
- Order-ship time
- Unserviceable material
- Repair parts supply
- Prescribed load list
- TUFMISS
- DS/4
- Operational readiness
- Supply forms
- Supply listings
- Supply reports

### Stock Funding of Depot Level Repairables (SFDLR)

- Army regulations
- Inventories
- Inventory schedules
- Serial numbers
- Technical manuals
- Supply bulletins
- Technical bulletins
- Property books

## OBJECTS RELATED TO PROPERTY ACCOUNTABILITY (Cont)

- Serviceability
- Estimated/actual cost of damage inspections
- Packing, preservation, and packaging
- National stock numbers
- Property accountability
- Demand data
- Major items of equipment
- Depot level repairables
- Transportation
- Order-ship time
- Unserviceable material
- Repair parts supply
- TUFMISS, DS/4
- Operational readiness
- Supply forms, listings, reports

- Tool control procedures
  - Army regulations
  - Local SOPs
  - Tool identification
  - Serial numbers
  - Technical manuals
  - Supply bulletins
  - Technical bulletins
  - Serviceability
  - Storage of equipment
  - Packing
  - Preservation
  - Packaging
  - National stock numbers
  - Documentation

- Publications library
  - Army regulations
  - Maintenance Update
  - Supply Update
  - Technical manuals
  - Supply bulletins
  - Technical bulletins

## OBJECTS RELATED TO PROPERTY ACCOUNTABILITY (Cont)

Order forms

Ordering process

Changes

Posting changes

Disposition of out-of-date publications

Micro-fich readers

Dissemination of changes

## OBJECTS RELATED TO PREVENTATIVE MAINTENANCE

### Preventative maintenance checks and services

- Army regulations
- Maintenance Update
- Scheduled services
- Motor stables
- Proper lubrication
- Fluid levels
- Army Oil Analysis Program
- DD Form 314
- DA Form 2404
- Inspection techniques
- Importance of PMCS
- Daily inspections
- Quarterly services
- Semi-annual services
- Annual services

### Prevention maintenance schedule and record

- Army regulations
- Maintenance Update
- Scheduled services
- Army Oil Analysis Program
- DD Form 314
- DA Form 2404
- Importance of PMCS
- Daily inspections
- Quarterly services
- Semi-annual services
- Annual services

### Oil analysis program

- Army regulations
- Collections
- Interpretation of results
- Importance of the program
- Program limitations

## OBJECTS RELATED TO PREVENTATIVE MAINTENANCE (Cont)

### PMCS procedures

- Army regulations
- Maintenance Update
- Scheduled services
- Motor stables
- Proper lubrication
- Fluid levels
- Army Oil Analysis Program
- DD Form 314
- DA Form 2404
- Inspection techniques
- Importance of PMCS
- Daily inspections
- Quarterly services
- Semi-annual services
- Annual services

## OBJECTS RELATED TO MOVEMENT

### Deployment of recovery teams

- Recovery requests
- Map reconnaissance
- Route reconnaissance
- Topographic maps
- Map reading
- Tools and equipment
- Communications planning
- Communications testing
- Weapons selection
- Weapons testing
- Determination of ammunition requirements
- Reference materials
- Personnel selection
- Verbal briefings
- Written directions
- Recovery vehicle selection
- Command and control

### Division and corps transportation capabilities

- Transportation assets
- Organizations
- Plans
- Standing operating procedures
- Transportation requests
- Priorities
- Organic capabilities

### Division and corps transportation organization

- Vehicles
- Personnel
- Equipment

### Loading plan for vehicle to include its trailer

- Local SOPs
- Purpose of loading plans
- Elements of a loading plan
- Vehicle on-road weight capacities
- Vehicle off-road weight capacities

## OBJECTS RELATED TO MOVEMENT (Cont)

- Vehicle cube capacities
- Spread loading

### Movement of hazardous materials

- Army regulations
- Federal regulations
- State and local regulations
- Requests
- Plans
- Approval process
- Packing and packaging
- Loading plans

### Storage of hazardous materials

- Army regulations
- Federal regulations
- State and local regulations
- Facility requirements
- Packing and packaging

### Movement of unit assets

- Army publications
- Local SOPs
- Map reconnaissance
- Route reconnaissance
- Topographic maps
- Map reading
- Communications planning
- Communications testing
- Verbal briefings
- Written directions
- Command and control
- Loading plans
- Spread loading
- Packing and packaging
- Inventories
- Convoy operations
- Hand and arm signals
- Planning

## OBJECTS RELATED TO MOVEMENT (Cont)

- Vehicle capacities
- Loading materials
- Material handling equipment
- Lifting devices

### Packaging and crating of unit supplies/equipment

- Army publications
- Local SOPs
- Packaging materials
- Packing techniques
- Property accountability

### Reconnaissance of terrain/route to recovery site

- Recovery requests
- Map reconnaissance
- Route reconnaissance
- Bridge classifications
- Slope estimation
- Topographic maps
- Map reading
- Communications planning
- Communications testing
- Weapons selection
- Weapons testing
- Determination of ammunition requirements
- Reference materials
- Personnel selection
- Verbal briefings
- Written directions
- Vehicle selection
- Command and control

## OBJECTS RELATED TO FIELD MAINTENANCE

### Battle damage assessment and repair

- Army publications
- Local SOPs
- Controlled cannibalization
- Property accountability
- BDAR techniques
- Quick fixes

- Defensive operations
- Field maintenance sites
- Documentation required

### Field services

- Army publications
- Local SOPs
- Field site selection
- Battle damage assessment and repair
- Defensive operations
- Field facilities
- Field sanitation
- Maintenance workflow
- Reconstitution points
- Recovery operations
- Retrograde of unserviceables

### Field maintenance site

- Army publications
- Local SOPs
- Site selection techniques
- Defensive operations
- Soil analysis
- Maintenance workflow
- Field sanitation
- Main supply routes
- Cover and concealment

## OBJECTS RELATED TO FIELD MAINTENANCE (Cont)

### Replacement/reconstitution point

- Army publications
- Local SOPs
- Battle damage assessment and repair
- Retrograde of unserviceables
- Main supply routes
- Property accountability
- Documentation
- Material handling equipment
- Controlled cannibalization
- Field facilities

### Unit trains area

- Army publications
- Local SOPs
- Site selection techniques
- Defensive operations
- Soil analysis
- Maintenance workflow
- Field sanitation
- Main supply routes
- Cover and concealment

### Maintenance assistance team

- Army publications
- Local publications
- Planning for special missions
- Team's personnel organization
- Tools and test equipment requirements
- Team missions
- Technical assistance requests
- Conduct of technical assistance visits
- Reporting results of visits
- Follow-up actions

## OBJECTS RELATED TO FIELD MAINTENANCE (Cont)

### Workflow

- Army publications
- Local SOPs
- Maintenance missions
- Shop layouts
- Shop operations
- Shop safety
- Initial inspections
- In-process inspections
- Final inspections

## OBJECTS RELATED TO LOGISTICS OPERATIONS

### Logistics support for maintenance operations

- Army publications
- Local SOPs
- Supply support
- Transportation support
- Financial accounting
- Repair parts supply
- Depot level repairables
- Stock funds
- Storage of supplies
- Inventories
- Computer systems
- Reports and listings
- Property accountability

### Logistics support operations (SAILS)

- Army publications
- Computer systems
- Computer programs
- Financial accounting
- Repair parts supply
- Depot level repairables
- Stock funds

### Combat service support operations

- Army publications
- Local SOPs
- Maintenance operations
- Combat vehicle maintenance
- Engineer equipment maintenance
- Communications equipment maintenance
- COMSEC maintenance
- Tactical vehicle maintenance
- Maintenance planning
- Shop operations
- Inspections
- Workflow
- Supply operations
- Repair parts supply

## OBJECTS RELATED TO LOGISTICS OPERATIONS Cont)

- Depot level repairables
- Stock funding
- Transportation operations
- Transportation requests
- Retrograde of unservicables
- Property accountability
- Computer systems
- Computer programs

### Maintenance facilities

- Army publications
- Local SOPs
- Shop operations
- Fixed facilities
- Field facilities
- Workflow
- Shop safety

## OBJECTS RELATED TO AUTOMATED SYSTEMS

### Automated logistics support systems

- Army publications
- Local SOPs
- Computer systems
- Computer programs
- Listings and reports
- Repair parts supply programs
- Stock funding of depot level repairables
- Supply requests
- Transportation requests
- Maintenance management programs
- Historical maintenance reports
- Material readiness
- Financial accounting

### DS/4

- Army publications
- Computer systems
- Computer programs
- Listings and reports
- Data entry
- Program capabilities
- Program requirements
- Interfaces
- Peripherals
- Maintenance management
- Supply management
- Financial accounting

### SAILS

- Army publications
- Computer systems
- Computer programs
- Listings and reports
- Data entry
- Program capabilities
- Program requirements
- Interfaces
- Peripherals

## OBJECTS RELATED TO AUTOMATED SYSTEMS (Cont)

- Maintenance management
- Supply management
- Financial accounting

### SAMS

- Army publications
- Computer systems
- Computer programs
- Listings and reports
- Data entry
- Program capabilities
- Program requirements
- Interfaces
- Peripherals
- Maintenance management
- Supply management
- Financial accounting

### SARSS

- Army publications
- Computer systems
- Computer programs
- Listings and reports
- Data entry
- Program capabilities
- Program requirements
- Interfaces
- Peripherals
- Maintenance management
- Supply management
- Financial accounting

### TUFMIS

- Army publications
- Computer systems
- Computer programs
- Listings and reports
- Data entry
- Program capabilities

## OBJECTS RELATED TO AUTOMATED SYSTEMS (Cont)

- Program requirements
- Interfaces
- Peripherals
- Maintenance management
- Supply management
- Financial accounting

### ULLS

- Army publications
- Computer systems
- Computer programs
- Listings and reports
- Data entry
- Program capabilities
- Program requirements
- Interfaces
- Peripherals
- Maintenance management
- Supply management
- Financial accounting

### SPBS

- Army publications
- Computer systems
- Computer programs
- Listings and reports
- Data entry
- Program capabilities
- Program requirements
- Interfaces
- Peripherals
- Maintenance management
- Supply management
- Financial accounting

## OBJECTS RELATED TO PLANNING

### Plans

- Army publications
- Local SOPs
- Types of plans
- Tactical planning
- Maintenance management plans
- Backward planning techniques
- Operations orders
- Logistics annexes
- Planning principles
- Risk assessment

### RC mobilization plan

- Army publications
- RC missions
- RC organizations
- Maintenance capabilities
- Plan elements
- Purpose of mobilization plans

### Risk assessment

- Army publications
- Levels of risk
- Circumstances
- Consequences
- Advantages

### Standing operating procedures

- Army publications
- Local SOPs
- Purpose of SOPs
- Elements of SOPs
- Maintenance management SOPs
- Review process
- Approval process

### Unit capabilities to support proposed operations

- Army publications
- Local SOPs
- Personnel

## OBJECTS RELATED TO PLANNING (Cont)

Vehicles

Tools and test equipment

Weapons and ammunition

Recovery assets

Power generation equipment

Materials handling equipment

Tactical operations plans

Maintenance management plans

## OBJECTS RELATED TO QUALITY CONTROL

### QUALITY CONTROL PROGRAM

Automated maintenance management forms  
Automated maintenance management schedules  
Automated maintenance management reports  
Calibration label nomenclature block  
Calibration label signature block  
Calibration label serial number block  
Calibration label NSN block  
Calibration schedules  
Calibration label date block  
Calibration schedules  
Calibration program  
Calibration technicians  
Customers  
E-mail  
Electronic correspondence  
Faxes  
Final inspections  
Formal inspections  
Formal correspondence  
In-person conversations  
In-process inspections  
Informal correspondence  
Informal inspections  
Initial inspections  
Inspection schedules  
Inspection standards  
Inspection worksheets  
Letters  
Manual maintenance management schedules  
Manual maintenance management reports  
Manual maintenance management forms  
Memos  
Notes  
Production schedules  
Reports  
SOPs  
Technical manuals

## OBJECTS RELATED TO QUALITY CONTROL (Cont.)

Technical inspectors

Telephone conversations

Test, measurement, and diagnostic equipment

Training schedules

## OBJECTS RELATED TO FORMS

### MANUAL MAINTENANCE MANAGEMENT REPORTS

- Authorization section
- Condition code block
- Data section
- Date ordered blocks
- Date block
- Discrepancy blocks
- Equipment listing section
- Equipment identification section
- Equipment status section
- Fault identification block
- Heading
- Initials blocks
- Maintenance code blocks
- Nomenclature block
- NSN block
- Printed name block
- Priority codes section
- Quantity blocks
- Rank block
- Repair parts required blocks
- Repairs required blocks
- Serial number block
- Signature block
- Type of inspection block
- Type of request section
- Unit block
- Unit identification code block
- Unit designation block

### EQUIPMENT OPERATOR'S QUALIFICATION RECORD

- Data section
- Date block
- Date block
- Date blocks
- Equipment blocks
- Heading

Operator's name block

Printed name block

Rank block

Restriction blocks

Signature block

Unit block

Unit block

## AUTOMATED MAINTENANCE MANAGEMENT REPORTS

- Caps lock
- Computer systems
- Computer on-off switch
- Condition code block
- Data section
- Date block
- Disposition block
- Enter key
- Equipment identification section
- Equipment blocks
- Equipment status section
- Fault identification block
- Floppy drives
- Function keys
- Heading
- Key boards
- Letters
- Monitor brightness control
- Monitor contrast control
- Monitor on-off switch
- Monitors
- Nomenclature block
- NSN blocks
- Number key pad
- Period covered block
- Print outs
- Priority codes section
- Rank block
- Serial number blocks
- Signature block
- Space bar
- Type of request section
- Unit block
- Unit identification block
- Unit identification code block

## MANUAL REPAIR PARTS LISTINGS

- Authorization section

Authorization signature  
Authorization date  
Data sections  
Date block  
Heading  
NSN blocks  
Parts listing section  
Quantity authorized blocks  
Rank block  
Signature block  
Stock description blocks  
Unit identification block  
Unit location block  
Unit block  
Unit identification code

#### AUTOMATED REPAIR PARTS LISTINGS

Computer systems  
Data section  
Date block  
Heading  
Key boards  
Monitors  
NSN blocks  
Number of demands blocks  
Part number blocks  
Print outs  
Signature block  
Unit identification block

#### MANUAL REPAIR PARTS REQUESTS

Approval block  
Date block  
Item description section  
NSN blocks  
Priority block  
Quantity section  
Reason for turn-in block  
Signature block

Technical manual block  
Unit identification code  
Unit block

## OBJECTS RELATED TO PERSONNEL

### DEVELOPMENT OF SUBORDINATES

- Army reference materials
- Conversations with subordinates
- Correspondence with subordinates
- Efficiency report entries
- Efficiency reports
- Formal counseling sessions
- Informal counseling sessions
- Medical records
- NCO Academy reference materials
- Observations of subordinates
- Personnel records
- Personnel reference materials
- Program reference materials
- Program records
- Report forms
- Sergeants Major Academy reference materials
- Training reference materials
- Training records

### STRESS MANAGEMENT

- Community recreational professionals
- Conversations with subordinates
- Counseling sessions
- Education programs
- Family fitness program
- FM 26-2
- Health risk appraisal
- Health care providers
- Hypertension identification
- Medical records
- Observations of subordinates
- Reference materials
- Spiritual fitness
- Suicide prevention
- Training sessions
- Training programs

Treatment programs  
Unit ministry team

## LEADERSHIP

Army reference materials  
Conversations with superiors  
Conversations with subordinates  
Conversations with peers  
Conversations with groups  
Conversations with individuals  
Correspondence with peers  
Correspondence with subordinates  
FM 22-100  
FM 22-103  
FM 22-102  
Formal counseling sessions  
Informal counseling sessions  
Insubordination  
Maslows' hierarchy of needs theory  
Motivation  
NCO Academy reference materials  
Observations of subordinates  
Personnel reference materials  
Principles of motivation  
Professional ethics  
Reference materials  
Resource limitations  
Risk assessment  
Sergeants Major Academy reference materials  
Stress management  
Team spirit activities  
Technical competence  
Uniform Code of Military Justice  
Unit standing operating procedures

## ARMY TRADITIONS

Army reference materials  
Conversations with peers  
Conversations with superiors

Correspondence with peers  
Correspondence with superiors  
Historical publications  
NCO Academy reference materials  
Sergeants Major Academy reference materials  
Unit standing operating procedures

#### UNIT LEVEL ADMINISTRATIVE PROCEDURES

Army reference materials  
Filing systems  
NCO Academy reference materials  
Office management  
Office management reports  
Sergeants Major Academy reference materials  
Unit standing operating procedures

## OBJECTS RELATED TO TACTICS

### DEFENSIVE OPERATIONS

- Air support
- Command and control
- Communications
- Coordination
- Dismounted patrols
- Enemy capabilities
- Indirect fire support
- Intelligence
- Interlocking fires
- Map reading
- Military decision making
- Mission
- Perimeter security
- Terrain analysis
- Topographic maps
- Verbal orders
- Written orders
- Written orders

### OFFENSIVE OPERATIONS

- Air support
- Air Land Battle principles
- Avenues of approach
- Command and control
- Communications
- Communications devices
- Coordination
- Direct fires
- Dismounted maneuver
- Enemy capabilities
- Envelopments
- Fire support planning
- Frontal attacks
- Hand and arm signals
- Indirect fire support
- Intelligence

Interlocking fires  
Logistical planing  
Maintenance support  
Maneuver planning  
Maneuver  
Map reading  
Military decision making  
Mission  
Mounted maneuvers  
Objectives  
Offense  
Operational readiness  
Perimeter security  
Reconnaissance  
Secure communications  
Supply  
Terrain analysis  
Topographic maps  
Transportation  
Turning movements  
Verbal orders  
Verbal orders by telephone  
Verbal orders by radio  
Written orders  
Written orders

## RADIATION MONITORING

Monitoring plan  
Dosimeters  
Radiac meters  
Levels of radiation  
Protective clothing  
Terrain analysis  
Topographic maps  
Map reading  
Warning devices  
Alarms  
Alarm signals  
Plotting

## OBJECTS RELATED TO PROPERTY ACCOUNTABILITY

### PROPERTY ACCOUNTABILITY

- Army regulations
- Army publications
- Documentation
- Equipment identification
- Inventories
- Inventory schedules
- Local publications
- National stock numbers
- Packaging
- Packing
- Preservation
- Property books
- Serial numbers
- Serviceability
- Storage of equipment
- Supply bulletins
- Technical bulletins
- Technical manuals
- Tool identification

### CONTROLLED CANNIBALIZATION PROCEDURES

- Actual cost of damage inspections
- Army regulations
- Battle Damage Assessment and Repair
- Documentation required
- Estimated cost of damage inspections
- Hanger queens
- Local standing operating procedures
- Problems with cannibalization
- Purpose of cannibalization
- Turn-in of unserviceables

