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TRAINING REQUIREMENTS OF TWO  
ARMY NATIONAL GUARD BRIGADES

John Metzko

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June 1994

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Advanced Research Projects Agency

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# TRAINING REQUIREMENTS OF TWO ARMY NATIONAL GUARD BRIGADES

John Metzko

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## **FOREWORD**

The results of the study effort reported herein have already been used by the Advanced Systems Technology Office of the Advanced Research Projects Agency (ARPA) to make courseware development decisions. The courseware will be used to deliver training to two Army National Guard (ARNG) brigades under ARPA's SIMITAR (Simulation in Training for Advanced Readiness) program, whose goal is to demonstrate the effectiveness and affordability of advanced distributed training technologies.

In developing training requirements for the ARNG brigades studied in this investigation, personnel records were extracted from the July 1993 Standard Installation/Division Personnel System (SIDPERS) database to determine the training status of personnel in the ARNG brigades of interest. These records use Social Security numbers as identifiers, and concern for privacy precludes their inclusion in this report. A SIDPER-extract file tape can be made available to any interested agency authorized by ARPA, the study sponsor, and the ARNG to receive it.

Extracts of July 1993 tables of organization and equipment (TOE) were obtained from an ARNG database to identify MOSs and grade levels required by, authorized for, and assigned to the brigades of interest. While TOE strength data related to MOSs and grade levels are shown in this report, neither TOE nor TOE extracts are included.

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## **PREFACE**

The material reported herein has been prepared for Colonel Steve Funk of the Advanced Research Projects Agency's Advanced Systems Technology Office, under a subtask of Task Order A-132, entitled "National Guard Combat Service Support Training: Opportunities and Requirements." The work represents fulfillment of that subtask.

This examination of ARNG training depended on data, data-processing assistance, and tutorial material provided by many people, most of whom are associated with personnel management and training in the Army's active component and reserve components. Initial and continuing assistance on ARNG personnel matters was provided by Larry Lutz of the Army National Guard Bureau, ARNG Readiness Center. Data runs from the Standard Installation/Division Personnel System (SIDPERS) and tables of organization and equipment (TOE) databases were made by Fred McKenzie and Dennis Buerk of the General Research Corporation. Computer processing of ARNG-personnel-record extracts from SIDPERS was done by an Institute for Defense Analyses consultant, Karen Garcia.

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## CONTENTS

Preface .....	iii
Foreword .....	v
Tables .....	xi
Abbreviations .....	xiii
SUMMARY .....	S-1
I. INTRODUCTION.....	I-1
A. Background.....	I-1
B. Objective .....	I-2
C. The Experiment.....	I-1
D. Target Population .....	I-2
II. NONPRIOR SERVICE.....	II-1
A. Training Requirements .....	II-1
B. Training Sites.....	II-2
III. RECLASSIFICATION .....	III-1
A. Training Requirements .....	III-1
B. Training Effectiveness .....	III-1
IV. TRAINING DEFICITS For SLs 2 and Above.....	IV-1
V. FINDINGS .....	V-1
Appendix--Unit Allocations .....	A-1
References .....	R-1



## TABLES

S-1.	Aggregate CSS Training Deficits of the 48 and 116 Brigades Based on Mid-1993 Assigned Strengths.....	S-1
S-2.	Aggregate CSS Training Deficits of the 48 and 116 Brigades Based on Mid-1993 Authorized Strengths.....	S-2
1.	Combat Service Support MOSs.....	I-3
2.	Distribution of Enlisted Personnel Between Forward Support Battalions and All Other Units in Four Brigades .....	I-4
3.	Distribution of Enlisted Combat Service Support Personnel Between Forward Support Battalions and All Other Units in Four Brigades .....	I-4
4.	MOSQ Status in the 48 Infantry Brigade .....	I-6
5.	MOSQ Status in the 116 Armored Brigade .....	I-9
6.	Nonprior Service Part of Combat Service Support in Four Brigades .....	II-4
7.	Distribution of Nonprior Service Personnel in Four Brigades .....	II-4
8.	Nonprior Service Training Requirements by Duty MOS for the 48 Infantry Brigade.....	II-5
9.	Nonprior Service Training Requirements by Duty MOS for the 116 Armored Brigade .....	II-7
10.	Training Status of Nonprior Service Personnel of the 48 Infantry Brigade.....	II-9
11.	Training Status of Nonprior Service Personnel of the 116 Armored Brigade .....	II-11
12.	Training Status of Nonprior Service Personnel of the 155 Armored Brigade .....	II-13
13.	Training Status of Nonprior Service Personnel of the 218 Infantry Brigade .....	II-15
14.	Critical-Task Training for Nonprior Service Soldiers in 21 MOSs: Number of Tasks Included in Resident Courses for Advanced Individual Training and Number to Be Taught in Soldiers' Units .....	II-17

15.	Advanced Individual Training Strategy for 63B, Light Wheel Vehicle Mechanic .....	II-18
16.	Reclassification Personnel in Four Brigades .....	III-2
17.	Distribution of Reclassification Personnel in Four Brigades .....	III-2
18.	Reclassification Training Requirements by Duty MOS .....	III-3
19.	Reclassification Training Requirements Compared to Authorized MOS SL 1 Spaces for the 48 Infantry Brigade.....	III-5
20.	Reclassification Training Requirements Compared to Authorized MOS SL 1 Spaces for the 116 Armored Brigade .....	III-7
21.	Academic Hours in Resident Courses and RC-Configured Courses for SL 1 Training in Four MOSS .....	III-10
22.	Number of Personnel Who Are Under-Qualified or Over-Qualified at Skill Levels 2 through 5.....	IV-1
23.	Training Requirements for SL 2 in the 48 Infantry Brigade.....	IV-2
24.	Training Requirements for SL 2 in the 116 Armored Brigade .....	IV-3
25.	Training Requirements for SLs 3, 4, and 5 in the 48 Infantry Brigade .....	IV-4
26.	Training Requirements for SL 3, 4, and 5 in the 116 Armored Brigade.....	IV-5

## ABBREVIATIONS

AC	active component
ADT	active duty for training
AIT	advanced individual training
AOU	all other units
ARNG	U.S. Army National Guard
ARPA	Advanced Research Projects Agency
CMF	career management field
CSS	combat service support
FSB	forward support battalion
IADT	initial active duty for training
IDT	inactive duty training
IET	initial entry training
MOS	military occupational specialty
MOSQ	MOS qualified
NA	not applicable
NPS	nonprior service
NT	not taught
NTC	National Training Center
RC	reserve component
RMT	regional maintenance training
SIDPERS	Standard Installation/Division Personnel System
SIMITAR	Simulation in Training for Advanced Readiness
SL	skill level
TOE	table(s) of organization and equipment

## **SUMMARY**

### **A. BACKGROUND**

The desire to improve Army National Guard (ARNG) training and to demonstrate the effectiveness and affordability of advanced distributed training technologies have led the Advanced Research Projects Agency (ARPA) to formulate its Simulation in Training for Advanced Readiness (SIMITAR) program. Under SIMITAR, ARPA will use new technologies to deliver training to two ARNG brigades, the 48 Infantry Brigade and the 116 Armored Brigade, that are scheduled to rotate to the National Training Center (NTC) in FYs 96 and 97, respectively.

### **B. PURPOSE**

The ARPA sponsor has based decisions on courseware development on needs identified by this study. The study identifies Combat Service Support (CSS) military occupational specialties (MOSs) that would be expected to benefit most by some form of individual training that would supplement training given to ARNG personnel by current training curricula; additional technical training for unskilled personnel is a particular concern.

### **C. METHODOLOGY**

The benefits of the supplementary training might be determined by measurements at the NTC, and/or compared with the training state of other units that do not receive supplementary training. Training requirements, by MOSs and skill levels, are developed from personnel records and tables of organization and equipment of the two-brigade test group. Training requirements, by MOS, are also developed for zero-skill-level personnel in a control group of two brigades. Zero-skill-level personnel consist of (1) recent high school graduates who have no prior service experience and who are able to spend several months attending basic training and advanced individual training (AIT) at active Army schools and (2) prior service personnel who are filling MOS positions for which they are not qualified and whose employment commitments generally preclude their going away to school for more than a few weeks. In addition to identifying training requirements for

zero-skill-level personnel, with and without prior service, the study identifies training needs for non-zero-skill-level personnel, who occupy positions requiring higher skill levels.

#### D. AGGREGATE TRAINING DEFICITS

Shortages of MOS-qualified CSS personnel in the 48 and 116 Brigades in mid-1993 are aggregated and compared to assigned strengths in Table S-1 and to authorized strengths in Table S-2.