### MATERIAL ACQUISITION AND ACCOUNTING PROCESS

Army regulations  
Demand data  
Depot level repairables  
DS/4  
Estimated/actual cost of damage inspections  
Inventories  
Inventory schedules  
Major items of equipment  
National stock numbers  
Operational readiness  
Order-ship time  
Packing, preservation, and packaging  
Prescribed load list  
Property books  
Property accountability  
Repair parts supply  
Serial numbers  
Serviceability  
Stock funding of depot level repairables  
Storage  
Supply forms, listings, reports  
Supply bulletins  
Technical bulletins  
Technical manuals  
Transportation  
TUFMISS  
Unserviceable material

## PUBLICATIONS LIBRARY

Army regulations  
Changes  
Disposition of out-of-date publications  
Dissemination of changes  
Maintenance Update  
Micro-fich readers  
Order forms  
Ordering process  
Posting changes  
Supply Update

Supply bulletins  
Technical bulletins  
Technical manuals

## OBJECTS RELATED TO PREVENTATIVE MAINTENANCE

### PREVENTATIVE MAINTENANCE CHECKS AND SERVICES

- Annual services
- Army regulations
- Army Oil Analysis Program
- DA Form 2404
- Daily inspections
- DD Form 314
- Fluid levels
- Importance of PMCS
- Inspection techniques
- Maintenance Update
- Motor stables
- Proper lubrication
- Quarterly services
- Scheduled services
- Semi-annual services

### OIL ANALYSIS PROGRAM

- Army regulations
- Collections
- Importance of the program
- Interpretation of results
- Program limitations

## OBJECTS RELATED TO MOVEMENT

### DEPLOYMENT OF UNIT ASSETS

- Army publications
- Bridge classifications
- Command and control
- Communications testing
- Communications planning
- Convoy operations
- Determination of ammunition requirements
- Hand and arm signals
- Inventories
- Lifting devices
- Loading plans
- Loading materials
- Local SOPs
- Map reading
- Map reconnaissance
- Material handling equipment
- Packing and packaging
- Personnel selection
- Planning
- Recovery vehicle selection
- Recovery requests
- Reference materials
- Route reconnaissance
- slope estimation
- Spread loading
- Tools and equipment
- Topographic maps
- Vehicle selection
- Vehicle capacities
- Verbal briefings
- Weapons selection
- Weapons testing
- Written directions

### DIVISION AND CORPS TRANSPORTATION CAPABILITIES

- Organic capabilities

Organizations

Plans

Priorities

Standing operating procedures

Transportation assets

Transportation requests

## DIVISION AND CORPS TRANSPORTATION ORGANIZATION

- Equipment
- Personnel
- Vehicles

## LOADING PLAN FOR VEHICLE TO INCLUDE ITS TRAILER

- Elements of a loading plan
- Local SOPs
- Purpose of loading plans
- Spread loading
- Vehicle on-road weight capacities
- Vehicle cube capacities
- Vehicle off-road weight capacities

## HAZARDOUS MATERIALS

- Approval process
- Army regulations
- Facility requirements
- Federal regulations
- Loading plans
- Packing and packaging
- Plans
- Requests
- State and local regulations

## PACKAGING AND CRATING OF UNIT SUPPLIES/EQUIPMENT

- Army publications
- Local SOPs
- Packaging materials
- Packing techniques
- Property accountability

## OBJECTS RELATED TO FIELD MAINTENANCE

### FIELD SERVICES

- Army publications
- Battle damage assessment and repair
- Defensive operations
- Field sanitation
- Field site selection
- Field facilities
- Final inspections
- In-process inspections
- Initial inspections
- Local SOPs
- Maintenance missions
- Maintenance workflow
- Reconstitution points
- Recovery operations
- Retrograde of unserviceables
- Shop layouts
- Shop operations
- Shop safety

### FIELD MAINTENANCE SITES

- Army publications
- Cover and concealment
- Defensive operations
- Field sanitation
- Local SOPs
- Main supply routes
- Maintenance workflow
- Site selection techniques
- Soil analysis

### REPLACEMENT/RECONSTITUTION POINT

- Army publications

- Battle damage assessment and repair
- BDAR techniques
- Controlled cannibalization
- Defensive operations
- Documentation required
- Field maintenance sites
- Field facilities
- Local SOPs
- Main supply routes
- Material handling equipment
- Property accountability
- Quick fixes
- Retrograde of unserviceables

#### MAINTENANCE ASSISTANCE TEAM

- Army publications
- Conduct of technical assistance visits
- Follow-up actions
- Local publications
- Planning for special missions
- Reporting results of visits
- Team missions
- Team's personnel organization
- Technical assistance requests
- Tools and test equipment requirements

## OBJECTS RELATED TO LOGISTICS OPERATIONS

### COMBAT SERVICE SUPPORT OPERATIONS

- Army publications
- Combat vehicle maintenance
- Communications equipment maintenance
- Computer systems
- COMSEC maintenance
- Depot level repairables
- Engineer equipment maintenance
- Financial accounting
- Inspections
- Inventories
- Local SOPs
- Maintenance planning
- Maintenance operations
- Property accountability
- Repair parts supply
- Reports and listings
- Retrograde of unservicables
- Shop operations
- Stock funds
- Storage of supplies
- Supply operations
- Tactical vehicle maintenance
- Transportation operations
- Workflow

### MAINTENANCE FACILITIES

- Army publications
- Local SOPs
- Shop operations
- Fixed facilities
- Field facilities
- Workflow
- Shop safety

## OBJECTS RELATED TO AUTOMATED SYSTEMS

### AUTOMATED LOGISTICS SUPPORT SYSTEMS

- Army publications
- Computer systems
- Computer programs
- Data entry
- Financial accounting
- Historical maintenance reports
- Interfaces
- Listings and reports
- Local SOPs
- Maintenance management
- Maintenance management programs
- Material readiness
- Peripherals
- Program requirements
- Program capabilities
- Repair parts supply programs
- Stock funding of depot level repairables
- Supply management
- Supply requests
- Transportation requests

## OBJECTS RELATED TO PLANNING

### PLANS

- Army publications
- Backward planning techniques
- Local SOPs
- Logistics annexes
- Maintenance management plans
- Operations orders
- Planning principles
- Risk assessment
- Tactical planning
- Types of plans

### RC MOBILIZATION PLAN

- Army publications
- Maintenance capabilities
- Plan elements
- Purpose of mobilization plans
- RC missions
- RC organizations

### RISK ASSESSMENT

- Advantages
- Army publications
- Circumstances
- Consequences
- Levels of risk

### STANDING OPERATING PROCEDURES

- Approval process
- Army publications
- Elements of SOPs
- Local SOPs
- Maintenance management SOPs
- Purpose of SOPs
- Review process

## UNIT CAPABILITIES TO SUPPORT PROPOSED OPERATIONS

Army publications  
Local SOPs  
Maintenance management plans  
Materials handling equipment  
Personnel  
Power generation equipment  
Recovery assets  
Tactical operations plans  
Tools and test equipment  
Vehicles  
Weapons and ammunition

## OBJECTS RELATED TO PERSONNEL

### DEVELOPMENT OF SUBORDINATES

- Army reference materials
- Conversations with subordinates
- Correspondence with subordinates
- Efficiency report entries
- Efficiency reports
- Formal counseling sessions
- Informal counseling sessions
- Medical records
- NCO Academy reference materials
- Observations of subordinates
- Personnel records
- Personnel reference materials
- Program reference materials
- Program records
- Report forms
- Sergeants Major Academy reference materials
- Training reference materials
- Training records

### STRESS MANAGEMENT

- Community recreational professionals
- Conversations with subordinates
- Counseling sessions
- Education programs
- Family fitness program
- FM 26-2
- Health risk appraisal
- Health care providers
- Hypertension identification
- Medical records
- Observations of subordinates
- Reference materials
- Spiritual fitness
- Suicide prevention
- Training sessions
- Training programs

Treatment programs  
Unit ministry team

## LEADERSHIP

Army reference materials  
Conversations with superiors  
Conversations with subordinates  
Conversations with peers  
Conversations with groups  
Conversations with individuals  
Correspondence with peers  
Correspondence with subordinates  
FM 22-100  
FM 22-103  
FM 22-102  
Formal counseling sessions  
Informal counseling sessions  
Insubordination  
Maslows' hierarchy of needs theory  
Motivation  
NCO Academy reference materials  
Observations of subordinates  
Personnel reference materials  
Principles of motivation  
Professional ethics  
Reference materials  
Resource limitations  
Risk assessment  
Sergeants Major Academy reference materials  
Stress management  
Team spirit activities  
Technical competence  
Uniform Code of Military Justice  
Unit standing operating procedures

## ARMY TRADITIONS

Army reference materials  
Conversations with peers  
Conversations with superiors

Correspondence with peers  
Correspondence with superiors  
Historical publications  
NCO Academy reference materials  
Sergeants Major Academy reference materials  
Unit standing operating procedures

#### UNIT LEVEL ADMINISTRATIVE PROCEDURES

Army reference materials  
Filing systems  
NCO Academy reference materials  
Office management  
Office management reports  
Sergeants Major Academy reference materials  
Unit standing operating procedures

## OBJECTS RELATED TO PLANNING

### PLANS

- Army publications
- Backward planning techniques
- Local SOPs
- Logistics annexes
- Maintenance management plans
- Operations orders
- Planning principles
- Risk assessment
- Tactical planning
- Types of plans

### RC MOBILIZATION PLAN

- Army publications
- Maintenance capabilities
- Plan elements
- Purpose of mobilization plans
- RC missions
- RC organizations

### RISK ASSESSMENT

- Advantages
- Army publications
- Circumstances
- Consequences
- Levels of risk

### STANDING OPERATING PROCEDURES

- Approval process
- Army publications
- Elements of SOPs
- Local SOPs
- Maintenance management SOPs
- Purpose of SOPs
- Review process

## UNIT CAPABILITIES TO SUPPORT PROPOSED OPERATIONS

Army publications  
Local SOPs  
Maintenance management plans  
Materials handling equipment  
Personnel  
Power generation equipment  
Recovery assets  
Tactical operations plans  
Tools and test equipment  
Vehicles  
Weapons and ammunition

## OBJECTS RELATED TO MAINTENANCE OPERATIONS

### QUALITY CONTROL PROGRAM

Automated maintenance management forms  
Automated maintenance management schedules  
Automated maintenance management reports  
Calibration label nomenclature block  
Calibration label signature block  
Calibration label serial number block  
Calibration label NSN block  
Calibration schedules  
Calibration label date block  
Calibration schedules  
Calibration program  
Calibration technicians  
Customers  
E-mail  
Electronic correspondence  
Faxes  
Final inspections  
Formal inspections  
Formal correspondence  
In-person conversations  
In-process inspections  
Informal correspondence  
Informal inspections  
Initial inspections  
Inspection schedules  
Inspection standards  
Inspection worksheets  
Letters  
Manual maintenance management schedules  
Manual maintenance management reports  
Manual maintenance management forms  
Memos  
Notes  
Production schedules  
Reports  
SOPs

- Technical manuals
- Technical inspectors
- Telephone conversations
- Test, measurement, and diagnostic equipment
- Training schedules

## PREVENTATIVE MAINTENANCE CHECKS AND SERVICES

- Annual services
- Army regulations
- Army Oil Analysis Program
- DA Form 2404
- Daily inspections
- DD Form 314
- Fluid levels
- Importance of PMCS
- Inspection techniques
- Maintenance Update
- Motor stables
- Proper lubrication
- Quarterly services
- Scheduled services
- Semi-annual services

## OIL ANALYSIS PROGRAM

- Army regulations
- Collections
- Importance of the program
- Interpretation of results
- Program limitations

## FIELD SERVICES

- Army publications
- Battle damage assessment and repair
- Defensive operations

- Field sanitation
- Field site selection
- Field facilities
- Final inspections
- In-process inspections
- Initial inspections
- Local SOPs
- Maintenance missions
- Maintenance workflow
- Reconstitution points
- Recovery operations
- Retrograde of unserviceables
- Shop layouts
- Shop operations
- Shop safety

#### FIELD MAINTENANCE SITES

- Army publications
- Cover and concealment
- Defensive operations
- Field sanitation
- Local SOPs
- Main supply routes
- Maintenance workflow
- Site selection techniques
- Soil analysis

#### REPLACEMENT/RECONSTITUTION POINT

- Army publications
- Battle damage assessment and repair
- BDAR techniques
- Controlled cannibalization
- Defensive operations
- Documentation required
- Field maintenance sites
- Field facilities
- Local SOPs
- Main supply routes
- Material handling equipment

- Property accountability
- Quick fixes
- Retrograde of unserviceables

## MAINTENANCE ASSISTANCE TEAM

- Army publications
- Conduct of technical assistance visits
- Follow-up actions
- Local publications
- Planning for special missions
- Reporting results of visits
- Team missions
- Team's personnel organization
- Technical assistance requests
- Tools and test equipment requirements

## CONTROLLED CANNIBALIZATION PROCEDURES

- Actual cost of damage inspections
- Army regulations
- Battle Damage Assessment and Repair
- Documentation required
- Estimated cost of damage inspections
- Hanger queens
- Local standing operating procedures
- Problems with cannibalization
- Purpose of cannibalization
- Turn-in of unserviceables

## PUBLICATIONS LIBRARY

- Army regulations
- Changes
- Disposition of out-of-date publications
- Dissemination of changes
- Maintenance Update
- Micro-fich readers
- Order forms

- Ordering process
- Posting changes
- Supply Update
- Supply bulletins
- Technical bulletins
- Technical manuals

## ARMY ENVIRONMENTAL PROGRAM

- Army reference materials
- Sergeants Major Academy reference materials
- NCO Academy reference materials
- Conversations with superiors
- Correspondence with superiors
- Conversations with peers
- Correspondence with peers
- Environmental awareness
- Environmental laws
- Environmental regulations
- Environmental policies
- Environmental goals
- Maneuver damage
- Field sanitation
- Noise pollution
- Environmental protection
- Historic preservation
- Solid waste
- Hazardous materials

## SHOP SAFETY PROGRAM

- Safety regulations
- Unit SOPs
- Shop safety plan
- Observations of personnel
- Foreign object damage program
- Fire fighting equipment
- Tool control procedures

Personal protective gear  
Warning labels  
Ventilation  
Lifting devices

## OBJECTS RELATED TO TACTICAL OPERATIONS

### DEFENSIVE OPERATIONS

- Air support
- Command and control
- Communications
- Coordination
- Dismounted patrols
- Enemy capabilities
- Indirect fire support
- Intelligence
- Interlocking fires
- Map reading
- Military decision making
- Mission
- Perimeter security
- Terrain analysis
- Topographic maps
- Verbal orders
- Written orders
- Written orders

### OFFENSIVE OPERATIONS

- Air support
- Air Land Battle principles
- Avenues of approach
- Command and control
- Communications
- Communications devices
- Coordination
- Direct fires
- Dismounted maneuver
- Enemy capabilities
- Envelopments
- Fire support planning
- Frontal attacks
- Hand and arm signals
- Indirect fire support
- Intelligence

Interlocking fires  
Logistical planing  
Maintenance support  
Maneuver planning  
Maneuver  
Map reading  
Military decision making  
Mission  
Mounted maneuvers  
Objectives  
Offense  
Operational readiness  
Perimeter security  
Reconnaissance  
Secure communications  
Supply  
Terrain analysis  
Topographic maps  
Transportation  
Turning movements  
Verbal orders  
Verbal orders by telephone  
Verbal orders by radio  
Written orders  
Written orders

## RADIATION MONITORING

Monitoring plan  
Dosimeters  
Radiac meters  
Levels of radiation  
Protective clothing  
Terrain analysis  
Topographic maps  
Map reading  
Warning devices  
Alarms  
Alarm signals  
Plotting

## DEPLOYMENT OF UNIT ASSETS

- Army publications
- Bridge classifications
- Command and control
- Communications testing
- Communications planning
- Convoy operations
- Determination of ammunition requirements
- Hand and arm signals
- Inventories
- Lifting devices
- Loading plans
- Loading materials
- Local SOPs
- Map reading
- Map reconnaissance
- Material handling equipment
- Packing and packaging
- Personnel selection
- Planning
- Recovery vehicle selection
- Recovery requests
- Reference materials
- Route reconnaissance
- slope estimation
- Spread loading
- Tools and equipment
- Topographic maps
- Vehicle selection
- Vehicle capacities
- Verbal briefings
- Weapons selection
- Weapons testing
- Written directions

## LOADING PLAN FOR VEHICLE TO INCLUDE ITS TRAILER

- Elements of a loading plan
- Local SOPs

Purpose of loading plans  
Spread loading  
Vehicle on-road weight capacities  
Vehicle cube capacities  
Vehicle off-road weight capacities

## OBJECTS RELATED TO LOGISTICS MANAGEMENT

### COMBAT SERVICE SUPPORT OPERATIONS

- Army publications
- Combat vehicle maintenance
- Communications equipment maintenance
- Computer systems
- COMSEC maintenance
- Depot level repairables
- Engineer equipment maintenance
- Financial accounting
- Inspections
- Inventories
- Local SOPs
- Maintenance planning
- Maintenance operations
- Property accountability
- Repair parts supply
- Reports and listings
- Retrograde of unservicables
- Shop operations
- Stock funds
- Storage of supplies
- Supply operations
- Tactical vehicle maintenance
- Transportation operations
- Workflow

### MAINTENANCE FACILITIES

- Army publications
- Local SOPs
- Shop operations
- Fixed facilities
- Field facilities
- Workflow
- Shop safety

## AUTOMATED LOGISTICS SUPPORT SYSTEMS

- Army publications
- Computer systems
- Computer programs
- Data entry
- Financial accounting
- Historical maintenance reports
- Interfaces
- Listings and reports
- Local SOPs
- Maintenance management
- Maintenance management programs
- Material readiness
- Peripherals
- Program requirements
- Program capabilities
- Repair parts supply programs
- Stock funding of depot level repairables
- Supply management
- Supply requests
- Transportation requests

## MANUAL MAINTENANCE MANAGEMENT REPORTS

- Authorization section
- Condition code block
- Data section
- Date ordered blocks
- Date block
- Discrepancy blocks
- Equipment listing section
- Equipment identification section
- Equipment status section
- Fault identification block
- Heading
- Initials blocks
- Maintenance code blocks
- Nomenclature block
- NSN block
- Printed name block

Priority codes section  
Quantity blocks  
Rank block  
Repair parts required blocks  
Repairs required blocks  
Serial number block  
Signature block  
Type of inspection block  
Type of request section  
Unit block  
Unit identification code block  
Unit designation block