**Table S-1. Aggregate CSS Training Deficits of the 48 and 116 Brigades Based on Mid-1993 Assigned Strengths**

Skill Level	Variable	Brigade	
		48 Infantry	116 Armored
1	Number of positions in TOE, N(TOE)	550	475
	Number of positions filled by personnel who are not MOS qualified, N(UNQ)	156	147
	N(UNQ) + N(TOE)	.28	.31
2-5	Number of positions in TOE, N(TOE)	576	506
	Number of positions filled by personnel who are not MOS qualified, N(UNQ)	126	118
	N(UNQ) + N(TOE)	.22	.23



**Table S-2. Aggregate CSS Training Deficits of the 48 and 116 Brigades Based on Mid-1993 Authorized Strengths**

Skill Level	Variable		Brigade	
			48 Infantry	116 Armored
1	Number of positions in TOE, N(TOE)		864	878
	Number of positions filled by personnel who are not MOS qualified, N(UNQ)	Nonprior service personnel	85	86
		Personnel with prior service	151	219
	N(UNQ) + N(TOE)	Nonprior service personnel	.10	.10
		Personnel with prior service	.17	.25
2	Number of positions in TOE, N(TOE)		263	159
	Number of positions filled by personnel who are not MOS qualified, N(UNQ)		53	57
	N(UNQ) + N(TOE)		.20	.36
3-5	Number of positions in TOE, N(TOE)		243	166
	Number of positions filled by personnel who are not MOS qualified, N(UNQ)		40	36
	N(UNQ) + N(TOE)		.16	.22

## **E. FINDINGS**

- Mid-1993 shortages of qualified personnel by MOS are identified for the 48 and 116 Brigades in Tables 4 and 5, respectively, in Chapter I.
- Curricula and standards in AIT are the same for ARNG personnel as they are for active Army personnel.
- Resident courses at proponent schools, which are attended by nonprior service personnel in the RCs as well as by new recruits in the Army, provide training in almost all critical tasks.
- Supplementary AIT should target those who need reclassification training; however, courseware developed for distributed training would also be useful for extending AIT for nonprior service personnel.

## I. INTRODUCTION

### A. BACKGROUND

Defense cutbacks are causing the Army to reduce the number of units and personnel in its active components. A smaller active Army means increased reliance on the reserve components (RCs). Combat service support (CSS) soldiers of the Army National Guard (ARNG) are an important part—both in mission<sup>1</sup> and in numbers<sup>2</sup>—of RC support. A wish to improve ARNG training and a desire to demonstrate the effectiveness and affordability of advanced distributed training technologies have led the Advanced Research Projects Agency (ARPA) to formulate its Simulation in Training for Advanced Readiness (SIMITAR) program. Under SIMITAR, ARPA will use new technologies to deliver training to enlisted populations of two ARNG brigades, the 48 Infantry Brigade in Georgia and the 116 Armored Brigade in Idaho, which are slated for deployment to the National Training Center (NTC) in FYs 96 and 97, respectively.

### B. OBJECTIVE

The task objective is to assess the CSS training requirements of the 48 Infantry Brigade and the 116 Armored Brigade by identifying groups most in need of training to supplement initial technical training. The training requirements should focus on acquisition of new skills rather than training to maintain skills already acquired.

### C. THE EXPERIMENT

One or more of several technologies will be used to deliver supplementary technical training to widely-dispersed CSS soldiers of the 48 and 116 Brigades: computer-based instruction, interactive multimedia, video teletraining, simulation, and networking. The supplementary training is expected to improve unit performance at the NTC. However, the

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<sup>1</sup> Combat service support, an organic logistics part of a fighting force (vis-à-vis logistical support from external sources), sustains battle by maintaining and supporting soldiers and their weapon systems in operations. The CSS functions include manning, arming, fueling, fixing, and moving the supported force (manning involves a medical system for preserving the force's fighting strength) (Ref. 1).

<sup>2</sup> A previous IDA Study of RC training in the Army indicated that 42 percent of the ARNG was involved in CSS (Ref. 2).

benefits of the additional training are to be measured in an as yet undefined way; they might be measured at the NTC, and they might be measured against a control group. The control group consists of two brigades, the 218 Infantry Brigade in South Carolina and the 155 Armored Brigade in Mississippi, which have comparable missions and size but whose CSS soldiers are not expected to receive the supplementary technical training.

#### D. TARGET POPULATION

Two groups of skill level 0 (zero)<sup>3</sup> ARNG soldiers have to acquire basic technical skills. One group, nonprior service (NPS) recruits, receives initial entry training (IET), which consists of basic military training and advanced individual training (AIT),<sup>4</sup> in curricula for all new recruits at active Army facilities. An issue concerning IET: Is too much AIT left to ARNG units to conduct? The other group is prior service soldiers who require reclassification training for military occupational specialties (MOSs) different from MOSs held in earlier service. Unlike NPS recruits, who are just out of high school, they do not need basic training and they usually cannot break away from civilian jobs to attend lengthy AIT in their new duty MOSs.

Skill acquisition (vis-à-vis skill sustainment) concerns a third group of ARNG soldiers, who are at SL 1 or above but whose duty MOS jobs require higher skill levels.

This study uses 146 MOSs in 13 career management fields (CMFs) to identify CSS soldiers as shown in Table 1. This assumption omits CSS soldiers involved in Personnel Services Support, which includes Personnel and Administration Services, Finance Services, Chaplain Activities, Public Affairs, and Legal Service Support.

The forward support battalion (FSB) is often the focus of concern about CSS in a combat brigade. Tables 2 and 3 show that CSS is disproportionately represented in the FSBs of two test brigades and the two control brigades: while one out of six soldiers of all

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<sup>3</sup> Skill level identifies skills, proficiency, or ability--level of qualification--typically required for successful performance at the grade with which the skill level is associated. Levels of qualification are identified by the numbers "0" through "5." Skill level "0" is used with an MOS to identify personnel undergoing training for award of a primary MOS. The following relationships exist between skill level (SL) and grade: SL 1 ~ E3 and E4; SL 2 ~ E5; SL 3 ~ E6; SL 4 ~ E7; SL 5 ~ E8 and E9 (Ref. 3).

<sup>4</sup> Advanced individual training is given to enlisted personnel subsequent to completion of basic training in order to qualify them for award of a MOS; it is also training conducted at training centers or Army service schools to qualify an individual to perform an entry-level or higher MOS.

MOSs are in the FSBs, about four out of 10 CSS soldiers are in FSBs while the other six of 10 are distributed among all other units (AOU).<sup>5</sup>

**Table 1. Combat Service Support MOSs**

CMF 23	Air Defense Systems Maintenance									
	23R	24C	24G	24M	24N	24T	25L			
CMF 27	Land Combat and Air Defense System Direct and General Support Maintenance									
	24H	24K	27B	27E	27F	27G	27H	27J	27K	27L
	27M	27T	27X							
CMF 29	Signal Maintenance									
	29E	29J	29N	29S	29V	29W	29Y	39C	39D	39E
	39G	39V								
CMF 33	Electronic Warfare/Intercept Systems Maintenance									
	33R	33T	33V	33Y						
CMF 35	Electronic Maintenance and Calibration									
	35H	35Y	39B							
	39S	39V								
CMF 63	Mechanical Maintenance									
	44B	44E	45B	45D	45E	45G	45K	45N	45T	52C
	52D	52F	52X	62B	63B	63D	63E	63G	63H	63J
	63N	63S	63T	62W	63Y					
CMF 67	Aircraft Maintenance									
	67G	67H	67N	67R	67S	67T	67U	67V	67X	67Y
	68B	68D	68F	68G	68H	68J	68K	68L	68N	68P
	68Q	68R	68X							
CMF 55	Ammunition									
	55B	55D	55G	55R						
CMF 76	Supply and Service									
	57F	76C	76J	76P	76V	76X	76Y	76Z		
CMF 77	Petroleum and Water									
	77F	77L	77W							
CMF 88	Transportation									
	88H	88K	88L	88M	88N	88P	88Q	88R	88S	88T
	88U	88V	88W							
CMF 91	Medical									
	01H	35U	42C	42D	42E	71G	76J	91B	91C	91D
	91E	91F	91G	91H	91J	91L	91M	91N	91P	91Q
	91R	91S	91T	91U	91V	91W	91X	91Y	92B	92E
CMF 94	Food Service									
	94B									

<sup>5</sup> Table 2 authorized strengths, which, for all units in both brigades, are equal to structured (or required) strengths, are from Reserve Components Troop Basis of the Army (popularly called the Buff Book) (Ref. 4); Buff Book data for the four brigades are in Appendix A. Table 3 data are aggregates from the SIDPERS-extract file.

**Table 2. Distribution of Enlisted Personnel Between Forward Support Battalions and All Other Units in Four Brigades<sup>a</sup>**

Brigade	Forward Support Battalion		All Other Units		TOTAL	
	N	%	N	%	N	%
48 Infantry	666		3437		4103	
		16		84		100
116 Armored	673		3260		3933	
		17		83		100
155 Armored	675		3178		3853	
		18		82		100
218 Infantry	666		3274		3940	
		17		83		100
TOTALS	2680		13,149		15,829	
		17		83		100

<sup>a</sup> Source: Ref. 4. The 48 and 116 Brigades comprise the test group, and the 155 and 218 Brigades comprise the control group.

**Table 3. Distribution of Enlisted Combat Service Support Personnel Between Forward Support Battalions and All Other Units in Four Brigades<sup>a</sup>**

Brigade	Forward Support Battalion		All Other Units		TOTAL	
	N	%	N	%	N	%
48 Infantry	1,178		764		1342	
		43		57		100
116 Armored	354		627		981	
		36		64		100
155 Armored	449		634		1083	
		41		59		100
218 Infantry	571		634		1205	
		47		53		100
TOTALS	1952		2659		4611	
		42		58		100

<sup>a</sup> Source: Ref. 4. The 48 and 116 Brigades comprise the test group, and the 155 and 218 Brigades comprise the control group.

Extracts from the July 1993 SIDPERS-ARNG<sup>6</sup> database were used to form a computer file with the following data elements in records for all enlisted personnel of the two test brigades and the two control brigades:

<u>Data Element Identifier</u>	<u>Data Element</u>
1-190	Social Security Number
1-82	Duty MOS Designator
1-207	Training Category
1-159	Primary MOS Designator
1-160	Basis for Acquiring Primary MOS Designator
1-180	Secondary MOS Designator
1-5	Additional MOS Designator
1-214	Unit Processing Code
1-223	Zip Code

Data in the SIDPERS-extract file were used to compare the number of personnel who are duty MOS qualified (MOSQ) with the assigned strength for CSS MOSs in the 48 and 116 Brigades. These comparisons are shown in Tables 4 and 5, where personnel grades E3-E4 represent SL1 and grades E5-E8 represent SLs 2 through 5.

While this study focuses on the 48 and 116 Brigades, several statistical views of the training state of the 155 and 218 Brigades are also provided in this report for possible future test group versus control group comparisons.

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<sup>6</sup> SIDPERS is the Standard Installation/Division Personnel System. Data element descriptions are found in a National Guard Bureau SIDPERS Data Element Dictionary (Ref. 5).

**Table 4. MOSQ Status in the 48 Infantry Brigade**

MOS		(Duty Mos Qualified) ÷ (Assigned Strength)	
		E3-E4	E5-E8
27B	Land Combat Support System Test Specialist		0/1 = 0.00
27E	TOW/Dragon Missile Electronic Repairer	3/7 = 0.43	3/4 = 0.75
29E	Radio Repairer	1/3 = 0.33	3/3 = 1.00
29J	Telecommunications Terminal Device Repairer	0/3 = 0.00	1/2 = 0.50
29N	Switching Central Repairer	1/4 = 0.25	1/1 = 1.00
29S	Communications Security Equipment Repairer	1/2 = 0.50	
29W	Communications Electronics Maintenance Chief		1/1 = 1.00
33U	Medical Equipment Repairer Advanced	1/1 = 1.00	
39C	Target Acquisition/Surveillance Radar Repairer		0/1 = .00
39E	Special Electronic Devices Repairer	2/3 = 0.67	1/1 = 1.00
44B	Metal Worker	4/6 = 0.67	1/1 = 1.00
44E	Machinist	1/1 = 1.00	0/1 = 0.00
45B	Small Arms/Artillery Repairer	3/3 = 1.00	4/4 = 1.00
45D	Self-Propelled Field Artillery Turret Mechanic	1/2 = .50	2/2 = 1.00
45E	M1 Abrams Tank Turret Mechanic	7/9 = 0.28	1/2 = .50
45G	Fire Control Repairer RTS-M	0/2 = .00	
45K	Armorment Repairer	2/2 = 1.00	6/6 = 1.00
45N	M60A1/A3 Tank Turret Mechanic	0/1 = 0.00	
45T	Bradley FVS Turret Mechanic	8/12 = 0.67	3/4 = .75
45Z	(Now 45K)		1/1 = 1.00
52C	Utilities Equipment Repairer	6/7 = 0.86	1/2 = 0.50
52D	Power-Generation Equipment Repairer	16/21 = 0.76	10/11 = 0.91
52X	Special Purpose Equipment Repairer		1/2 = 0.50
55B	Ammunition Specialist	2/2 = 1.00	2/3 = 0.67
55R	Ammunition Stock Control and Acctg Specialist	0/1 = 0.00	0/1 = 0.00
55Z	Ammunition Supervisor		1/1 = 1.00

(continued)



**Table 4 (continued)**

MOS		(Duty Mos Qualified) + (Assigned Strength)	
		E3-E4	E5-E8
57F	Mortuary Affairs Specialist		1/1 = 1.00
62B	Construction Equipment Repairer	5/7 = 0.71	3/3 = 1.00
63B	Light Wheel Vehicle Mechanic	22/33 = 0.70	27/34 = 0.79
63D	Self-Propelled Field Artillery Repairer	3/9 = 0.33	16/20 = 0.75
63E	M1 Abrams Tank System Mechanic	7/9 = 0.78	20/24 = 0.83
63G	Fuel and Electrical System Repairer	1/3 = 0.33	1/1 = 1.00
63H	Track Vehicle Repairer	13/15 = 0.87	20/22 = 0.91
63J	QM and Chemical Equipment Repairer	4/5 = 0.80	3/3 = 1.00
63S	Heavy Wheel Vehicle Mechanic	4/13 = 0.31	6/8 = 0.75
63T	Bradley Fighting Vehicle System Mechanic	19/46 = 0.41	54/77 = 0.70
63W	Wheel Vehicle Repairer	6/9 = 0.67	4/7 = .57
63Y	Track Vehicle Mechanic	1/3 = 0.33	1/2 = 0.50
63Z	Mechanical Maintenance Supervisor		2/3 = 0.67
67N	UH-1 Helicopter Repairer	1/1 = 1.00	1/3 = 0.33
67V	67V Observation/Scout Helicopter Repairer		0/6 = 0.00
67Z	Aircraft Maintenance Senior Sergeant		0/1 = 0.00
76C	Equipment Records and Parts Specialist <sup>a</sup>	10/15 = 0.67	16/26 = 0.62
76J	Medical Supply Specialist	5/5 = 1.00	1/2 = 0.50
76P	Material Control and Accounting Specialist <sup>a</sup>	4/10 = 0.40	2/7 = 0.29
76V	Material Storage and Handling Specialist <sup>a</sup>	18/19 = 0.95	2/3 = 0.67
76X	Subsistence Supply Specialist <sup>a</sup>	2/2 = 1.00	2/3 = 0.67
76Y	Unit Supply Specialist	21/26 = 0.81	34/40 = 0.85
76Z	Senior Supply/Service Sergeant		3/8 = 0.38

<sup>a</sup> 76C, 76P, 76V, and 76X have been consolidated; 92A Automated Logistical Specialist replaces them.

(continued)

Table 4 (continued)

MOS		(Duty Mos Qualified) ÷ (Assigned Strength)	
		E3-E4	E5-E8
77F	Petroleum Supply Specialist	23/28 = 0.82	7/9 = 0.78
77W	Water Treatment Specialist	2/2 = 1.00	
88M	Motor Transport Operator	46/56 = 0.82	54/64 = 0.84
88Z	Transportation Senior Sergeant		1/1 = 1.00
91B	Medical Specialist	76/91 = 0.84	55/58 = 0.95
91C	Practical Nurse	1/1 = 1.00	1/1 = 1.00
91D	Operating Room Specialist		1/1 = 1.00
91E	Dental Specialist	1/1 = 1.00	1/1 = 1.00
91G	Behavioral Science Specialist		1/1 = 1.00
91Q	Pharmacy Specialist	0/1 = 0.00	0/1 = 0.00
92B	Medical Laboratory Specialist	1/1 = 1.00	
94B	Food Service Specialist	38/47 = 0.81	67/80 = 0.84
TOTALS		394/550 = .72	450/576 = .78

**Table 5. MOSQ Status in the 116 Armored Brigade**

MOS		(Duty Mos Qualified) + (Assigned Strength)	
		E3-E4	E5-E8
27B	Land Combat Support System Test Specialist		0/1 = 0.00
27E	TOW/Dragon Missile Electronic Repairer	1/1 = 1.00	1/4 = 0.25
29E	Radio Repairer	4/5 = 0.80	2/3 = 0.67
29J	Telecommunications Terminal Device Repairer		1/1 = 1.00
29S	Communications Security Equipment Repairer		2/2 = 1.00
29Z	Electronics Maintenance Chief		1/1 = 1.00
35G	Medical Equipment Repairer	1/1 = 1.00	
39D	DAS3 Computer Systems Repairer	1/1 = 1.00	2/2 = 1.00
39E	Special Electronic Devices Repairer	2/3 = 0.67	1/1 = 1.00
39V	Computerized Systems Maintenance Chief		0/1 = 0.00
44B	Metal Worker	4/5 = 0.80	1/1 = 1.00
44E	Machinist	1/2 = 0.50	1/1 = 1.00
45D	Self-propelled Field Artillery Turret Mechanic	0/1 = 0.00	
45E	M1 Abrams Tank Turret Mechanic	10/14 = 0.71	2/4 = 0.50
45G	Fire Control Repairer RTS-M	0/1 = 0.00	
45K	Armament Repairer	2/2 = 1.00	6/9 = 0.67
45L	(Now 45B or 45K)		1/2 = 0.50
45T	Bradley FVS Turret Mechanic	3/4 = 0.75	0/1 = 0.00
45Z	(Now 45K)		1/1 = 1.00
52C	Utilities Equipment Repairer	1/2 = 0.50	2/3 = 0.67
52D	Power-Generation Equipment Repairer	7/8 = 0.88	8/11 = 0.73
52X	Special Purpose Equipment Repairer		1/1 = 1.00
55B	Ammunition Specialist	0/5 = 0.00	2/3 = 0.67
55R	Ammunition Stock Control and Acctg Specialist	1/1 = 1.00	1/1 = 1.00