#### EQUIPMENT OPERATOR'S QUALIFICATION RECORD

Data section  
Date block  
Date block  
Date blocks  
Equipment blocks  
Heading  
Operator's name block  
Printed name block  
Rank block  
Restriction blocks  
Signature block  
Unit block  
Unit block

#### AUTOMATED MAINTENANCE MANAGEMENT REPORTS

Caps lock  
Computer systems  
Computer on-off switch  
Condition code block  
Data section  
Date block  
Disposition block

Enter key  
Equipment identification section  
Equipment blocks  
Equipment status section  
Fault identification block  
Floppy drives  
Function keys  
Heading  
Key boards  
Letters  
Monitor brightness control  
Monitor contrast control  
Monitor on-off switch  
Monitors  
Nomenclature block  
NSN blocks  
Number key pad  
Period covered block  
Print outs  
Priority codes section  
Rank block  
Serial number blocks  
Signature block  
Space bar  
Type of request section  
Unit block  
Unit identification block  
Unit identification code block

## MANUAL REPAIR PARTS LISTINGS

Authorization section  
Authorization signature  
Authorization date  
Data sections  
Date block  
Heading  
NSN blocks  
Parts listing section  
Quantity authorized blocks  
Rank block

Signature block  
Stock description blocks  
Unit identification block  
Unit location block  
Unit block  
Unit identification code

#### AUTOMATED REPAIR PARTS LISTINGS

Computer systems  
Data section  
Date block  
Heading  
Key boards  
Monitors  
NSN blocks  
Number of demands blocks  
Part number blocks  
Print outs  
Signature block  
Unit identification block

#### MANUAL REPAIR PARTS REQUESTS

Approval block  
Date block  
Item description section  
NSN blocks  
Priority block  
Quantity section  
Reason for turn-in block  
Signature block  
Technical manual block  
Unit identification code  
Unit block

#### DIVISION AND CORPS TRANSPORTATION CAPABILITIES

Organic capabilities  
Organizations

- Plans
- Priorities
- Standing operating procedures
- Transportation assets
- Transportation requests

## DIVISION AND CORPS TRANSPORTATION ORGANIZATION

- Equipment
- Personnel
- Vehicles

## HAZARDOUS MATERIALS

- Approval process
- Army regulations
- Facility requirements
- Federal regulations
- Loading plans
- Packing and packaging
- Plans
- Requests
- State and local regulations

## PACKAGING AND CRATING OF UNIT SUPPLIES/EQUIPMENT

- Army publications
- Local SOPs
- Packaging materials
- Packing techniques
- Property accountability

## PROPERTY ACCOUNTABILITY

- Army regulations
- Army publications
- Documentation

Equipment identification  
Inventories  
Inventory schedules  
Local publications  
National stock numbers  
Packaging  
Packing  
Preservation  
Property books  
Serial numbers  
Serviceability  
Storage of equipment  
Supply bulletins  
Technical bulletins  
Technical manuals  
Tool identification

#### MATERIAL ACQUISITION AND ACCOUNTING PROCESS

Army regulations  
Demand data  
Depot level repairables  
DS/4  
Estimated/actual cost of damage inspections  
Inventories  
Inventory schedules  
Major items of equipment  
National stock numbers  
Operational readiness  
Order-ship time  
Packing, preservation, and packaging  
Prescribed load list  
Property books  
Property accountability  
Repair parts supply  
Serial numbers  
Serviceability  
Stock funding of depot level repairables  
Storage  
Supply forms, listings, reports  
Supply bulletins

Technical bulletins  
Technical manuals  
Transportation  
TUFMISS  
Unserviceable material

## OBJECTS & COMPONENTS - PERSONNEL

### OBJECTS:

- Development of subordinates
- Stress management
- Leadership
- Army traditions
- Unit level administrative procedures

### COMPONENTS:

- Army reference materials
- Community recreational professionals
- Conversations with subordinates
- Conversations with superiors
- Conversations with groups
- Conversations with peers
- Conversations with individuals
- Correspondence with subordinates
- Correspondence with peers
- Correspondence with superiors
- Counseling sessions
- Education programs
- Efficiency report entries
- Efficiency reports
- Family fitness program
- Fear
- Filing systems
- FM 22-103
- FM 22-100
- FM 22-102
- FM 26-2
- Formal counseling sessions
- Health risk appraisal
- Health care providers
- Historical publications
- Hypertension identification
- Informal counseling sessions
- Insubordination

Maslows' hierarchy of needs theory  
Medical records  
Motivation  
NCO Academy reference materials  
Observations of subordinates  
Office management reports  
Office management  
Personnel records  
Personnel reference materials  
Principles of motivation  
Professional ethics  
Program records  
Program reference materials  
Reference materials  
Report forms  
Resource limitations  
Risk assessment  
Sergeants Major Academy reference materials  
Spiritual fitness  
Stress management  
Suicide prevention  
Team spirit activities  
Technical competence  
Training programs  
Training reference materials  
Training sessions  
Training records  
Treatment programs  
Uniform Code of Military Justice  
Unit standing operating procedures  
Unit ministry team

## OBJECTS & COMPONENTS - PLANNING

### OBJECTS:

- Plans
- RC mobilization plan
- Risk assessment
- Standing operating procedures
- Unit capabilities to support proposed operations

### COMPONENTS:

- Advantages
- Approval process
- Army publications
- Backward planning techniques
- Circumstances
- Consequences
- Elements of SOPs
- Levels of risk
- Local SOPs
- Logistics annexes
- Maintenance management SOPs
- Maintenance capabilities
- Maintenance management plans
- Materials handling equipment
- Operations orders
- Personnel
- Plan elements
- Planning principles
- Power generation equipment
- Purpose of mobilization plans
- Purpose of SOPs
- RC missions
- RC organizations
- Recovery assets
- Review process
- Risk assessment
- Tactical operations plans
- Tactical planning

Tools and test equipment  
Types of plans  
Vehicles  
Weapons and ammunition

Conduct of technical assistance visits  
Controlled cannibalization  
Conversations with superiors  
Conversations with peers  
Correspondence with peers  
Correspondence with superiors  
Cover and concealment  
Customers  
DA Form 2404  
Daily inspections  
DD Form 314  
Defensive operations  
Disposition of out-of-date publications  
Dissemination of changes  
Documentation required  
E-mail  
Electronic correspondence  
Environmental laws  
Environmental regulations  
Environmental awareness  
Environmental protection  
Environmental goals  
Environmental policies  
Estimated cost of damage inspections  
Faxes  
Field sanitation  
Field maintenance sites  
Field facilities  
Field site selection  
Final inspections  
Fire fighting equipment  
Fluid levels  
Follow-up actions  
Foreign object damage program  
Formal inspections  
Formal correspondence  
Hanger queens  
Hazardous materials  
Historic preservation  
Importance of the program  
Importance of PMCS

In-person conversations  
In-process inspections  
Informal correspondence  
Informal inspections  
Initial inspections  
Inspection worksheets  
Inspection standards  
Inspection schedules  
Inspection techniques  
Interpretation of results  
Letters  
Lifting devices  
Local standing operating procedures  
Local publications  
Main supply routes  
Maintenance Update  
Maintenance workflow  
Maintenance missions  
Maneuver damage  
Manual maintenance management reports  
Manual maintenance management schedules  
Manual maintenance management forms  
Material handling equipment  
Memos  
Micro-fich readers  
Motor stables  
NCO Academy reference materials  
Noise pollution  
Notes  
Observations of personnel  
Order forms  
Ordering process  
Personal protective gear  
Planning for special missions  
Posting changes  
Problems with cannibalization  
Production schedules  
Program limitations  
Proper lubrication  
Property accountability  
Purpose of cannibalization

Quarterly services  
Quick fixes  
Reconstitution points  
Recovery operations  
Reporting results of visits  
Reports  
Retrograde of unserviceables  
Safety regulations  
Scheduled services  
Semi-annual services  
Sergeants Major Academy reference materials  
Shop layouts  
Shop safety plan  
Shop safety  
Shop operations  
Site selection techniques  
Soil analysis  
Solid waste  
Supply bulletins  
Supply Update  
Team missions  
Team's personnel organization  
Technical manuals  
Technical inspectors  
Technical assistance requests  
Technical bulletins  
Telephone conversations  
Test, measurement, and diagnostic equipment  
Tool control procedures  
Tools and test equipment requirements  
Training schedules  
Turn-in of unserviceables  
Ventilation  
Warning labels

## OBJECTS & COMPONENTS - TACTICAL OPERATIONS

### OBJECTS:

- Defensive operations
- Offensive operations
- Radiation monitoring
- Deployment of unit assets
- Loading plan for vehicle to include its trailer

### COMPONENTS:

- Air Land Battle principles
- Air support
- Alarm signals
- Alarms
- Army publications
- Avenues of approach
- Bridge classifications
- Command and control
- Communications
- Communications devices
- Communications planning
- Communications testing
- Convoy operations
- Coordination
- Determination of ammunition requirements
- Direct fires
- Dismounted maneuver
- Dismounted patrols
- Dosimeters
- Elements of a loading plan
- Enemy capabilities
- Envelopments
- Fire support planning
- Frontal attacks
- Hand and arm signals
- Indirect fire support
- Intelligence
- Interlocking fires

Inventories  
Levels of radiation  
Lifting devices  
Loading materials  
Loading plans  
Local SOPs  
Logistical planning  
Maintenance support  
Maneuver  
Maneuver planning  
Map reading  
Map reconnaissance  
Material handling equipment  
Military decision making  
Mission  
Monitoring plan  
Mounted maneuvers  
Objectives  
Offense  
Operational readiness  
Packing and packaging  
Perimeter security  
Personnel selection  
Planning  
Plotting  
Protective clothing  
Purpose of loading plans  
Radiac meters  
Reconnaissance  
Recovery vehicle selection  
Recovery requests  
Reference materials  
Route reconnaissance  
Secure communications  
Slope estimation  
Spread loading  
Supply  
Terrain analysis  
Tools and equipment  
Topographic maps  
Transportation

Turning movements  
Vehicle capacities  
Vehicle on-road weight capacities  
Vehicle selection  
Vehicle off-road weight capacities  
Vehicle cube capacities  
Verbal orders  
Verbal briefings  
Verbal orders by radio  
Verbal orders by telephone  
Warning devices  
Weapons selection  
Weapons testing  
Written orders

## OBJECTS & COMPONENTS - LOGISTICS MANAGEMENT

### OBJECTS:

- Combat service support operations
- Maintenance facilities
- Automated logistics support systems
- Manual maintenance management reports
- Equipment operator's qualification record
- Automated maintenance management reports
- Manual repair parts listings
- Automated repair parts listings
- Manual repair parts requests
- Division and corps transportation capabilities
- Division and corps transportation organization
- Hazardous materials
- Packaging and crating of unit supplies/equipment
- Property accountability
- Material acquisition and accounting process

### COMPONENTS:

- Approval block
- Approval process
- Army publications
- Army regulations
- Authorization section
- Authorization date
- Authorization signature
- Caps lock
- Combat vehicle maintenance
- Communications equipment maintenance
- Computer programs
- Computer systems
- Computer on-off switch
- COMSEC maintenance
- Condition code block
- Data section
- Data entry
- Date ordered blocks

Date block  
Demand data  
Depot level repairables  
Discrepancy blocks  
Disposition block  
Documentation  
DS/4  
Engineer equipment maintenance  
Enter key  
Equipment identification section  
Equipment blocks  
Equipment status section  
Equipment listing section  
Equipment  
Estimated/actual cost of damage inspections  
Facility requirements  
Fault identification block  
Federal regulations  
Field facilities  
Financial accounting  
Fixed facilities  
Floppy drives  
Function keys  
Heading  
Historical maintenance reports  
Initials blocks  
Inspections  
Interfaces  
Inventories  
Inventory schedules  
Item description section  
Key boards  
Letters  
Listings and reports  
Loading plans  
Local SOPs  
Local publications  
Maintenance code blocks  
Maintenance management  
Maintenance management programs  
Maintenance planning

Maintenance operations  
Major items of equipment  
Material readiness  
Monitor on-off switch  
Monitor brightness control  
Monitor contrast control  
Monitors  
National stock numbers  
Nomenclature block  
NSN blocks  
Number of demands blocks  
Number key pad  
Operational readiness  
Operator's name block  
Order-ship time  
Organic capabilities  
Organizations  
Packaging materials  
Packing, preservation, and packaging  
Packing techniques  
Part number blocks  
Parts listing section  
Period covered block  
Peripherals  
Personnel  
Plans  
Prescribed load list  
Print outs  
Printed name block  
Priorities  
Priority codes section  
Priority block  
Priority codes section  
Program capabilities  
Program requirements  
Property books  
Property accountability  
Quantity section  
Quantity blocks  
Quantity authorized blocks  
Rank block

Reason for turn-in block  
Repair parts supply  
Repair parts supply programs  
Repair parts required blocks  
Repairs required blocks  
Reports and listings  
Requests  
Restriction blocks  
Retrograde of unservicables  
Serial numbers  
Serial number block  
Serviceability  
Shop safety  
Shop operations  
Signature block  
Space bar  
Standing operating procedures  
State and local regulations  
Stock description blocks  
Stock funding of depot level repairables  
Stock funds  
Storage of equipment  
Storage of supplies  
Storage  
Supply bulletins  
Supply forms, listings, reports  
Supply operations  
Supply requests  
Supply management  
Tactical vehicle maintenance  
Technical manuals  
Technical bulletins  
Technical manual block  
Tool identification  
Transportation  
Transportation operations  
Transportation requests  
Transportation assets  
TUFMISS  
Type of request section  
Type of inspection block

Unit location block  
Unit identification code  
Unit block  
Unit identification code block  
Unit designation block  
Unserviceable material  
Vehicles  
Workflow

## OBJECTS & COMPONENTS - ALL

### OBJECTS:

Development of subordinates  
Stress management  
Leadership  
Army traditions  
Unit level administrative procedures  
Plans  
RC mobilization plan  
Risk assessment  
Standing operating procedures  
Unit capabilities to support proposed operations  
Quality control program  
Preventative maintenance checks and services  
Oil analysis program  
Field services  
Field maintenance sites  
Replacement/reconstitution point  
Maintenance assistance team  
Controlled cannibalization procedures  
Publications library  
Army environmental program  
Shop safety program  
Defensive operations  
Offensive operations  
Radiation monitoring  
Deployment of unit assets  
Loading plan for vehicle to include its trailer  
Combat service support operations  
Maintenance facilities  
Automated logistics support systems  
Manual maintenance management reports  
Equipment operator's qualification record  
Automated maintenance management reports  
Manual repair parts listings  
Automated repair parts listings  
Manual repair parts requests  
Division and corps transportation capabilities  
Division and corps transportation organization

Hazardous materials  
Packaging and crating of unit supplies/equipment  
Property accountability  
Material acquisition and accounting process

## COMPONENTS:

- Advantages
- Air Land Battle principles
- Air support
- Alarm signals
- Alarms
- Annual services
- Approval block
- Approval process
- Army regulations
- Army publications
- Army Oil Analysis Program
- Authorization signature
- Authorization section
- Authorization date
- Automated maintenance management reports
- Automated maintenance management schedules
- Automated maintenance management forms
- Avenues of approach
- Backward planning techniques
- Battle damage assessment and repair
- BDAR techniques
- Bridge classifications
- Calibration label NSN block
- Calibration label serial number block
- Calibration label nomenclature block
- Calibration technicians
- Calibration label date block
- Calibration program
- Calibration schedules
- Calibration label signature block
- Caps lock
- Changes
- Circumstances
- Collections
- Combat vehicle maintenance
- Command and control
- Communications devices
- Communications testing
- Communications equipment maintenance

Communications planning  
Communications  
Community recreational professionals  
Computer systems  
Computer on-off switch  
COMSEC maintenance  
Condition code block  
Conduct of technical assistance visits  
Consequences  
Controlled cannibalization  
Conversations with superiors  
Conversations with peers  
Conversations with individuals  
Conversations with groups  
Conversations with subordinates  
Convoy operations  
Coordination  
Correspondence with subordinates  
Correspondence with superiors  
Correspondence with peers  
Counseling sessions  
Cover and concealment  
Customers  
DA Form 2404  
Daily inspections  
Data section  
Data entry  
Date block  
Date ordered blocks  
DD Form 314  
Defensive operations  
Demand data  
Depot level repairables  
Determination of ammunition requirements  
Direct fires  
Discrepancy blocks  
Dismounted patrols  
Dismounted maneuver  
Disposition block  
Disposition of out-of-date publications  
Dissemination of changes

Documentation  
Documentation required  
Dosimeters  
DS/4  
E-mail  
Education programs  
Efficiency reports  
Efficiency report entries  
Electronic correspondence  
Elements of SOPs  
Elements of a loading plan  
Enemy capabilities  
Engineer equipment maintenance  
Enter key  
Envelopments  
Environmental laws  
Environmental regulations  
Environmental goals  
Environmental policies  
Environmental protection  
Environmental awareness  
Equipment status section  
Equipment blocks  
Equipment listing section  
Equipment  
Equipment identification section  
Estimated/actual cost of damage inspections  
Facility requirements  
Family fitness program  
Fault identification block  
Faxes  
Fear  
Federal regulations  
Field facilities  
Field sanitation  
Field maintenance sites  
Field site selection  
Filing systems  
Final inspections  
Financial accounting  
Fire support planning

Fire fighting equipment  
Fixed facilities  
Floppy drives  
Fluid levels  
FM 22-100  
FM 26-2  
FM 22-102  
FM 22-103  
Follow-up actions  
Foreign object damage program  
Formal counseling sessions  
Formal correspondence  
Formal inspections  
Frontal attacks  
Function keys  
Hand and arm signals  
Hanger queens  
Hazardous materials  
Heading  
Health care providers  
Health risk appraisal  
Historic preservation  
Historical maintenance reports  
Historical publications  
Hypertension identification  
Importance of the program  
Importance of PMCS  
In-person conversations  
In-process inspections  
Indirect fire support  
Informal inspections  
Informal correspondence  
Informal counseling sessions  
Initial inspections  
Initials blocks  
Inspection schedules  
Inspection worksheets  
Inspection techniques  
Inspection standards  
Inspections  
Insubordination

Intelligence  
Interfaces  
Interlocking fires  
Interpretation of results  
Inventories  
Inventory schedules  
Item description section  
Key boards  
Letters  
Levels of radiation  
Levels of risk  
Lifting devices  
Listings and reports  
Loading materials  
Loading plans  
Local SOPs  
Local publications  
Logistical planing  
Logistics annexes  
Main supply routes  
Maintenance capabilities  
Maintenance management plans  
Maintenance management SOPs  
Maintenance support  
Maintenance Update  
Maintenance workflow  
Maintenance missions  
Maintenance code blocks  
Maintenance operations  
Maintenance management  
Maintenance management programs  
Maintenance planning  
Major items of equipment  
Maneuver damage  
Maneuver planning  
Maneuver  
Manual maintenance management schedules  
Manual maintenance management forms  
Manual maintenance management reports  
Map reconnaissance  
Map reading