(continued)

Table 5 (continued)

MOS		(Duty Mos Qualified) + (Assigned Strength)	
		E3-E4	E5-E8
55X	Ammunition Inspector		0/1 = 0.00
57F	Mortuary Affairs Specialist		1/1 = 1.00
62B	Construction Equipment Repairer	1/3 = 0.33	1/1 = 1.00
63B	Light Wheel Vehicle Mechanic	28/32 = 0.88	36/43 = 0.84
63D	Self-Propelled Field Artillery System Mechanic	4/14 = 0.29	6/13 = 0.46
63E	M1 Abrams Tank System Mechanic	24/30 = 0.80	10/21 = 0.48
63G	Fuel And Electrical System Repairer		1/1 = 1.00
63H	Track Vehicle Repairer	8/13 = 0.62	28/34 = 0.82
63J	QM and Chemical Equipment Repairer	1/1 = 1.00	2/2 = 1.00
63N	M60A1/A3 Tank System Mechanic	3/4 = 0.75	0/2 = 0.00
63S	Heavy Wheel Vehicle Mechanic	12/13 = 0.92	7/8 = 0.88
63T	Bradley FVS Mechanic	24/38 = .63	27/35 = 0.77
63W	Wheel Vehicle Repairer	5/7 = 0.71	4/5 = 0.80
63Y	Track Vehicle Mechanic	0/1 = 0.00	2/4 = 0.50
63Z	Mechanical Maintenance Supervisor		1/1 = 0.50
76C	Equipment Records and Parts Specialist <sup>a</sup>	6/9 = 0.67	13/16 = 0.81
76J	Medical Supply Specialist	1/2 = 0.50	1/1 = 1.00
76P	Material Control and Accounting Specialist <sup>a</sup>	5/9 = 0.56	8/10 = 0.80
76V	Material Storage and Handling Specialist <sup>a</sup>	4/6 = 0.67	4/6 = 0.67
76X	Subsistence Supply Specialist <sup>a</sup>	0/1 = 0.00	2/3 = 0.67
76Y	Unit Supply Specialist	12/22 = 0.55	22/23 = 0.96
76Z	Senior Supply/Service Sergeant		2/2 = 1.00

<sup>a</sup> 76C, 76P, 76V, and 76X have been consolidated; 92A Automated Logistical Specialist replaces them.

(continued)

Table 5 (continued)

MOS		(Duty Mos Qualified) ÷ (Assigned Strength)	
		E3-E4	E5-E8
77F	Petroleum Supply Specialist	10/19 = 0.53	20/29 = 0.69
77W	Water Treatment Specialist		2/4 = 0.50
88M	Motor Transport Operator	43/72 = 0.60	48/71 = 0.68
91A	(Now 91B)	1/1 = 1.00	
91B	Medical Specialist	62/76 = 0.82	41/49 = 0.84
91C	Practical Nurse	1/1 = 1.00	
91G	Behavioral Science Specialist	1/1 = 1.00	1/1 = 1.00
91P	X-Ray Specialist	1/2 = 0.50	
91S	Preventive Medicine Specialist	1/1 = 1.00	1/1 = 1.00
91Y	Eye Specialist	0/1 = 0.00	
92B	Medical Laboratory Specialist	1/1 = 1.00	
94B	Food Service Specialist	31/39 = 0.79	61/64 = 0.95
TOTALS		328/475 = .69	388/506 = .77

## II. NONPRIOR SERVICE

### A. TRAINING REQUIREMENTS

Table 6 indicates that 6 percent to 12 percent of CSS personnel in the four brigades are nonprior service (NPS) personnel, who require initial entry training. The distribution of NPS personnel between forward support battalions (FSB) and all other units (ACU) of the four brigades in Table 7 is similar to the distribution of all CSS personnel: about 40 percent in the FSB and 60 percent in AOU.

For the 48 and 116 Brigades, Tables 8 and 9, respectively, show the required number of authorized grade E3 and E4 positions (a surrogate for required skill level 1 strengths) for CSS MOSs and the number of NPS personnel to be trained.<sup>1</sup> The July 1993 training status of NPS personnel of the 48 and 116 Brigades is shown for CSS MOSs in Tables 10 and 11, respectively. Corresponding data for the 155 and 218 Brigades are shown in Tables 12 and 13, respectively. Tables 10 through 13 show the number of personnel, by duty MOS, whose primary skill level indicator in the SIDPERS-extract file is zero. Six of seven training categories in these tables identify the status of NPS personnel by the following code:

<u>Code</u>	<u>Definition</u>
F	Currently on initial active duty for training (IADT)
L	Awaiting IADT without pay
P	Awaiting IADT with pay
Q	Awaiting second part of IADT <sup>2</sup>
U	Serving on second part of IADT
X	Assigned to ARNG unit for 12 drills or 90 days

A seventh Training Category, Code A, identifies personnel who are assigned to an ARNG unit for 48 inactive duty training (IDT) assemblies annually. The Code A category includes

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<sup>1</sup> From brigade tables of organization and equipment. In both brigades, the authorized strength and the required strength are equal for almost all TOE MOSs; required strength is the minimum number of manpower spaces that a unit requires to perform its mission; authorized strength is the portion of required manpower that can be supported by allocated manpower.

<sup>2</sup> Under the ARNG's Split Training Option, high school juniors can go to basic training during the summer before their senior year and then take AIT after graduation.

(1) personnel whose primary MOSs do not match their duty MOSs and who, thus, need reclassification training and (2) other personnel whose primary MOSs match their duty MOSs. These latter personnel are not really at SL 0; their primary skill level indicator in SIDPERS has not been updated because of oversight or because a security clearance had not yet been approved.<sup>3</sup>

## B. TRAINING SITES

Several Army training centers and schools were visited or contacted by telephone to discuss critical task<sup>4</sup> training for SL 1 of these 21 MOSs:<sup>5</sup>

- 27E TOW/Dragon Missile Electronic Repairer
- 29E Radio Repairer
- 29J Telecommunications Terminal Device Repairer
- 45E M1 Abrams Tank Turret Mechanic
- 45T Bradley FVS Turret Mechanic
- 52C Utilities Equipment Repairer
- 52D Power-Generation Equipment Repairer
- 55B Ammunition Specialist
- 63B Light Wheel Vehicle Mechanic
- 63D Self-Propelled Field Artillery Repairer
- 63E M1 Abrams Tank System Mechanic
- 63H Track Vehicle Repairer
- 63S Heavy Wheel Vehicle Mechanic
- 63T Bradley Fighting Vehicle System Mechanic
- 63W Wheel Vehicle Repairer
- 63Y Track Vehicle Mechanic
- 77F Petroleum Laboratory Specialist
- 88M Motor Transport Operator
- 91B Medical Specialist
- 91S Preventive Medicine Specialist
- 94B Food Service Specialist

The investigation focused on the location for training critical tasks: How many critical tasks are taught in resident courses in AIT, and how many are left to be taught at the soldiers' units? Each proponent service school convenes a board of subject matter experts, including RC representatives about every two years (1) to select from a list of candidate

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<sup>3</sup> Primary skill levels were verified in telephone conversations with the SIDPERS-ARNG offices that handle the 48 and 116 Brigades.

<sup>4</sup> Tasks that personnel must master to become MOS qualified are called critical tasks.

<sup>5</sup> It was not feasible to investigate training for all CSS MOSs; a large sample of MOSs was selected for investigation on the basis of number of personnel and/or percentage of unit strength requiring training.

tasks, critical tasks that are trained to the same standard in the AC and the RCs and (2) to select the sites for training the tasks.

Table 14 summarizes the results of that investigation. Of 813 critical tasks involving technical training, 95 percent (769/813) are taught in AIT, where training curricula and standards are the same for ARNG personnel as they are for active Army personnel: Grades of at least 70 percent are required to pass written tests in all phases of AIT (in some cases a passing grade of 80 percent is required), and students are required to demonstrate critical task mastery in hands-on demonstrations before proceeding to a next phase. The five percent of technical tasks that are left for the units to teach are related to obsolete equipment or involve knowledge transfer from similar tasks that are taught in AIT. Of the 44 tasks left for the units to teach for the 21 MOSs in Table 14, 27 (61 percent) involve MOSs 29E and 88M.

Examples of obsolete equipment include teletypewriters, which have been replaced by FAX machines, manual steering by power steering, carburetors by fuel injection, and spark ignition by compression ignition.

The practical necessity of utilizing knowledge transfer for training is illustrated by the vehicle-versus-vehicle component matrix in Table 14, where "T" indicates tasks pertaining to the given component are taught in AIT and "TR" indicates training by knowledge transfer ("NA" and "NT" indicate not applicable and not taught, respectively). Some MOSs, like 63B, Light Wheel Vehicle Mechanic, in Table 15, support a large number of end items; knowledge and skills gained in AIT on some items of equipment are directly applicable and easily transferred to other equipment.