Maslows' hierarchy of needs theory  
Material readiness  
Material handling equipment  
Medical records  
Memos  
Micro-fich readers  
Military decision making  
Mission  
Monitor on-off switch  
Monitor brightness control  
Monitor contrast control  
Monitoring plan  
Monitors  
Motivation  
Motor stables  
Mounted maneuvers  
National stock numbers  
NCO Academy reference materials  
Noise pollution  
Nomenclature block  
Notes  
NSN blocks  
Number of demands blocks  
Number key pad  
Objectives  
Observations of subordinates  
Observations of personnel  
Offense  
Office management reports  
Office management  
Operational readiness  
Operations orders  
Operator's name block  
Order forms  
Order-ship time  
Ordering process  
Organic capabilities  
Organizations  
Packaging materials  
Packing, preservation, and packaging  
Packing techniques

Part number blocks  
Parts listing section  
Perimeter security  
Period covered block  
Peripherals  
Personal protective gear  
Personnel  
Personnel records  
Personnel reference materials  
Personnel selection  
Plan elements  
Planning for special missions  
Planning  
Planning principles  
Plans  
Plotting  
Posting changes  
Power generation equipment  
Prescribed load list  
Principles of motivation  
Print outs  
Printed name block  
Priorities  
Priority block  
Priority codes section  
Problems with cannibalization  
Production schedules  
Professional ethics  
Program limitations  
Program requirements  
Program capabilities  
Program reference materials  
Program records  
Proper lubrication  
Property accountability  
Property books  
Protective clothing  
Purpose of mobilization plans  
Purpose of cannibalization  
Purpose of loading plans  
Purpose of SOPs

Quantity blocks  
Quantity section  
Quantity authorized blocks  
Quarterly services  
Quick fixes  
Radiac meters  
Rank block  
RC missions  
RC organizations  
Reason for turn-in block  
Reconnaissance  
Reconstitution points  
Recovery requests  
Recovery assets  
Recovery operations  
Recovery vehicle selection  
Reference materials  
Repair parts required blocks  
Repair parts supply programs  
Repair parts supply  
Repairs required blocks  
Report forms  
Reporting results of visits  
Reports and listings  
Requests  
Resource limitations  
Restriction blocks  
Retrograde of unserviceables  
Review process  
Risk assessment  
Route reconnaissance  
Safety regulations  
Scheduled services  
Secure communications  
Semi-annual services  
Sergeants Major Academy reference materials  
Serial number block  
Serial numbers  
Serviceability  
Shop safety  
Shop operations

Shop safety plan  
Shop layouts  
Shop operations  
Signature block  
Site selection techniques  
Slope estimation  
Soil analysis  
Solid waste  
Space bar  
Spiritual fitness  
Spread loading  
State and local regulations  
Stock description blocks  
Stock funding of depot level repairables  
Stock funds  
Storage of supplies  
Storage of equipment  
Stress management  
Suicide prevention  
Supply bulletins  
Supply forms, listings, reports  
Supply Update  
Supply requests  
Supply bulletins  
Supply operations  
Supply  
Supply management  
Tactical operations plans  
Tactical vehicle maintenance  
Tactical planning  
Team missions  
Team spirit activities  
Team's personnel organization  
Technical manuals  
Technical assistance requests  
Technical bulletins  
Technical inspectors  
Technical manuals  
Technical competence  
Technical bulletins  
Technical manual block

Telephone conversations  
Terrain analysis  
Test, measurement, and diagnostic equipment  
Tool control procedures  
Tool identification  
Tools and test equipment  
Tools and test equipment requirements  
Topographic maps  
Training programs  
Training schedules  
Training sessions  
Training records  
Training reference materials  
Transportation  
Transportation requests  
Transportation assets  
Transportation operations  
Transportation  
Treatment programs  
TUFMISS  
Turn-in of unserviceables  
Turning movements  
Type of inspection block  
Type of request section  
Types of plans  
Uniform Code of Military Justice  
Unit block  
Unit location block  
Unit identification code block  
Unit designation block  
Unit ministry team  
Unserviceable material  
Vehicle off-road weight capacities  
Vehicle selection  
Vehicle cube capacities  
Vehicle capacities  
Vehicle on-road weight capacities  
Vehicles  
Ventilation  
Verbal orders  
Verbal orders by telephone

Verbal briefings  
Verbal orders by radio  
Warning labels  
Warning devices  
Weapons and ammunition  
Weapons testing  
Weapons selection  
Workflow  
Written orders

An Application of the High Transfer Training (HITT)  
Methodology with Soft Skills Tasks

Step D

## CURRENT STEP D

### DESCRIBE KNOWLEDGE/SKILL/ATTITUDES (KS) GROUPS ASSOCIATED WITH THE GENERIC ACTION STATEMENTS

#### PURPOSE

To determine the KS Groups related to each GAS and N-GAS. Create RTAs with associated KS Groups.

#### SUMMARY OF THE STEP

Develop a list of KS Groups for the MOS by determining the KS Groups associated with the Generalized Objects, and by extracting KS Groups from the Task Analysis Worksheets, LAWs, Forms 550 or MDLs, and TMs for the MOS. Code the KS Groups. For each SAS, locate and record all associated KS Group codes. If there are three or fewer SASs for a GAS, they translate directly into RTAs. If there are more than three SASs for a GAS, the create a matrix to determine which three SASs will become the RTAs. Make a list of RTAs with associated KS Groups organized by GASs, where appropriate. Conduct a review. Produce a final approved list of RTAs.

#### INPUTS

- \* SAS List from Step C
- \* Generalized Objects from Step B
- \* Generalized Components List from Step B
- \* GAS List and Process Outlines from Step C
- \* Task Analysis Worksheets and TRADOC Form 550's or MDLs from SAT
- \* Learning Analysis Worksheets (LAW I/II) from SAT
- \* Technical Manuals

#### PROCEDURE

1. Compile KS Group list.

a. Extract KS Groups from the inputs listed above. KS Groups are anything contained in the above inputs with which a required set of knowledge and skills would be associated (e.g., things like analog assemblages or analog patch cables, resources like TMs, procedures like install or operate). The specific KSs (e.g., identify analog assemblages, know how to use analog patch cables, know the function of TMs, operate heaters and blowers) of a KS Group will be specified in Step F - Develop Learning Specifications.

b. Code the KS Groups with short identifiers to facilitate subsequent analyses. Any coding scheme felt to be useful is appropriate. Examples include A, AA, AB3, 243, etc.

2. Associate the KS Groups, as appropriate, with each SAS. A KS Group is associated with a SAS if the KS Group is related to a step or substep of the SAS or if the KS Group is related to the object or action of the SAS. List the applicable KS codes under each SAS.

3. If there are three or fewer SASs for a GAS, the SASs and their KS groups translate directly into RTAs. If, however, there are more than three SASs for a GAS, prepare a matrix for each such GAS with each SAS along one axis and a list of variables on the other axis. The variables include: number of associated KS groups, equipment availability for training, how often the task is performed on the job, percent of the MOS performing the task, learning difficulty of the task, consequences of inadequate performance, relative time spent performing the task on the job, equipment density in the field, and relative adequacy of reference materials. Rate each variable using the scales presented in Appendix A. Total the variable values per SAS and pick the three with the highest scores. They will become the RTAs. If the SASs are part of a larger task (i.e., system), then choose the three SASs with the highest scores that can be trained within the context of the larger task.

4. Produce a RTAs List and conduct a review with the proper authority.

5. Cluster approved RTAs and their associated KS groups by GASs. If GASs were combined then the combined GASs will become the GAS.

## PRODUCT

\* A list of approved RTAs with associated KS Groups organized by GASs.

## PRODUCT USE IN FUTURE STEPS

The KSs of the GAS KS Groups will be specified in Step F -Develop Learning Specifications. The GAS KS groups and KSs will be used in Step H - Develop Lesson Materials - and will be the basis for all conference classes. The GAS RTA List is the basis for the GTLOs to be developed in Step E - Develop and Sequence Generic Terminal Learning Objectives.

#### RECOMMENDED CHANGES TO STEP D:

1. General.
  - \* Completely rewrite the step to make the step compatible with the objectives of the HITT methodology.
2. Based on this Application of HITT.
  - \* Totally revise Step D because the current Step D is only applicable to a hardware applications at the Signal School.

#### COMMENTS:

1. General.
  - \* Step 3 of the current methodology is essentially a critical task selection process which at this point in the analysis is totally inconsistent with the basic objects of the HITT analysis process.
  - \* The references to SASs and LAWs also make this step a Signal School only step.
2. Based on this Application of HITT.
  - \* In order that the HITT methodology be usable in all training developments environments, the methodology must not include steps in analysis that are aimed to solve local resource constraint problems. Any steps that deal with training resources should be reserved for the design process.
  - \* The HITT analysis process should deal with what should be and not what can be.

## REVISED STEP D

### DETERMINE RESIDENT TRAINING ACTIONS

#### PURPOSE

To determine the Resident Training Actions based on commonality and differences in the skills and knowledge among Generic Action Statements.

#### SUMMARY OF THE STEP

Develop a lists of knowledge and skills associated with each Generic Action Statement. Compare the commonalities and differences among the knowledge and skills associated with each Generic Action Statement and combine, rearrange, or split Generic Action Statements based on common or different skills and knowledge. Label all new Generic Action Statements. The newly labeled Generic Action Statements become the Resident Training Actions. If required, obtain approval of the Resident Training Actions List.

#### INPUTS

- \* List of Generic Action Statements with associated components from Enclosure 4 of Step C.
- \* Initial listing of skills and knowledge from the Front End Analysis

#### PROCEDURE

1. Develop lists of knowledge and skills associated with each Generic Action Statement. Analyze each component listed under each Generic Action Statement and determine all skills and knowledge associated with that component. Replace the components with the skills and knowledge associated with that component. Add any knowledge and skills from the FEA as appropriate.
2. Compare the commonalities and differences among the knowledge and skills associated with each Generic Action Statement and combine, rearrange, or split Generic Action Statements based on common or different skills and knowledge.
3. Label all new Generic Action Statements. The newly labeled Generic Action Statements become the Resident Training Actions.

4. If required, obtain approval of the Resident Training Actions List.

## PRODUCT

- \* A list of approved Resident Training Actions.

## PRODUCT USE IN FUTURE STEPS

Each Resident Training Action will be directly translated, on a one-to-one basis into a Terminal Learning Objective in Step E - Develop and Sequence Generic Terminal Learning Objectives. The lists of knowledge and skills associated with each Resident Training Action will provide input to Step H - Develop Lesson Materials.

## APPLICATION OF HITT TO ORDNANCE ANCOC

### Procedures:

1. Developed lists of knowledge and skills associated with each Generic Action Statement. Analyzed each component listed under each Generic Action Statement and determined all skills and knowledge associated with that component. Replace the components with the skills and knowledge associated with that component. Integrated knowledge and skills identified during the Front End Analysis when and where appropriate. See Enclosure 1.
2. Compared the commonalities and differences among the knowledge and skills associated with each Generic Action Statement and combined and split Generic Action Statements based on common or different skills and knowledge. Combined "Develop Plans" and "Develop Standing Operating Procedures", "Supervise Field Maintenance Sites" and "Supervise Replacement/ Reconstitution Points", "Deploy Maintenance Assistance Teams" and "Supervise Deployment of Unit Assets", and "Manage Repair Parts Listing" and "Manage Manual Repair Parts Requests" based on common skills and knowledge. Split "Conduct Tactical Operations" into "Conduct Offensive Operations" and "Conduct Defensive Operations" because of differences in skills and knowledge.
3. Labeled all new Generic Action Statements. The newly labeled Generic Action Statements are the Resident Training Actions shown at Enclosure 2.

### Product:

- \* A list of approved Resident Training Actions - see Enclosure 2.

## KNOWLEDGE & SKILLS RELATED TO GASs - PERSONNEL

### DEVELOP SUBORDINATES

Adhere to the principles of equal opportunity  
Administer the weight control program  
Analyze trends using reports  
Complete an Enlisted Efficiency Report  
Counsel subordinates on career development  
Counsel subordinates on job performance  
Counsel subordinates with personal problems  
Develop leadership in subordinates  
Evaluate a subordinate's performance  
Evaluate a single parent plan  
Hold meaningful conversations with subordinates  
Identify the characteristics of proficient technical performance  
Identify leadership potential  
Identify reports  
Identify subordinates with potential personal problems  
Interpret subordinates' meanings  
Interpret gestures and body language  
Know how to fill out reports  
Know how to obtain blank report forms  
Know how to motivate subordinates  
Know the objectives of the equal opportunity program  
Know how to review program records  
Know how to review personnel records  
Know the objectives of a single parent plan  
Know the purpose of reports  
Know the consequences of being overweight  
Know how to review medical records  
Know the purpose of the weight control program  
Know how to file reports  
Know how to control your temper  
Know when to be stern and when to be sympathetic  
Know the importance of direct eye contact  
Know the concept of empathy  
Know how to appreciate others' points of view  
Know the purpose of reference materials  
Know how to listen carefully  
Know the indicators of personal problems

Know how to write memorandums  
Know when what awards are appropriate  
Know the consequences of an efficiency rating  
Know how to write letters of appreciation  
Know how to write an award  
Know the purpose of awards  
Know how to write disciplinary letters  
Know how to write letters of commendation  
Locate information in reference materials  
Motivate subordinates  
Use reference materials

## PREVENT STRESS

Administer the family fitness program  
Analyze trends using records  
Counsel subordinates with personal problems  
Fill out records  
Hold meaningful conversations with subordinates  
Identify health care providers  
Identify hypertension in individuals  
Identify records  
Identify subordinates with potential personal problems  
Interpret gestures and body language  
Interpret subordinates' meanings  
Know how to access records  
Know how to store records  
Know the purpose of reference materials  
Know the purpose of records  
Know the importance of spiritual fitness  
Know what treatment programs related to stress are available  
Know how to locate the unit ministry team  
Know the purpose of the unit ministry team  
Know what training related to stress is available  
Know the suicide prevention hot line telephone number  
Know how to obtain spiritual guidance  
Know the signs of depression  
Know what to do if you suspect an individual might attempt suicide  
Know how to obtain the services of health care providers  
Know what services are provided by the unit ministry team

Know the indicators of personal problems  
Know what educational programs are available related to stress  
Know how to locate health care providers  
Know the importance of direct eye contact  
Know when to be stern and when to be sympathetic  
Know how to appreciate others' points of view  
Know the concept of empathy  
Know how to control your temper  
Know how to request assistance from recreation professionals  
Know what functions community recreations professionals perform  
Know when to perform a health risk appraisal  
Know the functions health care providers can provide  
Know the elements of a health risk appraisal  
Know the objectives of the family fitness program  
Know the signs of a drug or alcohol problem  
Know how to obtain treatment for drug or alcohol problems  
Know how to listen carefully  
Locate community recreational professionals  
Locate information in reference materials  
Observe subordinates' behavior  
Perform a health risk appraisal  
Use reference materials

#### APPLY LEADERSHIP

Act professionally  
Apply the principles of motivation  
Apply Maslows' principles  
Conduct team spirit activities  
Conduct informal counseling sessions  
Conduct a risk assessment  
Conduct formal counseling sessions  
Evaluate subordinates state of motivation  
Evaluate others suggestions  
Follow unit standing operating procedures  
Hold meaningful conversations with subordinates  
Identify the characteristics of professionalism  
Identify insubordination  
Identify resource shortfalls  
Interpret unit standing operating procedures

Interpret gestures and body language  
Interpret subordinates' meanings  
Judge technical competence  
Know the principles of stress management  
Know what team spirit activities are  
Know how to discipline subordinates  
Know the impact of resource limitations  
Know how to control your emotions  
Know how to be fair  
Know how to minimize the impact of resource shortfalls  
Know your role in the military justice system  
Know the responsibilities of NCOs  
Know how to write unit standing operating procedures  
Know how to listen to subordinates  
Know the limits of authority of NCOs  
Know the characteristics of military bearing  
Know the elements of unit standing operating procedures  
Know your role in administering the Uniform Code of Military Justice  
Know the standards of dress  
Know the purpose of unit standing operating procedures  
Know how to define technical competence  
Know how to describe professional ethics  
Know the purpose of awards  
Know how to write letters of commendation  
Know how to write an award  
Know when what awards are appropriate  
Know the objectives of formal counseling sessions  
Know how to write disciplinary letters  
Know how to write letters of appreciation  
Know the concept of empathy  
Know when to be stern and when to be sympathetic  
Know the importance of direct eye contact  
Know how to write memorandums  
Know the principles of counseling  
Know the objectives of informal counseling sessions  
Know how to listen carefully  
Know the importance of motivation  
Know the purpose of reference materials  
Know the principles of motivation  
Know how to control your temper  
Know how Maslows' is related to your job

Know how to appreciate others' points of view  
Know how to handle insubordination  
Know the principles of counseling  
Know Maslows' hierarchy of needs theory  
Lead groups in physical training  
Lead groups during drill and ceremonies  
Locate information in reference materials  
Make on-the-spot corrections  
Manage stressful situations  
Motivate peers  
Motivate subordinates  
Motivate superiors  
Organize subordinates for the conduct of tactical operations  
Organize subordinates for the conduct of technical operations  
Organize team spirit activities  
Plan technical operations  
Plan tactical operations  
Supervise technical operations  
Supervise tactical operations  
Use reference materials

#### ADHERE TO ARMY TRADITIONS

Be able to describe Army customs  
Be able to describe Army traditions  
Follow unit standing operating procedures  
Hold meaningful conversations with subordinates  
Interpret gestures and body language  
Interpret subordinates' meanings  
Interpret unit standing operating procedures  
Know when what awards are appropriate  
Know the purpose of unit standing operating procedures  
Know the elements of unit standing operating procedures  
Know how to write unit standing operating procedures  
Know how to write an award  
Know the importance of Army customs  
Know the importance of Army traditions  
Know the role of Army customs  
Know the role of Army traditions  
Know how to write disciplinary letters

Know the concept of empathy  
Know how to control your temper  
Know how to appreciate others' points of view  
Know how to listen carefully  
Know the purpose of reference materials  
Know the purpose of awards  
Know when to be stern and when to be sympathetic  
Know how to write letters of commendation  
Know the importance of direct eye contact  
Know how to write letters of appreciation  
Know how to write memorandums  
Locate information in reference materials  
Use reference materials

#### SUPERVISE UNIT LEVEL ADMINISTRATIVE PROCEDURES

Analyze trends using reports  
Follow unit standing operating procedures  
Identify reports  
Interpret unit standing operating procedures  
Know the purpose of reference materials  
Know the elements of unit standing operating procedures  
Know how to write unit standing operating procedures  
Know how to file reports  
Know how to obtain blank report forms  
Know the purpose of reports  
Know your responsibilities in unit administration  
Know the purpose of unit standing operating procedures  
Know how to fill out reports  
Know how to obtain blank report forms  
Know how to set up a filing system  
Know office management duties  
Know how to file documents  
Know the purpose of reports  
Know the purpose of filing systems  
Know how to file reports  
Know the importance of proper filing  
Know how to fill out reports  
Know the principles of office management  
Locate information in reference materials