A couple of observations by training developers and training evaluators for many MOSs related to mechanical maintenance might be useful in decisions about supplementary training. First, experience has shown that the Regional Maintenance Training (RMT) facilities, which provide excellent hands-on training on equipment at their facilities, can also be indirectly useful for reclassification training: the RMTs can train trainers, who are already MOS qualified, and who, in turn, can give unit personnel hands-on training on unit equipment during IDT periods. But the train the trainer concept has a cost: the trainers are not available to do their normal unit jobs.

The other mechanical maintenance observation is that critical tasks for SL 3+ involve a lot of diagnostics, which are well suited for training by interactive videodisc and other distance learning technologies.



**Table 6. Nonprior Service Part of Combat Service Support in Four Brigades**

Brigade	Combat Service Support (CSS)	Nonprior Service Support (NPS)	(NPS)/(CSS)
48 Infantry	1342	85	.06
116 Armored	981	74	.08
155 Armored	1083	125	.12
218 Infantry	1205	84	.07
TOTALS	4611	368	.08

**Table 7. Distribution of Nonprior Service Personnel in Four Brigades**

Brigade	Forward Support Battalion (FSB)	All Other Units (AOU)	$\frac{(FSB)}{(FSB) + (AOU)}$
48 Infantry	58	77	.43
116 Armored	45	72	.35
155 Armored	48	95	.34
218 Infantry	61	84	.42
TOTALS	212	328	.40

**Table 8. Nonprior Service Training Requirements by Duty MOS  
for the 48 Infantry Brigade**

	MOS	Number in TOE, N(TOE)	Number to Train, N(Train)	N(Train) + N(TOE)
27E	TOW/Dragon Missile Electronic Repairer	18	3	0.17
29J	Telecommunications Terminal Device Repairer	2	1	0.50
44B	Metal Worker	10	1	0.10
45E	M1 Abrams Tank Turret Mechanic	9	2	0.22
45G	Fire Control Repairer RTS-M	3	1	0.33
45K	Armament Repairer	14	1	0.07
52D	Power-Generation Equipment Repairer	24	1	0.04
55B	Ammunition Specialist	5	1	0.20
62B	Construction Equipment Repairer	5	2	0.40
63B	Light Wheel Vehicle Mechanic	44	4	0.09
63J	QM and Chemical Equipment Repairer	12	2	0.17
63S	Heavy Wheel Vehicle Mechanic	33	2	0.06
63T	Bradley Fighting Vehicle System Mechanic	65	13	0.20
63W	Wheel Vehicle Repairer	30	1	0.13
63Y	Track Vehicle Mechanic	11	1	0.09
76C	Equipment Records and Parts Specialist	27	2	0.07
76P	Material Control and Accounting Specialist	8	1	0.13
76V	Material Storage and Handling Specialist	18	1	0.06
76Y	Unit Supply Specialist	34	4	0.18
77F	Petroleum Laboratory Specialist	57	2	0.04
77W	Water Treatment Specialist	1	1	1.00
88M	Motor Transport Operator	48	5	0.10
91B	Medical Specialist	104	28	0.27
91P	X-Ray Specialist	1	1	1.00
92A	Automated Logistical Specialist	60	1	0.02
94B	Food Service Specialist	89	3	0.03
	<b>TOTALS</b>	<b>732</b>	<b>85</b>	<b>0.12</b>

**Table 9. Nonprior Service Training Requirements by Duty MOS  
for the 116 Armored Brigade**

MOS		Number in TOE, N(TOE)	Number to Train, N(Train)	N(Train) + N(TOE)
29E	Radio Repairer	7	1	0.14
44B	Metal Worker	8	1	0.13
45E	M1 Abrams Tank Turret Mechanic	18	1	0.06
52C	Utilities Equipment Repairer	7	1	0.14
52D	Power-Generation Equipment Repairer	26	1	0.04
63D	Self-Propelled Field Artillery Repairer	19	2	0.11
63E	M1 Abrams Tank System Mechanic	46	5	0.11
63H	Track Vehicle Repairer	37	2	0.05
63J	QM and Chemical Equipment Repairer	10	1	0.10
63S	Heavy Wheel Vehicle Mechanic	23	5	0.22
63T	Bradley Fighting Vehicle System Mechanic	45	4	0.09
76J	Medical Supply Specialist	3	1	0.33
77F	Petroleum Laboratory Specialist	72	5	0.07
88M	Motor Transport Operator	89	11	0.12
91B	Medical Specialist	100	27	0.27
91P	X-Ray Specialist	1	1	1.00
92A	Automated Logistical Specialist	62	2	0.03
94B	Food Service Specialist	87	3	0.03
TOTALS		660	74	0.11

**Table 10. Training Status of Nonprior Service Personnel  
of the 48 Infantry Brigade**

MOS	Number of Personnel With Primary Skill Level of Zero	Training Category <sup>a</sup>							
		A	Nonprior service personnel						
			F	L	P	Q	U	X	
27E	TOW/Dragon Missile Electronic Repairer	5	2			2	1		
29E	Radio Repairer	1	1						
29J	Telecommunications Terminal Device Repairer	3	2			1			
29N	Switching Central Repairer	2	2						
29S	Communications Security Equipment Repairer	1	1						
39C	Target Acquisition/Surveillance Radar Repairer	1	1						
39E	Special Electronic Devices Repairer	1	1						
44E	Machinist	1	1						
45E	M1 Abrams Tank Turret Mechanic	2							2
45G	Fire Control Repairer RTS-M	2	1	1					
45K	Armament Repairer	1		1					
52D	Power-Generation Equipment Repairer	4	3	1					
55B	Ammunition Specialist	3	2			1			
62B	Construction Equipment Repairer	3	1				1		1
63B	Light Wheel Vehicle Mechanic	4				1	1		2
63E	M1 Abrams Tank System Mechanic	1	1						

<sup>a</sup>A = Assigned to ARNG unit for 48 IDT assemblies annually.

F = Currently on IADT.

L = Awaiting IADT without pay.

P = Awaiting IADT with pay.

Q = Awaiting second part of IADT.

U = Serving second part of IADT.

X = Assigned to ARNG unit for 12 drills or 90 days.

(Continued)

Table 10. (Continued)

MOS		Number of Personnel With Primary Skill Level of Zero	Training Category <sup>a</sup>						
			A	Nonprior service personnel					
				F	L	P	Q	U	X
63J	QM and Chemical Equipment Repairer	2		1		1			
63S	Heavy Wheel Vehicle Mechanic	5	3	1		1			
63T	Bradley Fighting Vehicle System Mechanic	17	4	2		4	3		4
63W	Wheel Vehicle Repairer	4	3			1			
63Y	Track Vehicle Mechanic	2	1			1			
67V	Observation/Scout Helicopter Repairer	1	1						
76C	Equipment Records and Parts Specialist	2					2		
76P	Material Control and Accounting Specialist	1					1		
76V	Material Storage and Handling Specialist	1				1			
76Y	Unit Supply Specialist	6	2	4					
77F	Petroleum Laboratory Specialist	2				2			
77W	Water Treatment Specialist	1				1			
88M	Motor Transport Operator	11	6			5			
91B	Medical Specialist	35	7	3		16	4		5
91P	X-Ray Specialist	1		1					
91Q	Pharmacy Specialist	1	1						
92A	Automated Logistical Specialist	1				1			
94B	Food Service Specialist	6	3			2			1
TOTALS		135	50	15	0	42	13	0	15

<sup>a</sup>A = Assigned to ARNG unit for 48 IDT assemblies annually.

F = Currently on IADT.

L = Awaiting IADT without pay.

P = Awaiting IADT with pay.

Q = Awaiting second part of IADT.

U = Serving second part of IADT.

X = Assigned to ARNG unit for 12 drills or 90 days.

**Table 11. Training Status of Nonprior Service Personnel  
of the 116 Armored Brigade**

MOS	Number of Personnel With Primary Skill Level of Zero	Training Category <sup>a</sup>							
		Nonprior service personnel							
		A	F	L	P	Q	U	X	
29E	Radio Repairer	2	1	1					
39C	Target Acquisition/Surveillance Radar Repairer	1	1						
39E	Special Electronic Devices Repairer	1	1						
44B	Metal Worker	1		1					
45E	M1 Abrams Tank Turret Mechanic	3	2		1				
45G	Fire Control Repairer RTS-M	1	1						
45K	Armament Repairer	2	2						
45T	Bradley FVS Turret Mechanic	1	1						
52C	Utilities Equipment Repairer	1		1					
52D	Power-Generation Equipment Repairer	1		1					
62B	Construction Equipment Repairer	1	1						
63B	Light Wheel Vehicle Mechanic	1	1						
63D	Self-Propelled Field Artillery Repairer	3	1						2
63E	M1 Abrams Tank System Mechanic	7	2	1		2			2

<sup>a</sup>A = Assigned to ARNG unit for 48 IDT assemblies annually.

F = Currently on IADT.

L = Awaiting IADT without pay.

P = Awaiting IADT with pay.

Q = Awaiting second part of IADT.

U = Serving second part of IADT.

X = Assigned to ARNG unit for 12 drills or 90 days.

(continued)

Table 11. (continued)

MOS	Number of Personnel With Primary Skill Level of Zero	Training Category <sup>a</sup>							
		Nonprior service personnel							
		A	F	L	P	Q	U	X	
63H	Track Vehicle Repairer	3	1			1		1	
63J	QM and Chemical Equipment Repairer	1		1					
63S	Heavy Wheel Vehicle Mechanic	5		1	2			2	
63T	Bradley Fighting Vehicle System Mechanic	5	1	2		1		1	
63W	Wheel Vehicle Repairer	2	2						
76J	Medical Supply Specialist	1						1	
77F	Petroleum Laboratory Specialist	9	4	1	2	1		1	
88M	Motor Transport Operator	16	5		4	3		4	
91B	Medical Specialist	37	10	7	1	8	4	1	6
91P	X-Ray Specialist	1		1					
92A	Automated Logistical Specialist	5	3	1				1	
94B	Food Service Specialist	5	2	1				2	
TOTALS		116	42	20	2	18	10	2	22

<sup>a</sup>A = Assigned to ARNG unit for 48 IDT assemblies annually.

F = Currently on IADT.

L = Awaiting IADT without pay.

P = Awaiting IADT with pay.

Q = Awaiting second part of IADT.

U = Serving second part of IADT.

X = Assigned to ARNG unit for 12 drills or 90 days.

**Table 12. Training Status of Nonprior Service Personnel  
of the 155 Armored Brigade**

MOS		Number of Personnel With Primary Skill Level of Zero	Training Category <sup>a</sup>						
			Nonprior service personnel						
			A	F	L	P	Q	U	X
27E	TOW/Dragon Missile Electronic Repairer	3	1				2		
29E	Radio Repairer	1		1					
29J	Telecommunications Terminal Device Repairer	1	1						
39E	Special Electronic Devices Repairer	1	1						
42E	Optical Laboratory Specialist	1	1						
44B	Metal Worker	3				2			1
44E	Machinist	1				1			
45B	Small Arms/Artillery Repairer	1						1	
45E	M1 Abrams Tank Turret Mechanic	1				1			
45K	Armament Repairer	3		2					1
45N	M60A1/A3 Tank Turret Mechanic	1				1			
45T	Bradley FVS Turret Mechanic	3							3
52C	Utilities Equipment Repairer	3	2						1
52D	Power-Generation Equipment Repairer	1					1		
62B	Construction Equipment Repairer	2				1			1
63B	Light Wheel Vehicle Mechanic	10	1	2		2	3		2
63D	Self-Propelled Field Artillery Repairer	8	1			6			1
63E	M1 Abrams Tank System Mechanic	4	2	1		1			

- <sup>a</sup>A = Assigned to ARNG unit for 48 IDT assemblies annually.  
 F = Currently on IADT.  
 L = Awaiting IADT without pay.  
 P = Awaiting IADT with pay.  
 Q = Awaiting second part of IADT.  
 U = Serving second part of IADT.  
 X = Assigned to ARNG unit for 12 drills or 90 days.

(Continued)



Table 12. (Continued)

MOS	Number of Personnel With Primary Skill Level of Zero	Training Category <sup>a</sup>							
		Nonprior service personnel							
		A	F	L	P	Q	U	X	
63H	Track Vehicle Repairer	2			2				
63J	QM and Chemical Equipment Repairer	1	1						
63S	Heavy Wheel Vehicle Mechanic	2	1			1			
63T	Bradley Fighting Vehicle System Mechanic	10	1	1	4	3		1	
71G	Patient Administration Specialist	3		1	1	1			
76J	Medical Supply Specialist	2			1			1	
77F	Petroleum Laboratory Specialist	2						2	
88M	Motor Transport Operator	30	4	5	6	3		12	
91B	Medical Specialist	33		6	13	4		10	
91Q	Pharmacy Specialist	1						1	
91S	Preventive Medicine Specialist	1			1				
92A	Automated Logistical Specialist	5	2			3			
94B	Food Service Specialist	3	1		1	1			
TOTALS		143	18	21	0	44	22	1	37

<sup>a</sup>A = Assigned to ARNG unit for 48 IDT assemblies annually.

F = Currently on IADT.

L = Awaiting IADT without pay.

P = Awaiting IADT with pay.

Q = Awaiting second part of IADT.

U = Serving second part of IADT.

X = Assigned to ARNG unit for 12 drills or 90 days.

(Continued)

**Table 13. Training Status of Nonprior Service Personnel  
of the 218 Infantry Brigade**

MOS	Number of Personnel With Primary Skill Level of Zero	Training Category <sup>a</sup>							
		Nonprior service personnel							
		A	F	L	P	Q	U	X	
27E	TOW/Dragon Missile Electronic Repairer	4	3			1			
29E	Radio Repairer	2	1	1					
29J	Telecommunications Terminal Device Repairer	3		3					
29N	Switching Central Repairer	2	1			1			
29S	Communications Security Equipment Repairer	1		1					
39E	Special Electronic Devices Repairer	2	1	1					
44E	Machinist	2	1				1		
45B	Small Arms/Artillery Repairer	1				1			
45E	M1 Abrams Tank Turret Mechanic	3		1		1			
45G	Fire Control Repairer RTS-M	1		1					
45K	Armament Repairer	1					1		
52C	Utilities Equipment Repairer	1		1					
55B	Ammunition Specialist	1	1						
62B	Construction Equipment Repairer	1	1						
63B	Light Wheel Vehicle Mechanic	13	6	3		3	1		
63D	Self-Propelled Field Artillery Repairer	4	3						1
63E	M1 Abrams Tank System Mechanic	2				1		1	

<sup>a</sup>A = Assigned to ARNG unit for 48 IDT assemblies annually.

F = Currently on IADT.

L = Awaiting IADT without pay.

P = Awaiting IADT with pay.

Q = Awaiting second part of IADT.

U = Serving second part of IADT.

X = Assigned to ARNG unit for 12 drills or 90 days.

(Continued)

Table 13. (Continued)

MOS		Number of Personnel With Primary Skill Level of Zero	Training Category <sup>a</sup>							
			Nonprior service personnel							
			A	F	L	P	Q	U	X	
63G	Fuel and Electrical System Repairer	2		1						1
63H	Track Vehicle Repairer	3	2							1
63J	Qm and Chemical Equipment Repairer	2		1						1
63S	Heavy Wheel Vehicle Mechanic	3	1	1						1
63T	Bradley Fighting Vehicle System Mechanic	10	8	1		1				
63W	Wheel Vehicle Repairer	8	5			2	1			
77F	Petroleum Laboratory Specialist	10	3			3	2			2
88M	Motor Transport Operator	17	6			5	2			4
91B	Medical Specialist	17	3	3		3	5			3
92A	Automated Logistical Specialist	16	6	1		3	3	2		1
92B	Medical Laboratory Specialist	1	1							
94B	Food Service Specialist	12	8	1		2	1			
TOTALS		145	61	21	0	27	17	3		16

- <sup>a</sup>A = Assigned to ARNG unit for 48 IDT assemblies annually.
- F = Currently on IADT.
- L = Awaiting IADT without pay.
- P = Awaiting IADT with pay.
- Q = Awaiting second part of IADT.
- U = Serving second part of IADT.
- X = Assigned to ARNG unit for 12 drills or 90 days.

**Table 14. Critical-Task Training for Nonprior Service Soldiers in 21 MOSs: Number of Tasks Included in Resident Courses for Advanced Individual Training (AIT) and Number to Be Taught in Soldiers' Units (Source: Soldier's Manuals and Training Guides for the 21 MOSs)**

MOS		Training Location for Critical Tasks			
		Technical		Administrative	
		AIT	Unit	AIT	Unit
27E	TOW/Dragon Missile Repairer	84	6 <sup>a</sup>	0	0
29E	Radio Repairer	83	14 <sup>b</sup>	0	0
29J	Telecommunications Terminal Device Repairer	17	6 <sup>c</sup>	0	0
45E	M1 Abrams Tank Turret Mechanic	10	0	1	0
45T	Bradley FVS Turret Mechanic	13	0	1	0
52C	Utilities Equipment Repairer	28	0	0	11
52D	Power-Generation Equipment	21	0	5	2
55B	Ammunition Specialist	28	0	0	0
63B	Light Wheel Vehicle Mechanic	31	1 <sup>d</sup>	4	2
63D	Self-Propelled Field Artillery Repairer	30	0	2	4
63E	M1 Abrams Tank System Mechanic	42	0	6	0
63H	Track Vehicle Repairer	14	0 <sup>e</sup>	1	6
63S	Heavy Wheel Vehicle Mechanic	30	1 <sup>f</sup>	4	0
63T	Bradley Fighting Vehicle System Mechanic	39	0	6	0
63W	Wheel Vehicle Repairer	16	1 <sup>g</sup>	4	3
63Y	Track Vehicle Mechanic	32	2 <sup>h</sup>	4	0
77F	Petroleum Laboratory Specialist	60	0	0	0
88M	Motor Transport Operator	46	13 <sup>i</sup>	0	0
91B	Medical Specialist	77	0	0	0
91S	Preventive Medicine Specialist	27	0	0	0
94B	Food Service Specialist	41	0	0	0
TOTALS		769	44	38	28

<sup>a</sup> Hands-on training in units follows AIT introduction (4 tasks); training on obsolete equipment (jeep-mounted TOW) left for units to conduct (2).