Review unit administration reports  
Use reference materials

## KNOWLEDGE & SKILLS RELATED TO GASs - PLANNING

### DEVELOP PLANS

Develop a maintenance management plan  
Develop an operations order  
Evaluate maintenance capabilities  
Follow unit standing operating procedures  
Interpret unit standing operating procedures  
Know the purpose of an operations order  
Know the elements of an operations order  
Know the importance of maintenance management planning  
Know the elements of a maintenance management plan  
Know the importance of operations orders  
Know the purpose of mobilization plans  
Know the purpose of tactical planning  
Know the importance of tactical planning  
Know the types of tactical plans  
Know how to conduct risk assessment  
Know RC organizations  
Know the importance of mobilization plans  
Know how to review mobilization plans  
Know RC missions  
Know the purpose of a maintenance management plan  
Know the advantages of good planning  
Know the different kinds of plans  
Know the circumstances when plans are required  
Know the principles of backward planning  
Know how to apply backward planning techniques  
Know the consequences of inadequate planning  
Know the levels of risk  
Know how to write unit standing operating procedures  
Know the purpose of individual Army publications  
Know the elements of unit standing operating procedures  
Know the purpose of unit standing operating procedures  
Locate information in Army publications  
Perform the backward planning process  
Plan for maintenance operations with reduced capabilities  
Use Army publications  
Write a Logistics Annex to an Operations Order

## DEVELOP STANDING OPERATING PROCEDURES

- Conduct a risk assessment
- Develop a standing operating procedure
- Evaluate plans
- Follow unit standing operating procedures
- Identify when a standing operating procedure is required
- Interpret unit standing operating procedures
- Know the purpose of standing operating procedures
- Know the SOP review process
- Know the principles of backward planning
- Know the purpose of unit standing operating procedures
- Know how to write unit standing operating procedures
- Know the purpose of individual Army publications
- Know the SOP approval process
- Know the elements of unit standing operating procedures
- Locate information in Army publications
- Use Army publications

## ASSESS UNIT CAPABILITIES TO SUPPORT PROPOSED OPERATIONS

- Analyze materials handling equipment requirements
- Analyze tools and test equipment requirements
- Analyze vehicle requirements
- Analyze power generation equipment requirements
- Analyze personnel requirements
- Analyze weapons and ammunition requirements
- Analyze recovery assets
- Determine requirements
- Develop a maintenance management plan
- Evaluate vehicle capabilities
- Evaluate weapons and ammunition capabilities
- Evaluate tools and test equipment capabilities
- Evaluate power generation equipment capabilities
- Evaluate recovery capabilities
- Evaluate personnel capabilities
- Evaluate materials handling equipment capabilities
- Follow unit standing operating procedures

Interpret unit standing operating procedures  
Know the elements of unit standing operating procedures  
Know how to write unit standing operating procedures  
Know the purpose of individual Army publications  
Know the importance of maintenance management planning  
Know the elements of a maintenance management plan  
Know the purpose of a maintenance management plan  
Know the purpose of unit standing operating procedures  
Locate information in Army publications  
Review tactical operations plans  
Use Army publications

## KNOWLEDGE & SKILLS RELATED TO GASs - MAINTENANCE OPERATIONS

### SUPERVISE QUALITY CONTROL PROGRAM

Access automated maintenance management schedules  
Access automated maintenance management forms  
Adhere to training schedules  
Administer the calibration program  
Analyze automated maintenance management schedules  
Analyze trends using reports  
Analyze automated maintenance management forms  
Analyze trends using reports  
Analyze trends using reports  
Complete automated maintenance management schedules  
Complete automated maintenance management forms  
Complete inspection worksheets  
Conduct telephone conversations  
Develop training schedules  
Develop inspection schedules  
Fill in the calibration label NSN block  
Fill in the calibration label serial number block  
Fill in the calibration label signature block  
Fill in the calibration label nomenclature block  
Fill in the calibration label date block  
Follow unit standing operating procedures  
Hold meaningful conversations with subordinates  
Identify reports  
Identify automated maintenance management schedules  
Identify automated maintenance management forms  
Identify inspection worksheets  
Identify reports  
Identify inspection worksheets  
Identify reports  
Interpret gestures and body language  
Interpret unit standing operating procedures  
Interpret subordinates' meanings  
Know the concept of acceptance  
Know how to document initial inspections  
Know how to conduct initial inspections  
Know the importance of initial inspections

Know the concept of rejection  
Know the consequences of rejection  
Know the purpose of calibration label signature block  
Know the meaning of your signature  
Know inspection standards  
Know the purpose of initial inspections  
Know when informal inspections are appropriate  
Know how to write letters of appreciation  
Know how to write memorandums  
Know the concept of rejection  
Know the concept of acceptance  
Know how to determine the NSN of TMDE  
Know how to write letters of commendation  
Know when what awards are appropriate  
Know how to write an award  
Know the purpose of awards  
Know how to fill out reports  
Know the purpose of reports  
Know the role of technical inspectors  
Know how to fill out reports  
Know the purpose of reports  
Know how to write unit standing operating procedures  
Know the duties of technical inspectors  
Know the importance of automated maintenance management schedules  
Know the importance of automated maintenance management forms  
Know the purpose of automated maintenance management schedules  
Know the importance of TMDE  
Know the elements of unit standing operating procedures  
Know the purpose of unit standing operating procedures  
Know how to fill out reports  
Know how to file reports  
Know how to obtain blank report forms  
Know the purpose of calibration label nomenclature block  
Know the purpose of reports  
Know how to file reports  
Know how to obtain blank report forms  
Know the consequences of rejection  
Know how to write disciplinary letters  
Know the importance of final inspections  
Know the purpose of final inspections  
Know how to send faxes

Know how to access E-mail  
Know how to conduct final inspections  
Know how to document in-process inspections  
Know the consequences of rejection  
Know the concept of rejection  
Know the concept of acceptance  
Know the responsibilities of customers in the QC program  
Know the role of customers in the quality control program  
Know the purpose of the calibration label NSN block  
Know the purpose of the calibration label date block  
Know calibration standards  
Know the purpose of periodic calibration  
Know the importance of the calibration label date block  
Know the objectives of the calibration program  
Know how to contact calibration technicians  
Know the role of calibration technicians  
Know the importance of the calibration program  
Know how to write memorandums  
Know how to document final inspections  
Know how to appreciate others' points of view  
Know the purpose of calibration label serial number block  
Know the purpose of automated maintenance management forms  
Know how to write letters of appreciation  
Know when what awards are appropriate  
Know the concept of empathy  
Know how to control your temper  
Know the importance of in-process inspections  
Know how to conduct in-process inspections  
Know the purpose of in-process inspections  
Know the importance of direct eye contact  
Know when to be stern and when to be sympathetic  
Know how to write an award  
Know how to listen carefully  
Know how to write disciplinary letters  
Know the purpose of awards  
Know how to write letters of commendation  
Locate the calibration label nomenclature block  
Locate the calibration label signature block  
Locate the calibration label serial number block  
Locate the calibration label date block  
Locate the calibration label NSN block

Locate serial numbers on items of TMDE  
Manual maintenance management forms  
Respect the problems of technical inspectors  
Review training schedules  
Review inspection worksheets  
Review calibration schedules  
Review inspection schedules  
Review technical manuals  
Review production schedules  
Revise production schedules  
Write memos

## SUPERVISE PREVENTATIVE MAINTENANCE CHECKS AND SERVICES

Administer the PMCS program  
Conduct motor stables  
Interpret the results of inspections  
Interpret Army regulations  
Know inspection techniques  
Know how to document PMCS  
Know the objectives of PMCS  
Know the limitations of the PMCS program  
Know the purpose of quarterly services  
Know the importance of semi-annual services  
Know how to conduct semi-annual services  
Know the purpose of semi-annual services  
Know how to conduct quarterly services  
Know the importance of quarterly services  
Know the importance of proper lubrication  
Know the importance of PMCS  
Know the importance of the Army Oil Analysis Program  
Know how to interpret the results of the Oil Analysis Program  
Know how to administer the Army Oil Analysis Program  
Know the purpose of Army regulations  
Know the importance of annual services  
Know how to conduct annual services  
Know how to collect oil samples  
Know what to do with oil samples  
Know the importance of maintaining vehicle fluid levels  
Know how to check vehicle fluid levels

- Know how to conduct daily inspections
- Know the importance of daily inspections
- Know the purpose of annual services
- Know the purpose of daily inspections
- Locate Army regulations
- Use the Maintenance Update

## SUPERVISE FIELD SERVICES

- Analyze maintenance missions
- Analyze terrain
- Complete the documentation for retrograde unserviceables
- Compute mechanical advantages
- Conduct recovery operations
- Conduct defensive operations
- Conduct a soil analysis
- Control work flow at a field maintenance site
- Coordinate logistical operations in a trains area
- Deploy recovery teams
- Determine main supply routes
- Direct recovery operations
- Direct groups using communications devices
- Direct individuals using communications devices
- Employ site selection techniques
- Employ BDAR techniques
- Ensure shop safety practices
- Establish reconstitution points
- Establish shop safety programs
- Evaluate shop layouts
- Follow unit standing operating procedures
- Inspect field sanitation facilities
- Interpret unit standing operating procedures
- Know the purpose of unit standing operating procedures
- Know how to document initial inspections
- Know the concept of rejection
- Know how to document in-process inspections
- Know the concept of rejection
- Know the purpose of in-process inspections
- Know the concept of acceptance
- Know how to conduct in-process inspections

Know the importance of in-process inspections  
Know the concept of acceptance  
Know how to conduct initial inspections  
Know how to control reconstitution points  
Know how to retrograde unserviceables  
Know the principles of shop safety  
Know the qualities of a good field maintenance site  
Know the purpose of reconstitution points  
Know the principles of maintenance workflow  
Know how to write unit standing operating procedures  
Know the importance of main supply routes  
Know the purpose of main supply routes  
Know the elements of unit standing operating procedures  
Know the concept of acceptance  
Know how to identify comsec devices  
Know the importance of communications security  
Know proper radio/telephone procedures  
Know the importance of initial inspections  
Know how to compute mechanical advantage  
Know the objectives of Battle Damage and Repair  
Know the purpose of Battle Damage and Repair  
Know how to coordinate logistics operations  
Know the purpose of a reconstitution point  
Know the activities that take place in a reconstitution point  
Know the principles of Battle Damage and Repair  
Know the purpose of individual Army publications  
Know how to organize a recovery team  
Know how to document final inspections  
Know how to conduct final inspections  
Know the importance of final inspections  
Know how to implement field sanitation  
Know the characteristics of a good field maintenance site  
Know how to select cover and concealment  
Know the purpose of initial inspections  
Know the concept of rejection  
Know the purpose of final inspections  
Know the objectives of Battle damage assessment and repair  
Locate information in Army publications  
Organize for maintenance missions  
Plan for workflow at a field site  
Plan for maintenance workflow

- Plan a Battle Damage and Repair operation
- Plan a field maintenance site
- Plan for recovery operations
- Revise shop operations
- Select a field maintenance site
- Select field sites
- Supervise a Battle Damage and Repair operation
- Supervise the erection of field facilities
- Supervise a reconstitution point
- Supervise shop operations
- Use authentication documents
- Use Army publications

## SUPERVISE REPLACEMENT/RECONSTITUTION POINT

- Approve actual/estimated cost of damage inspections
- Complete the documentation for retrograde unserviceables
- Conduct defensive operations
- Control cannibalization operations
- Determine main supply routes
- Document BDAR actions
- Employ BDAR techniques
- Erect field facilities
- Establish field maintenance sites
- Establish reconstitution points
- Follow unit standing operating procedures
- Inspect field facilities
- Interpret Army regulations
- Interpret unit standing operating procedures
- Know the documentation required by property accountability
- Know the advantages of cannibalization
- Know the objectives of property accountability
- Know the problems with controlled cannibalization
- Know the purpose of unit standing operating procedures
- Know material handling equipment assets
- Know how to write unit standing operating procedures
- Know the importance of main supply routes
- Know the purpose of main supply routes
- Know the concept of hanger queens
- Know the elements of unit standing operating procedures

- Know the procedures required by property accountability
- Know how to control reconstitution points
- Know the purpose of reconstitution points
- Know the purpose of individual Army publications
- Know the problems with controlled cannibalization
- Know how to retrograde unserviceables
- Know when to retrograde unserviceables
- Know the advantages of cannibalization
- Know when quick fixes are appropriate
- Know the objectives of battle damage assessment and repair
- Locate information in Army publications
- Maintain field facilities
- Obtain Army regulations
- Perform actual/estimated cost of damage inspections
- Plan for defensive operations
- Review actual cost of damage inspections
- Review actual/estimated cost of damage inspections
- Select field maintenance sites
- Use Army publications

## DEPLOY MAINTENANCE ASSISTANCE TEAMS

- Analyze team missions
- Analyze technical assistance requests
- Analyze local publications
- Brief team personnel
- Conduct technical assistance visits
- Estimate tools and test equipment requirements
- Follow local publications
- Know the purpose of individual Army publications
- Locate information in Army publications
- Organize team personnel
- Perform follow-up actions
- Plan for technical assistance visits
- Plan for special missions
- Receive technical assistance requests
- Report results of visits
- Use Army publications

## SUPERVISE PUBLICATIONS LIBRARIES

- Complete publications order forms
- Determine changes in the Supply Update
- Determine changes in the Maintenance Update
- Dispose of out-of-date publications
- Disseminate changes to publications
- Interpret Army regulations
- Know the purpose of individual Army publications
- Know the publications ordering process
- Locate information in Army publications
- Obtain Army regulations
- Operate micro-fich readers
- Post changes to publications
- Post changes to publications
- Update technical bulletins
- Update technical manuals
- Update supply bulletins
- Use Army publications

## IMPLEMENT ARMY ENVIRONMENTAL PROGRAM

- Estimate maneuver damage
- Estimate the extent of maneuver damage
- Have environmental awareness
- Hold meaningful conversations with subordinates
- Interpret subordinates' meanings
- Interpret gestures and body language
- Know how to maintain field sanitation
- Know how to handle hazardous waste materials
- Know how to store hazardous waste materials
- Know how to transport hazardous waste materials
- Know how to establish field sanitation facilities
- Know how to minimize noise pollution
- Know environmental goals
- Know historic preservation policies
- Know environmental protection policies
- Know how to properly dispose of solid waste
- Know environmental laws
- Know the concept of empathy

Know how to appreciate others' points of view  
Know how to listen carefully  
Know the purpose of Army reference materials  
Know how to control your temper  
Know when to be stern and when to be sympathetic  
Know environmental regulations  
Know environmental policies  
Know how to write memorandums  
Know the importance of direct eye contact  
Locate information in Army reference materials  
Use Army reference materials

#### SUPERVISE SHOP SAFETY PROGRAM

Develop a shop safety plan  
Enforce a shop safety plan  
Enforce safety regulations  
Enforce tool control procedures  
Enforce the foreign object damage program  
Ensure personal protective gear is worn  
Ensure shop safety practices  
Establish shop safety programs  
Follow unit standing operating procedures  
Identify personal protective gear  
Interpret safety regulations  
Inspect fire fighting equipment  
Inspect warning labels  
Inspect for proper ventilation  
Inspect lifting devices  
Interpret unit standing operating procedures  
Know the consequences of improper ventilation  
Know the importance of warning labels  
Know the purpose of warning labels  
Know the dangers associated with lifting devices  
Know the importance of proper ventilation  
Know the principles of shop safety  
Know how to write unit standing operating procedures  
Know the elements of unit standing operating procedures  
Know the importance of personal protective gear  
Know the objective of the foreign object damage program

Know the purpose of personal protective gear  
Know the purpose of unit standing operating procedures  
Observe personnel safe practices  
Supervise the use of lifting devices

## KNOWLEDGE & SKILLS RELATED TO GASs - TACTICAL OPERATIONS

### CONDUCT TACTICAL OPERATIONS

- Analyze missions
- Calibrate Radiac meters
- Call for indirect fires
- Conduct a perimeter security operation
- Conduct dismounted maneuvers
- Conduct a battle analysis
- Conduct dismounted patrols
- Conduct mounted maneuvers
- Conduct a terrain analysis
- Conduct security operations
- Coordinate supporting indirect fires
- Coordinate with adjacent units
- Develop a radiation monitoring plan
- Determine levels of radiation
- Develop an interlocking fires plan
- Develop written orders
- Develop a radiation overlay plot
- Direct fires
- Direct the defense of a maintenance support team
- Effect coordination with higher headquarters
- Effect coordination with adjacent units
- Effect coordination with subordinate units
- Effect coordination with supporting units
- Establish tactical objectives
- Estimate enemy capabilities
- Exercise command and control procedures
- Identify protective clothing
- Identify warning devices
- Identify communications devices
- Inspect protective clothing
- Issue verbal orders
- Issue verbal orders by telephone
- Issue verbal orders by radio
- Issue written orders
- Know how to conduct a battle analysis
- Know the steps of military decision making

Know the problems of defending maintenance support teams  
Know the principles of offensive warfare  
Know the part that personnel plays in operational readiness  
Know the concept of operational readiness  
Know communications procedures  
Know the techniques of stress management  
Know the purpose of maneuver on the battle field  
Know the importance of maneuver on the battle field  
Know the relationship of maneuver to fires on the battle field  
Know how to plan maneuvers  
Know how to control maneuvers  
Know the part that equipment plays in operational readiness  
Know the part that training plays in operational readiness  
Know the purpose of topographic maps  
Know the concept of interlocking fires  
Know how to conduct security operations  
Know how to plan an attack  
Know how to plan a unit defense  
Know the alert signal of warning devices  
Know how to use secure communications  
Know the purpose of reconnaissance  
Know the importance of protective clothing  
Know how to reorganize unit after enemy contact  
Know how to conduct radiation monitoring  
Know the purpose of Radiac meters  
Know the purpose of firing stakes  
Know the concept of maintenance support  
Know the principles of military decision making  
Know alarm signals  
Know how to sound alarms  
Know your role in the command and control process  
Know hand and arm signals  
Know your role in frontal attacks  
Know the purpose of Dosimeters  
Know Air Land Battle principles  
Know how to plan for air support  
Know the role of military intelligence  
Know how to request air support  
Know the principles of command and control  
Know how to plot avenues of approach on a map overlay  
Know command and control procedures

Know how to plan avenues of approach  
Know the importance of interlocking fires  
Know the purpose of interlocking fires  
Locate your position using a map  
Manage stress in combat  
Maneuver using topographic maps  
Organize a perimeter security  
Participate in turning movements offensive operations  
Participate in an envelopments attack  
Perform a map reconnaissance  
Perform an area reconnaissance  
Perform a route reconnaissance  
Perform maneuver planning  
Perform logistical planing  
Perform a map route reconnaissance  
Plan for the defense of a maintenance support team  
Plan for transportation support during tactical operations  
Plan for supply support during tactical operations  
Plan for direct fires  
Plan for fire support  
Plan for dismounted patrols  
Plan for dismounted maneuvers  
Plan for indirect fire support  
Plan for a perimeter security  
Plot levels of radiation on a map overlay  
Plot tactical objectives on a map overlay  
React to warning devices  
Read Dosimeters  
Read topographic maps  
Reorganize unit after enemy contact  
Supervise radiation monitoring  
Use communications devices  
Use protective clothing  
Use Radiac meters  
Use hand and arm signals  
Write a unit defense plan  
Write an attack order

## **SUPERVISE THE DEPLOYMENT OF UNIT ASSETS**

Analyze recovery requests  
Classify bridges  
Compute distances  
Compute vehicles loads  
Conduct communications planning  
Conduct verbal briefings  
Conduct convoy operations  
Conduct inventories  
Determine ammunition requirements  
Develop written directions  
Develop loading plans  
Estimate slopes  
Estimate bridge capacities  
Exercise command and control procedures  
Follow unit standing operating procedures  
Identify how to properly pack and package various materials  
Identify map symbols  
Inspect a vehicle loading plan  
Interpret unit standing operating procedures  
Know the importance of loading plans  
Know the purpose of lifting devices  
Know hand and arm signals  
Know to principles of inventory control  
Know the elements of a loading plan  
Know the purpose of loading plans  
Know the elements of a loading plan  
Know how to estimate slopes  
Know your recovery section assets  
Know the advantages of spread loading  
Know vehicle on-road weight capacities  
Know vehicle cube capacities  
Know vehicle off-road weight capacities  
Know the purpose of loading plans  
Know the documentation required by property accountability  
Know how to write unit standing operating procedures  
Know the elements of unit standing operating procedures  
Know the principles of packing, preservation, and packing  
Know packing techniques  
Know the procedures required by property accountability  
Know the objectives of property accountability  
Know the purpose of unit standing operating procedures

Know how to plan a unit movement  
Know how to inspect a vehicle loading plan  
Know vehicle capacities - weight & cube  
Know how to move and store hazardous materials  
Know the purpose of spread loading  
Know how to locate your position using GPS  
Know the meaning of map symbols  
Know how to perform a map reconnaissance  
Know the consequences of not spread loading  
Know how to locate your position using a map and compass  
Know the importance of proper packing and packaging of materials  
Know command and control procedures  
Know how to read a topographic map  
Know how to estimate bridge capacities  
Know the purpose of individual Army publications  
Know how to perform a route reconnaissance  
Locate your position using a map  
Locate information in Army publications  
Locate map legend  
Locate your position using the Global Positioning System  
Manage the use of packing materials  
Meet recovery requests  
Order ammunition  
Perform a map reconnaissance  
Perform a route reconnaissance  
Plan a unit movement  
Plan for the use of material handling equipment  
Plan convoy operations  
Plan inventories  
Plan for deployment  
Read a topographic map  
Read coordinates  
Receive recovery requests  
Review loading plans  
Revise loading plans  
Select personnel for deployment by specialty  
Select recovery assets based on requirements  
Supervise the use of lifting devices  
Supervise proper packing and packaging of materials  
Supervise the conduct of inventories  
Tailor weapons selection to the mission

Tailor tools and equipment to the mission  
Tailor vehicles to the mission  
Test communications  
Test weapons as required or permitted  
Use hand and arm signals  
Use Army publications

## KNOWLEDGE & SKILLS RELATED TO GASs - LOGISTICS MANAGEMENT

### CONDUCT COMBAT SERVICE SUPPORT OPERATIONS

- Analyze trends using reports
- Analyze financial reports
- Conduct maintenance planning
- Conduct maintenance operations
- Conduct inventories
- Coordinate the visit of a maintenance assistance team
- Define depot level repairables
- Determine the funds available in a stock fund
- Direct shop operations
- Direct a Preventative Maintenance Checks and Services program
- Direct maintenance operations
- Direct a maintenance assistance team
- Enter data into a computer program
- Establish a Preventative Maintenance Checks and Services program
- Evaluate a Preventative Maintenance Checks and Services program
- Follow unit standing operating procedures
- Identify reports
- Interpret unit standing operating procedures
- Know the relationship between supply and maintenance operations
- Know how to backward plan
- Know the importance of planning
- Know the relationship between transportation & maintenance opns
- Know to principles of inventory control
- Know the purpose of inventories
- Know the principles of maintenance workflow
- Know the importance of inventories
- Know the objectives of property accountability
- Know the elements of unit standing operating procedures
- Know the purpose of unit standing operating procedures
- Know how to write unit standing operating procedures
- Know the concept of demand data
- Know the relationship between production and quality control
- Know the principles of production control
- Know how to prepare unservicables for retrograde
- Know how stock funds work
- Know how to analyze stock fund reports

Know how to store repair parts  
Know how to store supplies  
Know how to file reports  
Know how to obtain blank report forms  
Know how to order repair parts  
Know the documentation required by property accountability  
Know how to stock repair parts  
Know how to fill out reports  
Know the purpose of reports  
Know how to store sensitive items  
Know the procedures required by property accountability  
Know how to order depot level reparable  
Know how to inspect COMSEC devices  
Know how to troubleshoot COMSEC devices  
Know how to maintain COMSEC devices  
Know how to repair COMSEC devices  
Know how to maintain engineer equipment  
Know how to report the results of an assistance visit  
Know how to troubleshoot engineer equipment  
Know how to inspect communications equipment  
Know how to troubleshoot communications equipment  
Know how to maintain combat vehicles  
Know the purpose of individual Army publications  
Know how to troubleshoot combat vehicles  
Know how to inspect combat vehicles  
Know how to maintain communications equipment  
Know how to repair combat vehicles  
Know how to repair engineer equipment  
Know how to inspect engineer equipment  
Know the purpose of Preventative Maintenance Checks and Services  
Know the importance of Preventative Maintenance Checks & Services  
Know how to repair small arms  
Know the purpose of computer systems  
Know how to evaluate a maintenance operation  
Know the principles of financial accounting  
Know how to account for depot level reparable  
Know how to maintain tactical vehicles  
Know how to inspect small arms  
Know how to inspect tactical vehicles  
Know the purpose of a maintenance assistance team  
Know how to troubleshoot tactical vehicles

Know how to repair tactical vehicles  
Know how to troubleshoot small arms  
Know how to maintain small arms  
Locate information in Army publications  
now how to repair communications equipment  
Organize a maintenance assistance team  
Organize a maintenance operation  
Plan inventories  
Plan for maintenance workflow  
Prepare documentation for the retrograde of unservicables  
Print out reports using a computer system  
Supervise the conduct of inventories  
Use financial accounting automated programs  
Use Army publications  
Write a maintenance management plan

## MANAGE MAINTENANCE FACILITIES

- Direct shop operations
- Ensure shop safety practices
- Erect field facilities
- Establish shop safety programs
- Follow unit standing operating procedures
- Inspect field facilities
- Inspect fixed facilities
- Interpret unit standing operating procedures
- Know the principles of shop safety
- Know the principles of maintenance workflow
- Know the relationship between production and quality control
- Know the elements of unit standing operating procedures
- Know the purpose of unit standing operating procedures
- Know the purpose of individual Army publications
- Know how to write unit standing operating procedures
- Know the principles of production control
- Locate information in Army publications
- Maintain field facilities
- Plan for maintenance workflow
- Use Army publications

## MANAGE AUTOMATED LOGISTICS SUPPORT SYSTEMS

- Analyze trends using reports
- Analyze financial reports
- Analyze material readiness reports
- Approve supply requests
- Assess maintenance program capabilities
- Complete priority code sections
- Complete supply requests for repair parts
- Complete serial number blocks
- Complete signature blocks
- Complete form headings
- Complete data sections
- Complete supply requests for major items of equipment
- Complete material readiness reports
- Complete transportation requests
- Complete unit identification code blocks

Complete NSN blocks  
Complete nomenclature blocks  
Complete period covered blocks  
Complete unit identification blocks  
Determine the serial numbers of test equipment  
Determine the NSN of repair parts  
Determine the serial numbers of end items  
Determine the NSN of end items  
Determine the serial numbers of sensitive items  
Determine periods covered  
Determine the nomenclature of end items  
Determine the serial numbers of weapons  
Determine the nomenclature of repair parts  
Determine priority codes  
Determine the nomenclature of depot level repairables  
Determine the effectiveness of maintenance management programs  
Determine maintenance program requirements  
Determine the NSN of depot level repairables  
Determine the status of equipment  
Determine the disposition of equipment  
Determine transportation requirements  
Determine the condition code of equipment  
Determine the correct unit identification  
Determine the correct date  
Determine unit identification codes  
Develop a maintenance management plan  
Enter the condition code  
Fill in the equipment status section  
Fill in date blocks properly  
Follow unit standing operating procedures  
Identify discrepancies in automated reports  
Identify the equipment status section  
Identify reports  
Interpret unit standing operating procedures  
Know the principles of supply management  
Know the purpose of transportation requests  
Know the purpose of UICs  
Know what transportation assets are available  
Know the purpose of period covered blocks  
Know how to obtain authorization for high priority requests  
Know the concept of demand data

Know how to stock repair parts  
Know the impacts of SFDLR on maintenance and supply operations  
Know the purpose of the stock funding of depot level repairables  
Know the meaning of your signature on maintenance documents  
Know how to order repair parts  
Know how stock funds work  
Know the relationship between maintenance and supply management  
Know the purpose of supply requests  
Know the importance of priority codes  
Know the importance of your signature  
Know the purpose of priority codes  
Know the objectives of maintenance management programs  
Know how to fill in equipment blocks  
Know the purpose of disposition blocks  
Know the importance of dates  
Know the purpose of equipment blocks  
Know the purpose of the equipment status section  
Know the purpose of NSN blocks  
Know the purpose of fault identification blocks  
Know the importance of the equipment status section  
Know the meaning of Julian dates  
Know the consequences of pre or post dating maintenance documents  
Know how to print out reports and listings  
Know how to access programs  
Know the purpose of individual Army publications  
Know how to analyze reports and listings for trends  
Know how to enter data into computer programs  
Know the purpose of data sections on forms and reports  
Know the meaning of condition codes  
Know the principles of financial accounting  
Know how to fill in fault identification blocks  
Know the purpose of a maintenance management plan  
Know the purpose of nomenclature blocks  
Know the elements of a maintenance management plan  
Know the relationship between material and operational readiness  
Know the concept of material readiness  
Know the importance of maintenance management planning  
Know how to write unit standing operating procedures  
Know the elements of unit standing operating procedures  
Know the purpose of reports  
Know how to fill out reports

- Know how to obtain blank report forms
- Know how to file reports
- Know the purpose of unit standing operating procedures
- Know the principles of maintenance management
- Locate information in Army publications
- Operate computer systems
- Review supply requests
- Review data sections
- Supervise maintenance management programs
- Use financial accounting automated programs
- Use Army publications

#### MANAGE MANUAL MAINTENANCE MANAGEMENT DOCUMENTS

- Complete repairs required blocks
- Complete repair parts required blocks
- Complete the quantities required blocks
- Complete printed name blocks
- Complete signature blocks
- Complete priority code sections
- Complete rank blocks
- Complete data sections
- Complete type of request sections
- Complete type of inspection blocks
- Complete NSN blocks
- Complete serial number blocks
- Complete equipment identification sections
- Complete equipment listing sections
- Complete discrepancy blocks
- Complete form headings
- Complete unit identification code blocks
- Complete nomenclature blocks
- Complete unit identification blocks
- Determine the correct date
- Determine the NSN of end items
- Determine the nomenclature of end items
- Determine the nomenclature of depot level reparable
- Determine the status of equipment
- Determine the NSN of repair parts

Determine the NSN of depot level repairables  
Determine priority codes  
Determine the serial numbers of sensitive items  
Determine the serial numbers of test equipment  
Determine the serial numbers of weapons  
Determine the correct unit identification  
Determine correct maintenance codes  
Determine correct quantities of parts  
Determine the nomenclature of repair parts  
Determine unit identification codes  
Determine the condition code of equipment  
Determine the serial numbers of end items  
Enter the condition code  
Enter maintenance codes on forms  
Fill in the equipment status section  
Fill in date blocks properly  
Identify the equipment status section  
Identify individuals prior to completing the operator's name  
Know the purpose of UICs  
Know the purpose of NSN blocks  
Know the importance of your signature  
Know how to obtain authorization for high priority requests  
Know the importance of priority codes  
Know the purpose of priority codes  
Know the meaning of your signature on maintenance documents  
Know how to fill in equipment blocks  
Know the purpose of restriction blocks  
Know the purpose of repairs required blocks  
Know the different types of inspections  
Know the purpose of type of request sections  
Know how to obtain authorization signatures  
Know the purpose of repair parts required blocks  
Know the purpose of maintenance code blocks  
Know the purpose of equipment listing sections  
Know the purpose of equipment identification sections  
Know the purpose of initials blocks  
Know the meaning of initials on forms and reports  
Know when authorizations are required  
Know the meaning of condition codes  
Know the purpose of the equipment status section  
Know the purpose of equipment blocks

Know the importance of the equipment status section  
Know the purpose of fault identification blocks  
Know how to fill in fault identification blocks  
Know the purpose of discrepancy blocks  
Know the consequences of pre or post dating maintenance documents  
Know the purpose of nomenclature blocks  
Know the meaning of Julian dates  
Know the purpose of data sections on forms and reports  
Know the importance of dates  
Review data sections  
Review operators' restrictions

#### MANAGE REPAIR PARTS LISTINGS

Complete unit identification blocks  
Complete unit identification code blocks  
Complete stock description blocks  
Complete NSN blocks  
Complete signature blocks  
Complete rank blocks  
Complete signature blocks  
Complete quantity authorized blocks  
Complete unit location blocks  
Complete part number blocks  
Complete data sections  
Complete parts listing sections  
Complete number of demands blocks  
Complete form headings  
Determine the correct date  
Determine the NSN of repair parts  
Determine the NSN of end items  
Determine unit identification codes  
Determine the NSN of depot level repairables  
Determine the correct date  
Determine the correct unit identification  
Fill in date blocks properly  
Fill in date blocks properly  
Identify discrepancies in automated reports  
Know how to stock repair parts  
Know the consequences of pre or post dating maintenance documents

Know the importance of dates  
Know the concept of demand data  
Know how to order repair parts  
Know the importance of your signature  
Know the meaning of your signature on maintenance documents  
Know the meaning of Julian dates  
Know the purpose of NSN blocks  
Know the purpose of UICs  
Know how to enter data into computer programs  
Know the purpose of stock description blocks  
Know the meaning of Julian dates  
Know the importance of dates  
Know the consequences of pre or post dating supply documents  
Know how to determine correct quantities authorized  
Know the purpose of parts listing sections  
Know the concept of demand data  
Know the purpose of part number blocks  
Know how to determine part numbers  
Know how to obtain authorization signatures  
Know when authorizations are required  
Know how to analyze reports and listings for trends  
Know the purpose of number of demands blocks  
Know the purpose of data sections on forms and reports  
Know how to print out reports and listings  
Know how to access programs  
Know the importance of your signature  
Know the consequences of pre or post dating maintenance documents  
Know the meaning of your signature on maintenance documents  
Operate computer systems  
Review data sections

## MANAGE MANUAL REPAIR PARTS REQUESTS

Complete technical manual block  
Complete unit identification code blocks  
Complete NSN blocks  
Complete signature blocks  
Complete reason for turn-in block  
Complete item description section  
Complete unit identification blocks

Complete quantity authorized blocks  
Complete priority code sections  
Determine priority codes  
Determine the NSN of end items  
Determine the NSN of repair parts  
Determine the NSN of depot level repairables  
Determine the correct date  
Determine unit identification codes  
Determine the correct unit identification  
Fill in date blocks properly  
Know the purpose of UICs  
Know how to obtain authorization for high priority requests  
Know the meaning of your signature on supply documents  
Know the importance of your signature  
Know the importance of priority codes  
Know the purpose of NSN blocks  
Know how to determine the correct technical manual number  
Know how to order repair parts  
Know how to determine the reason for turn-in  
Know how to determine correct quantities authorized  
Know how to obtain approval for high priority requests  
Know how to stock repair parts  
Know the concept of demand data  
Know the purpose of the approval block  
Know the consequences of pre or post dating maintenance documents  
Know the importance of dates  
Know the meaning of Julian dates  
Know the purpose of priority codes

## ASSESS DIVISION AND CORPS TRANSPORTATION CAPABILITIES

Complete transportation requests  
Determine transportation requirements  
Follow unit standing operating procedures  
Interpret unit standing operating procedures  
Know how to write unit standing operating procedures  
Know what transportation assets are available  
Know the purpose of transportation requests  
Know the elements of unit standing operating procedures  
Know how transportation units are organized

Know what your organic transportation capabilities are  
Know when to use organic transportation capabilities  
Know what type of personnel transportation units have  
Know how to read transportation plans  
Know the purpose of unit standing operating procedures  
Know the meaning of transportation priorities  
Know what transportation equipment is available

## MANAGE HAZARDOUS MATERIALS

Develop loading plans  
Interpret federal regulations on hazardous materials  
Interpret Army regulations  
Know packing techniques  
Know the elements of a loading plan  
Know the purpose of loading plans  
Know the importance of loading plans  
Know the principles of packing, preservation, and packing  
Know the approval process for moving hazardous materials  
Know how to obtain state and local regulations  
Know how to request disposition of hazardous materials  
Know facility requirements for storing hazardous materials  
Know how to handle hazardous waste materials  
Know what plans must be made with respect to hazardous materials  
Know how to store hazardous waste materials  
Know how to transport hazardous waste materials  
Manage the use of packing materials  
Obtain Army regulations  
Review loading plans  
Revise loading plans  
Supervise the packaging of materials

## MANAGE PROPERTY ACCOUNTABILITY

Analyze local publications  
Complete property accountability documentation  
Complete equipment identification sections  
Conduct inventories  
Determine the serial numbers of test equipment