<sup>b</sup> Knowledge transfer from AIT-trained tasks facilitates soldiers learning similar tasks in their units (all 14 tasks).

<sup>c</sup> Training on obsolete equipment (teletypewriters) left for units to conduct (5 tasks); knowledge transfer accounts for training the other task.

<sup>d</sup> Knowledge transfer facilitates training in units.

<sup>e</sup> All Direct Support (DS) maintenance tasks are trained in AIT; General Support (GS) maintenance tasks are trained in the units.

<sup>f</sup> Training on obsolete systems (spark ignition air induction) left for units to conduct.

<sup>g</sup> Training on obsolete systems (manual steering) left for units to conduct.

<sup>h</sup> Training on obsolete systems (carbureted fuel and spark ignition) left for units to conduct.

<sup>i</sup> These 13 tasks include: Assisting in loading and unloading vehicles (6); vehicle preparation and preventive maintenance (3); transporting sensitive cargo and busing passengers (2); and operating and maintaining a caliber .50 machine gun (2).

**Table 15. Advanced Individual Training Strategy for 63B,  
Light Wheel Vehicle Mechanic<sup>a</sup>**  
(Source: U.S. Army Ordnance Center and School)

Component \ Vehicles <sup>b</sup>	CUCV	HMMWV	M35A2 Series	800 Series	939 Series
Compression Ignition Engines	T	T	TR	TR	TR
Wheel Vehicle Clutch Assemblies	NA	NA	T	NA	NA
Compression Ignition Engine Fuel Systems	T	TR	T	TR	TR
Compression Ignition Air Induction Systems	T	TR	T	TR	TR
Wheel Vehicle Exhaust Systems	T	TR	T	TR	T
Vehicle Liquid Cool Systems	TR	T	T	TR	T
Vehicle Starting Systems	TR	T	T	TR	TR
Vehicle Charging Systems	TR	T	T	TR	TR
Intervehicular Electrical Connections	NT	NT	NT	NT	NT
Gages/Sending Units	T	TR	T	TR	T
Wheel Chassis Electrical Systems	T	T	TR	TR	T
Automatic Transmission Assemblies	T	T	NA	NA	T
Transfer Assemblies	T	TR	T	TR	T
Propeller Shaft Assemblies	T	TR	T	TR	T
Axle Assemblies	T	TR	T	TR	T
Disc Brake Systems	T	T	NA	NA	NA
Drum Brake Systems	T	NA	T	T	T
Hydraulic Brake Systems	T	T	NA	NA	NA
Air/Hydraulic Brake Systems	NA	NA	T	TR	NA

<sup>a</sup> T means training is done in the resident course; TR means training by knowledge transfer; NA means not applicable; and NT means training is not done.

<sup>b</sup> CUCV is a Commercial Utility Cargo Vehicle; HMMWV is a High Mobility Multi-Purpose Wheeled Vehicle; the M35A2 Series vehicles are 2 1/2-ton cargo trucks; the 800 series and 939 series vehicles are 5-ton cargo trucks.

### **III. RECLASSIFICATION**

#### **A. TRAINING REQUIREMENTS**

Table 16 indicates that 13 percent to 21 percent of CSS personnel with prior service in the four brigades have primary MOSs that do match their duty MOSs; thus, they require reclassification training to become MOS qualified. The distribution of these personnel between FSB and AOU of the four brigades in Table 17, where we see that 60 percent of the reclassification training requirement for the 155 Armored Brigade is in its FSB; the FSBs of the three other brigades account for 38, 39, and 35 percent of the requirements of the 48, 116, and 218 brigades, respectively, in Table 17.

The requirements for reclassification training, by duty MOS, are shown in Table 18 for the four brigades.

For the 48 and 116 Brigades, Tables 19 and 20, respectively, show the number of authorized E3 and E4 spaces (a surrogate for authorized strength requirements for SL 1) for CSS MOSs and the number of personnel who need reclassification training.

Discussions with the 48 and 116 Brigades indicated that personnel needing reclassification training in Tables 18, 19 and 20 were either involved in that training or slated to begin training.

#### **B. TRAINING EFFECTIVENESS**

Can reclassification training be expected to be as effective as resident courses at proponent schools for nonprior service personnel? In a word, no. Proponent service schools produce complete training support packages for courses that are configured and developed for the reserve components. The RC-configured courseware includes material to teach all critical tasks to the standards used by the service schools for their resident courses. However, retention of knowledge and skills is hampered by the fact that reclassification training is spread over one or two years of inactive duty training (IDT) plus one or two two-week active-duty-for-training (ADT) periods. And the RC-configured courseware and the aggregate of IDT and ADT do not provide training time for the amount of repetition (of instruction) involved in resident course training. Moreover, training facilities at the RC

training institutions<sup>1</sup> are often very austere (Ref. 6). While aviation training sites and regional training sites for maintenance and medical training have up-to-date aids, devices, and simulators, classrooms in U.S. Army Reserve centers, ARNG armories, and other RC teaching areas are frequently equipped with minimal training equipment; blocks of instruction that require equipment not available during IDT must be scheduled for ADT, thus precluding trainee participation in unit activities that are not repeated in IDT assemblies.

Comparison of academic time in resident courses at proponent schools and in instruction programs for reserve component training in Table 21 illustrates the unreasonableness of expecting RC-configured courses to be as effective as resident course training. For the following MOSs at SL 1, academic hours (hours for physical fitness training, commander's time, processing in and out, and other administrative activities are excluded) are substantially greater in resident courses:

29E10	Radio Repairer
29J10	Telecommunications Terminal Device Repairer
63B10	Light Wheel Vehicle Mechanic
63E10	M1 Abrams Tank System Mechanic
77F10	Petroleum Supply Specialist
88M10	Motor Transport Operator
91B10	Medical Specialist
91S10	Preventive Medicine Specialist

Developers of RC-configured courseware for that less training time means less repetition, which they recognize as the principal disadvantage of non-resident training. Previous experience give some prior service personnel an advantage over nonprior service personnel when the duty MOSs of the former are related to MOSs for which they were previously qualified. But many prior service personnel have no such advantage. The effectiveness issue incidental to resident training versus non-resident training appears moot, however, by the expectation that courseware to help reclassification trainees should also be useful for extending AIT of nonprior service personnel.

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<sup>1</sup> RC training institutions include Reserve Forces schools, ARNG state academics, ARNG regional academics, ARNG aviation training sites, consolidated training activities, leadership academies, and regional training sites for maintenance and medical personnel.

**Table 16. Reclassification Personnel  
in Four Brigades**

Brigade	Combat Service Support (CSS)	Reclassification Personnel (RP)	RP/CSS
48 Infantry	1342	216	0.16
116 Armored	981	204	0.21
155 Armored	1083	180	0.17
218 Infantry	1205	162	0.13
<b>TOTALS</b>	<b>4611</b>	<b>762</b>	<b>0.17</b>

**Table 17. Distribution of Reclassification Personnel  
in Four Brigades**

Brigade	Forward Support Battalion (FSB)	All Other Units (AOU)	$\frac{(FSB)}{(FSB) + (AOU)}$
48 Infantry	81	133	0.38
116 Armored	80	124	0.39
155 Armored	108	72	0.60
218 Infantry	57	105	0.35
<b>TOTALS</b>	<b>326</b>	<b>434</b>	<b>0.43</b>



**Table 18. Reclassification Training Requirements by Duty MOS**

MOS		Test Group		Control Group	
		48 Infantry Brigade	116 Armored Brigade	155 Armored Brigade	218 Infantry Brigade
27B	Land Combat Support System Test Specialist	1	1	1	1
27E	TOW/Dragon Missile Electronic Repairer	1	3		1
29E	Radio Repairer	2	3	1	4
29J	Telecommunications Terminal Device Repairer	2		2	
29N	Switching Central Repairer				1
29W	Communications Electronics Maintenance Chief	1			1
35U	Medical Equipment Repairer Advanced	1			1
39C	Target Acquisition/Surveillance Radar Repairer			1	
39E	Special Electronic Devices Repairer		1	2	1
39G	Automated Communications Computer Sys Repairer			2	
39V	Computerized Systems Maintenance Chief			1	
42E	Optical Laboratory Specialist			1	
44B	Metal Worker	2	1	4	1
44E	Machinist	1	1	4	1
45D	Self-Propelled Field Artillery Turret Mechanic	1		1	
45E	M1 Abrams Tank Turret Mechanic	2	4	1	1
45G	Fire Control Repairer RTS-M	2		1	
45K	Armament Repairer		3	6	3
45N	M60A1/A3 Tank Turret Mechanic	1			
45T	Bradley FVS Turret Mechanic	6	1	3	
52C	Utilities Equipment Repairer	4	5	4	1
52D	Power-Generation Equipment Repairer	5	8	10	4
52X	Special Purpose Equipment Repairer	2		1	1
55B	Ammunition Specialist	2	1	1	1
55R	Ammunition Stock Control And Acctg Specialist	2			
62B	Construction Equipment Repairer	1	1	2	2
63B	Light Wheel Vehicle Mechanic	21	12	20	10