Determine the serviceability of items of equipment  
Determine the NSN of end items  
Determine the NSN of repair parts  
Determine the serial numbers of sensitive items  
Determine the NSN of depot level repairables  
Determine the serial numbers of end items  
Determine the serial numbers of weapons  
Enforce tool control procedures  
Follow local publications  
Identify tools by name  
Identify tools by stock number  
Identify tools by sight  
Inspect property books  
Inspect property accountability documentation  
Inspect storage facilities  
Interpret Army regulations  
Know the concept of serviceability  
Know the documentation required by property accountability  
Know the purpose of individual Army publications  
Know the principles of packing, preservation, and packing  
Know to principles of inventory control  
Know the purpose of property books  
Know the procedures required by property accountability  
Know packing techniques  
Know how to establish inventory schedules  
Know what information supply bulletins contain  
Know how to obtain technical bulletins  
Know how to obtain supply bulletins  
Know the importance of proper storage of equipment  
Know the importance of property books  
Know the objectives of property accountability  
Know what information technical bulletins contain  
Know how to obtain technical manuals  
Know the purpose of equipment identification sections  
Know the purpose of property accountability documentation  
Know what information technical manuals contain  
Locate information in Army publications  
Maintain property books  
Manage the use of packing materials  
Obtain Army regulations  
Plan inventories

- Review technical bulletins for required information
- Review supply bulletins for required information
- Review inventory schedules
- Review technical manuals for required information
- Review property accountability documentation
- Supervise the conduct of inventories
- Supervise the packaging of materials
- Use Army publications

## MANAGE MATERIAL ACQUISITION AND ACCOUNTING PROCESS

- Analyze trends using reports
- Analyze material readiness reports
- Approve actual/estimated cost of damage inspections
- Complete transportation requests
- Complete material readiness reports
- Compute order-ship times
- Compute authorized quantities using demand data
- Conduct inventories
- Depot level repairables
- Determine the serial numbers of test equipment
- Determine the serial numbers of weapons
- Determine the serial numbers of test equipment
- Determine the serial numbers of end items
- Determine the serial numbers of weapons
- Determine the NSN of depot level repairables
- Determine the NSN of repair parts
- Determine the NSN of end items
- Determine the serial numbers of end items
- Determine the serial numbers of sensitive items
- Determine the serial numbers of sensitive items
- Determine transportation requirements
- Determine the serviceability of items of equipment
- Identify discrepancies in automated reports
- Identify reports
- Inspect storage facilities
- Inspect property books
- Interpret Army regulations
- Know packing techniques
- Know what transportation assets are available

Know how to obtain blank report forms  
Know the principles of packing, preservation, and packing  
Know the purpose of transportation requests  
Know the relationship between material and operational readiness  
Know the objectives of property accountability  
Know how to file reports  
Know the documentation required by property accountability  
Know how stock funds work  
Know the impacts of SFDLR on maintenance and supply operations  
Know the purpose of the stock funding of depot level repairables  
Know how to fill out reports  
Know the purpose of reports  
Know how to order repair parts  
Know how to stock repair parts  
Know the concept of demand data  
Know the procedures required by property accountability  
Know to principles of inventory control  
Know the impact of order-ship times on maintenance operations  
Know the impact of order-ship times on supply operations  
Know how to turn-in major items of equipment  
Know the concept of serviceability  
Know the importance of proper storage of equipment  
Know what information supply bulletins contain  
Know how to obtain supply bulletins  
Know how to request issue of major items of equipment  
Know which items are major items of equipment  
Know the purpose of property books  
Know how to establish inventory schedules  
Know the importance of property books  
Know the purpose of the prescribed load list  
Know the concept of demand data  
Know how to compute PLL authorized quantities  
Know the concept of material readiness  
Know how to obtain technical manuals  
Know how to print out reports and listings  
Know how to enter data into computer programs  
Know how to access programs  
Know how to analyze reports and listings for trends  
Know what information technical manuals contain  
Maintain property books  
Manage the use of packing materials

Obtain Army regulations  
Operate computer systems  
Perform actual/estimated cost of damage inspections  
Plan inventories  
Review supply bulletins for required information  
Review technical manuals for required information  
Review inventory schedules  
Review actual/estimated cost of damage inspections  
Supervise the packaging of materials  
Supervise the conduct of inventories

## RESIDENT TRAINING ACTIONS

- Develop subordinates
- Prevent stress
- Apply leadership
- Adhere to Army traditions
- Supervise unit level administrative procedures
- Develop plans and standing operating procedures
- Assess unit capabilities to support proposed operations
- Supervise quality control programs
- Supervise preventative maintenance checks and services
- Supervise field maintenance
- Supervise publications libraries
- Implement Army environmental program
- Supervise the shop safety program
- Conduct offensive tactical operations
- Conduct defensive tactical operations
- Supervise deployment of unit assets
- Conduct combat service support operations
- Manage maintenance facilities
- Manage automated logistics systems
- Manage manual maintenance management documents
- Manage repair parts operations
- Assess division and corps transportation capabilities
- Manage hazardous materials
- Manage property accountability
- Manage the material acquisition and accounting process

An Application of the High Transfer Training (HITT)  
Methodology with Soft Skills Tasks

Step C

## CURRENT STEP C

### DESCRIBE GENERIC ACTION STATEMENTS

#### PURPOSE

To describe the actions performed on the Generalized Objects and create Specific Action Statements (SASs).

#### SUMMARY OF THE STEP

Determine the actions directly related to the items on the Generalized Objects List. Produce a GAS List by associating the verbs on the Action Verbs List with the generalized objects. Use the TRADOC Forms 550 to develop an outline of the process involved with the application of actions on related objects. Develop and describe the SASs by clustering and naming GASs when common processes permit. Divide GASs into more specific action statements when differences in processes demand.

#### INPUTS

- \* The List of Action Verbs from Step A
- \* The Generalized Objects List from Step B
- \* TRADOC Forms 550 or MDLs from SAT
- \* TMs

#### PROCEDURE

1. Determine the actions related to each generalized object by directly associating the verbs on the Action Verbs List with the appropriate Generalized Object. Produce a Generic Action Statements (GAS) List.

2. Develop outlines of the processes (steps and substeps) involved with each GAS through comparison of all TRADOC Forms 550 and MDLs. If no Forms 550 or MDLs exist, use the TMs to develop the outlines.

3. Develop and describe the Specific Action Statements (SASs) for the GASs. Use the GAS as the SAS when there is only one mode of operation, configuration, function, processes, etc. When differences in processes demand, write more specific SASs for each mode of operation, configuration, function, etc. of the GAS. When common processes permit, combine GASs and name that GAS. If only one object is associated with the GAS, then give the SAS the specific name of that object.

## PRODUCTS

- \* GAS List
- \* Process Outlines for the GASs
- \* SAS List

## PRODUCT USE IN FUTURE STEPS

The GASs and their Process Outlines provide direct input to Step D, Describe Knowledge and Skills Groups Associated with the Specific Action Statements (SASs). They are analyzed in Step D to form the Resident Training Actions (RTAs). GASs are also used in HITT Step E - Develop and Sequence Generic Terminal Learning Objectives. The GAS process Outlines provide information for the conduct of HITT Step F - Develop Learning Specifications.

## RECOMMENDED CHANGES TO STEP C:

### 1. General.

- \* Replace all references to "Specific Action Statements" with "Generic Action Statements." Having a separate term for a special case of Generic Action Statements is confusing and does not add anything of substance to the analysis.
- \* Delete all references to SAT. SAT materials are scarce and those that do exist provide minimal data inputs to the analysis.
- \* Delete all references and actions related to "Process Outlines." See the comment below.
- \* Add a procedure and a product to this step, Develop a Revised List of Components for each GAS based on any changes made to the Generalized Objects List.

### 2. Based on this Application of HITT.

- \* Delete all references to TMs. This kind of reference constrains the analysis to hardware applications only.
- \* Add a step to the procedure and a product produced during analysis of verbs with similar meanings. Several verbs in the Ordnance ANCOC Job Task Inventory mean substantially the same thing.

## COMMENTS:

### 1. General.

- \* When the development of the HITT methodology became a group project at Fort Gordon, two members of the group insisted that the procedures contained in the Technical Manuals be copied into the methodology at some point. Step C was chosen as this location. The analyst should study the procedures associated with the job tasks, but including the Process Outlines serves no purpose in the analysis beyond consolidating and documenting the procedures in the HITT products. The Process Outlines do provide input to Step F, Develop Learning Specifications, but the TMs could provide this input to this step at that point. Also, Learning Specification Worksheets are documents that are unique to the Signal School.

2. Based on this Application of HITT.

- \* Many actions associated with soft skills tasks are not clearly defined procedures, but rather interactive processes. This fact further constrains the development of anything like Process Outlines to hard skill applications only.

## REVISED STEP C

### DESCRIBE GENERIC ACTION STATEMENTS

#### PURPOSE

To describe the actions performed on the Generalized Objects and create Generic Action Statements (GASs).

#### SUMMARY OF THE STEP

Determine if any verbs on the Job Task Inventory have similar meanings. If so, select the verbs that best describe the actions for this application and use those verbs for the remainder of the analysis. Determine the actions directly related to the items on the Generalized Objects List. Produce a GAS List by associating the verbs on the Action Verbs List with the generalized objects. Cluster and rename GASs when common processes permit. Divide GASs into two or more GASs when differences in processes demand. Develop a revised list of components for each GAS based on any additions or deletions made to the Generalized Objects List.

#### INPUTS

- \* Action Verbs Functional Groups from Step A - Enclosure 2
- \* The Generalized Objects List from Step B - Enclosure 5
- \* The Objects and Components List from Step B - Enclosure 3

#### PROCEDURE

1. Determine if any verbs on the Job Task Inventory have similar meanings. If so, select the verbs that best describe the actions for this application. Produce an Action Verbs List.
2. Determine the actions related to each generalized object by directly associating the verbs on the Action Verbs List with the appropriate Generalized Object. Produce a Generic Action Statements (GAS) List.
3. Cluster GASs when common processes permit and divide GASs into two or more GASs when differences in processes demand. Produce a revised Generic Action Statements List.

4. Develop a revised list of components for each GAS based on any additions or deletions made to the Generalized Objects List.

## PRODUCTS

- \* List of GASs with associated components

## PRODUCT USE IN FUTURE STEPS

The GASs List with associated components provides direct input to Step D, Describe Knowledge and Skills Groups Associated with the Generic Action Statements. They are analyzed in Step D to form the Resident Training Actions (RTAs).

## APPLICATION OF HITT TO ORDNANCE ANCOC

### Procedures:

1. Determined that several verbs on the Job Task Inventory had similar meanings by initially reviewing the Generalized Objects List. Thirteen of the 35 verbs were selected. The results of this step are at Enclosure 1.
2. Determined the actions related to each generalized object by directly associating the verbs on the Action Verbs List with the appropriate Generalized Object. The initial Generic Action Statements List is at Enclosure 2.
3. Clustered several GASs based on further identification of commonalities. The final Generic Action Statements List is at Enclosure 3.
4. Developed a revised list of components for each GAS based on deletions made to the Generalized Objects List. See Enclosure 4.

### Products:

- \* List of GASs with associated components - see Enclosure 4.

## ACTION VERBS LIST

### JOB TASK INVENTORY VERBS:

Direct  
Conduct  
Control  
Manage  
Administer  
Supervise  
Adhere  
Apply  
Plan  
Develop  
Organize  
Reorganize  
Establish  
Select  
Execute  
Implement  
Perform  
Deploy  
Displace  
Coordinate  
Integrate  
Inspect  
Assess  
Evaluate  
Interpret  
Determine  
Maintain  
Monitor  
Review  
Ensure  
Counsel  
Motivate  
Prevent  
Reduce  
Solve

### ACTION VERBS LIST:

Conduct  
  
Manage  
  
Supervise  
Adhere  
Apply  
  
Develop  
  
Establish  
  
Implement  
  
Deploy  
  
  
Inspect  
Assess  
  
  
  
Review  
  
Prevent

## INITIAL GENERIC ACTION STATEMENTS LIST

Develop subordinates  
Prevent stress  
Apply leadership  
Adhere to Army traditions  
Supervise unit level administrative procedures  
Develop plans  
Review RC mobilization plans  
Conduct risk assessments  
Develop standing operating procedures  
Assess unit capabilities to support proposed operations  
Supervise quality control programs  
Supervise preventative maintenance checks and services  
Supervise the oil analysis program  
Supervise field services  
Establish field maintenance sites  
Supervise replacement/reconstitution points  
Deploy maintenance assistance teams  
Supervise controlled cannibalization procedures  
Supervise publications libraries  
Implement Army environmental program  
Supervise the shop safety program  
Conduct defensive operations  
Conduct offensive operations  
Conduct radiation monitoring  
Supervise deployment of unit assets  
Inspect loading plan for vehicle to include its trailer  
Conduct combat service support operations  
Manage maintenance facilities  
Manage automated logistics support systems  
Manage manual maintenance management reports  
Inspect equipment operator's qualification record  
Manage automated maintenance management reports  
Manage manual repair parts listings  
Manage automated repair parts listings  
Manage manual repair parts requests  
Assess division and corps transportation capabilities  
Assess division and corps transportation organization

Manage hazardous materials  
Supervise packaging and crating of unit supplies/equipment  
Manage property accountability  
Manage the material acquisition and accounting process

## FINAL GENERIC ACTION STATEMENTS LIST

- Develop subordinates
- Prevent stress
- Apply leadership
- Adhere to Army traditions
- Supervise unit level administrative procedures
- Develop plans
- Develop standing operating procedures
- Assess unit capabilities to support proposed operations
- Supervise quality control programs
- Supervise preventative maintenance checks and services
- Supervise field maintenance sites
- Supervise replacement/reconstitution points
- Deploy maintenance assistance teams
- Supervise publications libraries
- Implement Army environmental program
- Supervise the shop safety program
- Conduct tactical operations
- Supervise deployment of unit assets
- Conduct combat service support operations
- Manage maintenance facilities
- Manage automated logistics systems
- Manage manual maintenance management documents
- Manage repair parts listings
- Manage manual repair parts requests
- Assess division and corps transportation capabilities
- Manage hazardous materials
- Manage property accountability
- Manage the material acquisition and accounting process

## GASs RELATED TO PERSONNEL

### DEVELOP SUBORDINATES

- Army reference materials
- Conversations with subordinates
- Correspondence with subordinates
- Efficiency report entries
- Efficiency reports
- Formal counseling sessions
- Informal counseling sessions
- Medical records
- NCO Academy reference materials
- Observations of subordinates
- Personnel records
- Personnel reference materials
- Program reference materials
- Program records
- Report forms
- Sergeants Major Academy reference materials
- Training reference materials
- Training records

### PREVENT STRESS

- Community recreational professionals
- Conversations with subordinates
- Counseling sessions
- Education programs
- Family fitness program
- FM 26-2
- Health risk appraisal
- Health care providers
- Hypertension identification
- Medical records
- Observations of subordinates
- Reference materials
- Spiritual fitness
- Suicide prevention
- Training sessions
- Training programs

Treatment programs  
Unit ministry team

## APPLY LEADERSHIP

Army reference materials  
Conversations with superiors  
Conversations with subordinates  
Conversations with peers  
Conversations with groups  
Conversations with individuals  
Correspondence with peers  
Correspondence with subordinates  
FM 22-100  
FM 22-103  
FM 22-102  
Formal counseling sessions  
Informal counseling sessions  
Insubordination  
Maslows' hierarchy of needs theory  
Motivation  
NCO Academy reference materials  
Observations of subordinates  
Personnel reference materials  
Principles of motivation  
Professional ethics  
Reference materials  
Resource limitations  
Risk assessment  
Sergeants Major Academy reference materials  
Stress management  
Team spirit activities  
Technical competence  
Uniform Code of Military Justice  
Unit standing operating procedures

## ADHERE TO ARMY TRADITIONS

Army reference materials  
Conversations with peers  
Conversations with superiors

Correspondence with peers  
Correspondence with superiors  
Historical publications  
NCO Academy reference materials  
Sergeants Major Academy reference materials  
Unit standing operating procedures

#### SUPERVISE UNIT LEVEL ADMINISTRATIVE PROCEDURES

Army reference materials  
Filing systems  
NCO Academy reference materials  
Office management  
Office management reports  
Sergeants Major Academy reference materials  
Unit standing operating procedures

## GASs RELATED TO PLANNING

### DEVELOP PLANS

- Advantages
- Army publications
- Backward planning techniques
- Circumstances
- Consequences
- Levels of risk
- Local SOPs
- Logistics annexes
- Maintenance capabilities
- Maintenance management plans
- Operations orders
- Plan elements
- Planning principles
- Purpose of mobilization plans
- RC missions
- RC organizations
- Risk assessment
- Tactical planning
- Types of plans

### DEVELOP STANDING OPERATING PROCEDURES

- Approval process
- Army publications
- Elements of SOPs
- Local SOPs
- Maintenance management SOPs
- Purpose of SOPs
- Review process

### ASSESS UNIT CAPABILITIES TO SUPPORT PROPOSED OPERATIONS

- Army publications
- Local SOPs
- Maintenance management plans
- Materials handling equipment
- Personnel

Power generation equipment  
Recovery assets  
Tactical operations plans  
Tools and test equipment  
Vehicles  
Weapons and ammunition

## GASs RELATED TO MAINTENANCE OPERATIONS

### SUPERVISE QUALITY CONTROL PROGRAM

- Automated maintenance management forms
- Automated maintenance management schedules
- Automated maintenance management reports
- Calibration label nomenclature block
- Calibration label signature block
- Calibration label serial number block
- Calibration label NSN block
- Calibration schedules
- Calibration label date block
- Calibration schedules
- Calibration program
- Calibration technicians
- Customers
- E-mail
- Electronic correspondence
- Faxes
- Final inspections
- Formal inspections
- Formal correspondence
- In-person conversations
- In-process inspections
- Informal correspondence
- Informal inspections
- Initial inspections
- Inspection schedules
- Inspection standards
- Inspection worksheets
- Letters
- Manual maintenance management schedules
- Manual maintenance management reports
- Manual maintenance management forms
- Memos
- Notes
- Production schedules
- Reports
- SOPs

Technical manuals  
Technical inspectors  
Telephone conversations  
Test, measurement, and diagnostic equipment  
Training schedules

## SUPERVISE PREVENTATIVE MAINTENANCE CHECKS AND SERVICES

- Annual services
- Army regulations
- Army Oil Analysis Program
- Collections
- DA Form 2404
- Daily inspections
- DD Form 314
- Fluid levels
- Importance of PMCS
- Inspection techniques
- Interpretation of results
- Maintenance Update
- Motor stables
- Program limitations
- Proper lubrication
- Quarterly services
- Scheduled services
- Semi-annual services

## SUPERVISE FIELD SERVICES

- Army publications
- Battle damage assessment and repair
- Cover and concealment
- Defensive operations
- Field sanitation
- Field site selection
- Field facilities
- Final inspections
- In-process inspections
- Initial inspections
- Local SOPs
- Main supply routes
- Maintenance workflow
- Maintenance missions
- Reconstitution points
- Recovery operations
- Retrograde of unserviceables

Shop safety  
Shop layouts  
Shop operations  
Site selection techniques  
Soil analysis

## SUPERVISE REPLACEMENT/RECONSTITUTION POINT

- Actual cost of damage inspections
- Army publications
- Army regulations
- Battle Damage Assessment and Repair
- BDAR techniques
- Controlled cannibalization
- Defensive operations
- Documentation required
- Estimated cost of damage inspections
- Field facilities
- Field maintenance sites
- Hanger queens
- Local standing operating procedures
- Main supply routes
- Material handling equipment
- Problems with cannibalization
- Property accountability
- Purpose of cannibalization
- Quick fixes
- Retrograde of unserviceables

## DEPLOY MAINTENANCE ASSISTANCE TEAMS

- Army publications
- Conduct of technical assistance visits
- Follow-up actions
- Local publications
- Planning for special missions
- Reporting results of visits
- Team missions
- Team's personnel organization
- Technical assistance requests
- Tools and test equipment requirements

## SUPERVISE PUBLICATIONS LIBRARIES

- Army regulations
- Changes

- Disposition of out-of-date publications
- Dissemination of changes
- Maintenance Update
- Micro-fich readers
- Order forms
- Ordering process
- Posting changes
- Supply Update
- Supply bulletins
- Technical bulletins
- Technical manuals

#### IMPLEMENT ARMY ENVIRONMENTAL PROGRAM

- Army reference materials
- Sergeants Major Academy reference materials
- NCO Academy reference materials
- Conversations with superiors
- Correspondence with superiors
- Conversations with peers
- Correspondence with peers
- Environmental awareness
- Environmental laws
- Environmental regulations
- Environmental policies
- Environmental goals
- Maneuver damage
- Field sanitation
- Noise pollution
- Environmental protection
- Historic preservation
- Solid waste
- Hazardous materials

#### SUPERVISE SHOP SAFETY PROGRAM

- Safety regulations
- Unit SOPs
- Shop safety plan
- Observations of personnel

Foreign object damage program  
Fire fighting equipment  
Tool control procedures  
Personal protective gear  
Warning labels  
Ventilation  
Lifting devices

## GASs RELATED TO TACTICAL OPERATIONS

### CONDUCT TACTICAL OPERATIONS

- Air support
- Air Land Battle principles
- Alarm signals
- Alarms
- Avenues of approach
- Command and control
- Communications
- Communications devices
- Coordination
- Direct fires
- Dismounted patrols
- Dismounted maneuver
- Dosimeters
- Enemy capabilities
- Envelopments
- Fire support planning
- Frontal attacks
- Hand and arm signals
- Indirect fire support
- Intelligence
- Interlocking fires
- Levels of radiation
- Logistical planing
- Maintenance support
- Maneuver planning
- Maneuver
- Map reading
- Military decision making
- Mission
- Monitoring plan
- Mounted maneuvers
- Objectives
- Offense
- Operational readiness
- Perimeter security
- Plotting
- Protective clothing

- Radiac meters
- Reconnaissance
- Secure communications
- Supply
- Terrain analysis
- Topographic maps
- Transportation
- Turning movements
- Verbal orders
- Verbal orders by radio
- Verbal orders by telephone
- Warning devices
- Written orders

#### SUPERVISE THE DEPLOYMENT OF UNIT ASSETS

- Army publications
- Bridge classifications
- Command and control
- Communications planning
- Communications testing
- Convoy operations
- Determination of ammunition requirements
- Elements of a loading plan
- Hand and arm signals
- Inventories
- Lifting devices
- Loading plans
- Loading materials
- Local SOPs
- Map reading
- Map reconnaissance
- Material handling equipment
- Packaging materials
- Packing techniques
- Packing and packaging
- Personnel selection
- Planning
- Property accountability
- Purpose of loading plans

Recovery vehicle selection  
Recovery requests  
Reference materials  
Route reconnaissance  
Slope estimation  
Spread loading  
Tools and equipment  
Topographic maps  
Vehicle selection  
Vehicle on-road weight capacities  
Vehicle off-road weight capacities  
Vehicle cube capacities  
Verbal briefings  
Weapons selection  
Weapons testing  
Written directions

## GASs RELATED TO LOGISTICS MANAGEMENT

### CONDUCT COMBAT SERVICE SUPPORT OPERATIONS

- Army publications
- Combat vehicle maintenance
- Communications equipment maintenance
- Computer systems
- COMSEC maintenance
- Depot level repairables
- Engineer equipment maintenance
- Financial accounting
- Inspections
- Inventories
- Local SOPs
- Maintenance planning
- Maintenance operations
- Property accountability
- Repair parts supply
- Reports and listings
- Retrograde of unservicables
- Shop operations
- Stock funds
- Storage of supplies
- Supply operations
- Tactical vehicle maintenance
- Transportation operations
- Workflow

### MANAGE MAINTENANCE FACILITIES

- Army publications
- Local SOPs
- Shop operations
- Fixed facilities
- Field facilities
- Workflow
- Shop safety

### MANAGE AUTOMATED LOGISTICS SUPPORT SYSTEMS

Army publications  
Caps lock  
Computer on-off switch  
Computer programs  
Computer systems  
Condition code block  
Data section  
Data entry  
Date block  
Disposition block  
Enter key  
Equipment blocks  
Equipment status section  
Equipment identification section  
Fault identification block  
Financial accounting  
Floppy drives  
Function keys  
Heading  
Historical maintenance reports  
Interfaces  
Key boards  
Letters  
Listings and reports  
Local SOPs  
Maintenance management  
Maintenance management programs  
Material readiness  
Monitor contrast control  
Monitor on-off switch  
Monitor brightness control  
Monitors  
Nomenclature block  
NSN blocks  
Number key pad  
Period covered block  
Peripherals  
Print outs  
Priority codes section  
Program requirements

Program capabilities  
Rank block  
Repair parts supply programs  
Serial number blocks  
Signature block  
Space bar  
Stock funding of depot level repairables  
Supply requests  
Supply management  
Transportation requests  
Type of request section  
Unit identification code block  
Unit block  
Unit identification block

## MANAGE MANUAL MAINTENANCE MANAGEMENT DOCUMENTS

- Authorization section
- Condition code block
- Data section
- Date block
- Date ordered blocks
- Discrepancy blocks
- Equipment blocks
- Equipment listing section
- Equipment identification section
- Equipment status section
- Fault identification block
- Heading
- Initials blocks
- Maintenance code blocks
- Nomenclature block
- NSN block
- Operator's name block
- Printed name block
- Priority codes section
- Quantity blocks
- Rank block
- Repair parts required blocks
- Repairs required blocks
- Restriction blocks
- Serial number block
- Signature block
- Type of inspection block
- Type of request section
- Unit block
- Unit designation block
- Unit identification code block

## MANAGE REPAIR PARTS LISTINGS

- Authorization date
- Authorization signature
- Computer systems
- Data sections
- Date block

Heading  
Key boards  
Monitors  
NSN blocks  
Number of demands blocks  
Part number blocks  
Parts listing section  
Print outs  
Quantity authorized blocks  
Rank block  
Signature block  
Stock description blocks  
Unit identification block  
Unit location block  
Unit block  
Unit identification code

#### MANAGE MANUAL REPAIR PARTS REQUESTS

Approval block  
Date block  
Item description section  
NSN blocks  
Priority block  
Quantity section  
Reason for turn-in block  
Signature block  
Technical manual block  
Unit identification code  
Unit block

#### ASSESS DIVISION AND CORPS TRANSPORTATION CAPABILITIES

Equipment  
Organic capabilities  
Organizations  
Personnel  
Plans  
Priorities  
Standing operating procedures  
Transportation requests

Transportation assets  
Vehicles

## MANAGE HAZARDOUS MATERIALS

Approval process  
Army regulations  
Facility requirements  
Federal regulations  
Loading plans  
Packing and packaging  
Plans  
Requests  
State and local regulations

## MANAGE PROPERTY ACCOUNTABILITY

- Army regulations
- Army publications
- Documentation
- Equipment identification
- Inventories
- Inventory schedules
- Local publications
- National stock numbers
- Packaging
- Packing
- Preservation
- Property books
- Serial numbers
- Serviceability
- Storage of equipment
- Supply bulletins
- Technical bulletins
- Technical manuals
- Tool identification

## MANAGE MATERIAL ACQUISITION AND ACCOUNTING PROCESS

- Army regulations
- Demand data
- Depot level repairables
- DS/4, TUFMISS
- Estimated/actual cost of damage inspections
- Inventories
- Inventory schedules
- Major items of equipment
- National stock numbers
- Operational readiness
- Order-ship time
- Packing, preservation, and packaging
- Prescribed load list
- Property books
- Property accountability
- Repair parts supply
- Serial numbers

ot level repairables

;, reports

## CURRENT STEP E

### DEVELOP AND SEQUENCE GENERIC TERMINAL LEARNING OBJECTIVES

#### PURPOSE

To develop a GTLO for each action statement.

#### SUMMARY OF THE STEP

Same as SAT except the Generic Design process starts with approved RTAs with associated KS Groups by GASs instead of Critical Job Tasks selected for resident training.

#### INPUTS

- \* The GAS List from Step C
- \* Task Analysis Worksheets, TRADOC Forms 550, and MDLs from SAT
- \* LAW I/II from SAT
- \* The GASs with approved RTAs and KS Groups from Step D

#### PROCEDURE

1. Develop a GTLO for each GAS (Procedure 1, Step C). Use the Approved RTA List for the Actions, use the TRADOC Forms 550 and MDLs for the Conditions, and use the LAWs for the Standards. Estimate a time standard for the GTLO that is sufficient for the execution of the objective, after training, when the performance involves the most time consuming procedure related to the GTLO. State the time standard as "in a time limit not to exceed."
2. Start a Learning Specification Worksheet (LSW) for each GTLO. Record the GTLO on the LSW. Determine and record on the LSW for each GTLO, the date, the MOS title, the RTA, the related job task numbers and titles, and the GTLO (GAS, Action, Condition, and Standard). Arrange the GTLO LSWs in the general order in which they are to be trained.

## PRODUCT

- \* Sequenced Draft GTLO LSWs

## PRODUCT USE IN FUTURE STEPS

The GTLO LSWs are the basis for determining the instructional content and sequence to be specified in Step F - Develop Learning Specifications.

#### RECOMMENDED CHANGES TO STEP C:

1. General.
  - \* Delete all references to SAT or SAT documentation.
  - \* Delete all references to LSWs as they are Signal School documents.
2. Based on this Application of HITT.
  - \* None.

#### COMMENTS:

1. General.
  - \* None.
2. Based on this Application of HITT.
  - \* None.

## REVISED STEP E

### DEVELOP AND SEQUENCE GENERIC TERMINAL LEARNING OBJECTIVES

#### PURPOSE

To develop a GTLO for each Resident Action Statement.

#### SUMMARY OF THE STEP

Translate each Resident Training Action into a Generic Terminal Learning Objective (GTLOs). Produce a list of GTLOs sequenced in initial order of instruction.

#### INPUTS

- \* The List of Resident Training Actions from Step D

#### PROCEDURE

1. Translate each Resident Training Action into a single Generic Terminal Learning Objective.
2. Sequence the GTLOs in initial order of instruction.
3. Produce a document with sequenced GTLOs.

#### PRODUCT

- \* Sequenced GTLOs

#### PRODUCT USE IN FUTURE STEPS

The GTLOs are the basis for the rest of the Generic Design process.

## APPLICATION OF HITT TO ORDNANCE ANCOC

### Procedures:

1. Translated each Resident Training Action into a single Generic Terminal Learning Objective. See Enclosure 1.
2. Sequenced the GTLOs in initial order of instruction.
3. Produced a document with sequenced GTLOs. See Enclosure 2.

### Products:

- \* Sequenced GTLOs - at Enclosure 2.

## GENERIC TERMINAL LEARNING OBJECTIVES NOT SEQUENCED

Given instruction on developing subordinates, the student will demonstrate how to develop subordinates by explaining how to develop subordinates using examples.

Given instruction on stress prevention, the student will demonstrate how to prevent stress by explaining how to prevent stress using examples.

Given instruction on leadership, the student will demonstrate how to apply leadership principles by explaining how to employ leadership principles using examples.

Given instruction on Army traditions and customs, the student will demonstrate how to adhere to Army traditions and customs by relating Army customs and traditions to his/her job using examples.

Given instruction on unit level administrative procedures, the student will demonstrate how to supervise unit level administrative procedures by explaining how to supervise unit level administrative procedures using examples.

Given instruction on developing plans and SOPs, the student will demonstrate how to develop plans and SOPs by explaining how to develop plans and SOPs using examples.

Given instruction on assessing unit capabilities to support proposed operations, the student will demonstrate how to assess unit capabilities to support proposed operations by explaining how to assess unit capabilities to support proposed operations using examples.

Given instruction on supervising quality control programs, the student will demonstrate how to supervise quality control programs by explaining how to supervise quality control programs using examples.

Given instruction on supervising preventative maintenance checks and services, the student will demonstrate how to supervise preventative maintenance checks and services by explaining how to supervise preventative maintenance checks and services using examples.

Given instruction on supervising field maintenance, the student will demonstrate how to supervise field maintenance by explaining how to supervise field maintenance operations using examples.

Given instruction on supervising publications libraries, the student will demonstrate how to supervise publications libraries by explaining how to supervise publications libraries using examples.

Given instruction on how to implement the Army environmental program, the student will demonstrate how to implement the Army environmental program by explaining how to implement the Army environmental program using examples.

Given instruction on supervising shop safety programs, the student will demonstrate how to supervise shop safety programs by explaining how to supervise shop safety programs using examples.

Given instruction on offensive tactical operations, the student will demonstrate knowledge of offensive tactical operations by explaining how to conduct offensive tactical operations using examples.

Given instruction on defensive tactical operations, the student will demonstrate knowledge of defensive tactical operations by explaining how to conduct defensive tactical operations using examples.

Given instruction on supervising the deployment of unit assets, the student will demonstrate how to supervise the deployment of unit assets by explaining how to supervise the deployment of unit assets using examples.

Given instruction on combat service support operations, the student will demonstrate knowledge of combat service support operations by explaining how to conduct combat service support operations using examples.

Given instruction on combat service support operations, the student will demonstrate knowledge of combat service support operations by explaining how to conduct combat service support operations using examples.

Given instruction on management of maintenance facilities, the student will demonstrate knowledge of management of maintenance facilities by explaining how to manage maintenance facilities using examples.

Given instruction on management of automated logistics systems, the student will demonstrate knowledge of management of automated logistics systems by explaining how to manage automated logistics systems using examples.

Given instruction on management of manual maintenance documents, the student will demonstrate knowledge of management of manual maintenance documents by explaining how to manage manual maintenance documents using examples.

Given instruction on management of repair parts operations, the student will demonstrate knowledge of management of repair parts operations by explaining how to manage repair parts operations using examples.

Given instruction on how to assess division and corps transportation capabilities, the student will demonstrate knowledge of assessment of division and corps transportation capabilities by explaining assess division and corps transportation capabilities using examples.

Given instruction on management of hazardous materials, the student will demonstrate knowledge of management of hazardous materials by explaining how to manage hazardous materials using examples.

Given instruction on management of property accountability, the student will demonstrate knowledge of management of property accountability by explaining how to manage property accountability using examples.

Given instruction on management of the material acquisition and accounting process, the student will demonstrate knowledge of the material acquisition and accounting process by explaining how to manage the material acquisition and accounting process using examples.

## GENERIC TERMINAL LEARNING OBJECTIVES SEQUENCED

Given instruction on leadership, the student will demonstrate how to apply leadership principles by explaining how to employ leadership principles using examples.

Given instruction on Army traditions and customs, the student will demonstrate how to adhere to Army traditions and customs by relating Army customs and traditions to his/her job using examples.

Given instruction on developing subordinates, the student will demonstrate how to develop subordinates by explaining how to develop subordinates using examples.

Given instruction on stress prevention, the student will demonstrate how to prevent stress by explaining how to prevent stress using examples.

Given instruction on unit level administrative procedures, the student will demonstrate how to supervise unit level administrative procedures by explaining how to supervise unit level administrative procedures using examples.

Given instruction on developing plans and SOPs, the student will demonstrate how to develop plans and SOPs by explaining how to develop plans and SOPs using examples.

Given instruction on assessing unit capabilities to support proposed operations, the student will demonstrate how to assess unit capabilities to support proposed operations by explaining how to assess unit capabilities to support proposed operations using examples.

Given instruction on offensive tactical operations, the student will demonstrate knowledge of offensive tactical operations by explaining how to conduct offensive tactical operations using examples.

Given instruction on defensive tactical operations, the student will demonstrate knowledge of defensive tactical operations by explaining how to conduct defensive tactical operations using examples.

Given instruction on supervising field maintenance, the student will demonstrate how to supervise field maintenance by explaining how to supervise field maintenance operations using examples.

Given instruction on how to implement the Army environmental program, the student will demonstrate how to implement the Army environmental program by explaining how to implement the Army environmental program using examples.

Given instruction on supervising publications libraries, the student will demonstrate how to supervise publications libraries by explaining how to supervise publications libraries using examples.

Given instruction on supervising shop safety programs, the student will demonstrate how to supervise shop safety programs by explaining how to supervise shop safety programs using examples.

Given instruction on supervising the deployment of unit assets, the student will demonstrate how to supervise the deployment of unit assets by explaining how to supervise the deployment of unit assets using examples.

Given instruction on combat service support operations, the student will demonstrate knowledge of combat service support operations by explaining how to conduct combat service support operations using examples.

Given instruction on supervising quality control programs, the student will demonstrate how to supervise quality control programs by explaining how to supervise quality control programs using examples.

Given instruction on supervising preventative maintenance checks and services, the student will demonstrate how to supervise preventative maintenance checks and services by explaining how to supervise preventative maintenance checks and services using examples.

Given instruction on management of maintenance facilities, the student will demonstrate knowledge of management of maintenance facilities by explaining how to manage maintenance facilities using examples.

Given instruction on management of automated logistics systems, the student will demonstrate knowledge of management of automated logistics systems by explaining how to manage automated logistics systems using examples.

Given instruction on management of manual maintenance documents, the student will demonstrate knowledge of management of manual maintenance documents by explaining how to manage manual maintenance documents using examples.

Given instruction on management of repair parts operations, the student will demonstrate knowledge of management of repair parts operations by explaining how to manage repair parts operations using examples.

Given instruction on how to assess division and corps transportation capabilities, the student will demonstrate knowledge of assessment of division and corps transportation capabilities by explaining assess division and corps transportation capabilities using examples.

Given instruction on management of hazardous materials, the student will demonstrate knowledge of management of hazardous materials by explaining how to manage hazardous materials using examples.

Given instruction on management of property accountability, the student will demonstrate knowledge of management of property accountability by explaining how to manage property accountability using examples.

Given instruction on management of the material acquisition and accounting process, the student will demonstrate knowledge of the material acquisition and accounting process by explaining how to manage the material acquisition and accounting process using examples.