(continued)

Table 18 (continued)

MOS		Test Group		Control Group	
		48 Infantry Brigade	116 Armored Brigade	155 Armored Brigade	218 Infantry Brigade
63D	Self-Propelled Field Artillery System Mechanic	10	10	7	11
63E	M1 Abrams Tank System Mechanic	4	11	5	5
63G	Fuel And Electrical System Repairer	1			
63H	Track Vehicle Repairer	5	17	10	6
63J	QM and Chemical Equipment Repairer		1	4	
63S	Heavy Wheel Vehicle Mechanic	8	4	12	6
63T	Bradley FVS Mechanic	14	18	8	19
63W	Wheel Vehicle Repairer	5	3	1	1
63Y	Track Vehicle Mechanic	2	4	3	3
67V	Observation/Scout Helicopter Repairer	1			
76C	Equipment Records and Parts Specialist	3	1		
76J	Medical Supply Specialist	2			1
76P	Material Control and Accounting Specialist	4			
76Y	Unit Supply Specialist	12			
77F	Petroleum Supply Specialist	9	13	1	20
77W	Water Treatment Specialist				
88M	Motor Transport Operator	23	36	16	15
91B	Medical Specialist	12	13	9	10
91C	Practical Nurse			2	1
91G	Behavioral Science Specialist			1	
91P	X-Ray Specialist		1		
91Q	Pharmacy Specialist			1	
91S	Preventive Medicine Specialist	1	1		
92A	Automated Logistical Specialist	17	12	19	16
92B	Medical Laboratory Specialist				1
94B	Food Service Specialist	19	13	12	12
TOTALS		212	204	180	162

**Table 19. Reclassification Training Requirements Compared to Authorized  
MOS SL 1 Positions for the 48 Infantry Brigade**

	MOS	Number in TOE, N(TOE)	Number to retrain, N(Retrain)	N(Retrain) + N(TOE)
27E	Tow/Dragon Missile Electronic Repairer	18	1	0.06
29E	Radio Repairer	8	2	0.25
29P	Material Control and Accounting Specialist	8	4	0.50
29N	Switching Central Repairer	4	1	
44B	Metal Worker	10	2	0.20
45D	Self-Propelled FA Turret Mechanic	6	1	0.17
45E	M1 Abrams Tank Turret Mechanic	9	2	0.22
45G	Fire Control Repairer RTS-M	3	2	0.67
45T	Bradley FVS Turret Mechanic	20	6	0.30
52C	Utilities Equipment Repairer	6	4	0.67
52D	Power-Generation Equipment Repairer	24	5	0.21
55B	Ammunition Specialist	5	2	0.40
62B	Construction Equipment Repairer	5	1	0.20
63B	Light Wheel Vehicle Mechanic	44	21	0.48
63D	Self-Propelled Field Artillery Repairer	19	10	0.53
63E	M1 Abrams Tank System Mechanic	23	4	0.17
63G	Fuel And Electrical Sys Repairer	4	1	0.25
63H	Track Vehicle Repairer	31	5	0.16
63S	Heavy Wheel Vehicle Mechanic	33	8	0.24
63T	Bradley Fighting Vehicle System Mechanic	65	14	0.21
63W	Wheel Vehicle Repairer	30	5	0.17

(continued)

**Table 19. (Continued)**

MOS		Number in TOE, N(TOE)	Number to retrain, N(Retrain)	N(Retrain) + N(TOE)
63Y	Track Vehicle Mechanic	11	2	0.18
67V	Observation/Scout Helicopter Repairer	1	1	1.00
76C	Equipment Records and Parts Specialist	27	3	0.11
76P	Material Control and Accounting Specialist	8	4	0.50
76Y	Unit Supply Specialist	34	12	0.35
77F	Petroleum Laboratory Specialist	57	9	0.16
77W	Water Treatment Specialist	1	1	1.00
88M	Motor Transport Operator	48	23	0.48
91B	Medical Specialist	104	12	0.11
91S	Preventive Medicine Specialist	2	1	0.50
92A	Automated Logistical Specialist	60	17	0.25
94B	Food Service Specialist	89	19	0.21
TOTALS		811	151	0.19

**Table 20. Reclassification Training Requirements Compared to Authorized MOS SL 1 Positions for the 116 Armored Brigade**

MOS		Number in TOE, N(TOE)	Number to retrain, N(Retrain)	N(Retrain) + N(TOE)
27E	TOW/Dragon Missile Electronic Repairer	5	3	0.60
29E	Radio Repairer	7	3	0.43
39E	Special Electronic Devices Repairer	2	1	0.50
44B	Metal Worker	8	1	0.13
44E	Machinist	3	1	0.33
45B	Small Arms/Artillery Repairer	4	1	0.25
45E	M1 Abrams Tank Turret Mech	18	4	0.22
45K	Armament Repairer	19	3	0.16
45N	M60A1/A3 Tank Turret Mechanic	1	1	1.00
52C	Utilities Equipment Repairer	7	5	0.71
52D	Power-Generation Equipment Repairer	26	8	0.31
55B	Ammunition Specialist	7	1	0.14
62B	Construction Equipment Repairer	7	1	0.14
63B	Light Wheel Vehicle Mechanic	51	12	0.24
63D	Self-Propelled Field Artillery Repairer	19	10	0.53
63E	M1 Abrams Tank System Mechanic	46	11	0.24
63H	Track Vehicle Repairer	37	17	0.46
63J	QM and Chemical Equipment Repairer	10	1	0.10
63S	Heavy Wheel Vehicle Mechanic	23	4	0.17
63T	Bradley Fighting Vehicle System Mechanic	45	18	0.40
63W	Wheel Vehicle Repairer	26	3	0.12
83Y	Track Vehicle Mechanic	12	4	0.33
76C	Equipment Records and Parts Specialist	28	1	0.04
76P	Material Control and Acctg Specialist	15	4	0.27
76Y	Unit Supply Specialist	34	12	0.35
77F	Petroleum Laboratory Specialist	72	13	0.18

(continued)

Table 20. (Continued)

	MOS	Number in TOE, N(TOE)	Number to retrain, N(Retrain)	N(Retrain) + N(TOE)
88M	Motor Transport Operator	89	36	0.40
91B	Medical Specialist	100	13	0.13
91P	X-Ray Specialist	1	1	1.00
91S	Preventive Medicine Specialist	2	1	0.50
92A	Automated Logistical Specialist	62	12	0.19
94B	Food Service Specialist	87	13	0.15
	TOTALS	873	219	0.25

**Table 21. Academic Hours in Resident Courses and RC-Configured Courses for SLI Training in Several MOSs**

MOS	Resident Course (ResC)	RC-Configured Course (RCCC)			(ResC) + (RCCC)
		IDT	ADT	Total	
29E10	994	208	200	599 <sup>a</sup>	1.66
29J10	740	168	200	368	2.01
63B10	420	123	120	243	1.73
63E10	502	113	115.5	228.5	2.20
77F10	331	100	120	220	1.50
88M10	257	85	135	220	1.17
91B10	394	198	83	281	1.40
91S10	602	4	85	241 <sup>b</sup>	2.50

<sup>a</sup> 408 hours plus 191 hours of home study.

<sup>b</sup> Includes 152 hours of correspondence courses; 4 hours of IDT is for a proctored examination covering the correspondence study.

#### IV. TRAINING DEFICITS FOR SLs 2 AND ABOVE

For SLs 2 through 5 in the four brigades, Table 22 shows the number of TOE positions that are filled by personnel whose skill levels are less than required. Table 22 also shows the number of TOE positions--also for SLs 2 through 5--that are filled by personnel whose skill levels exceed those required. It is apparently a coincidence that the number of personnel (340) who are over-qualified for their jobs is about equal to the number of TOE positions (341) that are filled by personnel who are under-qualified.

**Table 22. Number of Personnel Who Are Under-Qualified or Over-Qualified at Skill Levels 2 through 5**

Brigade	Under-qualified <sup>a</sup>					Over-qualified
	1 → 2	1 → 3	2 → 3	3 → 4	4 → 5	
48 Infantry	54	1	26	15	0	117
116 Armored	59	1	25	11	0	23
155 Armored	36	0	26	12	1	126
218 Infantry	35	0	24	14	1	74
<b>TOTALS</b>	<b>184</b>	<b>2</b>	<b>101</b>	<b>52</b>	<b>2</b>	<b>340</b>

<sup>a</sup> 1 → 2 notation means a SL 1 soldier fills a TOE position for an MOS SL 2; similar deficiency meanings apply to the other SL notations.

The large number of MOSs combined with four skill levels (2 through 5) and the dispersion of units within each state might not permit the brigades to improve their readiness and reduce their training load by assigning over-qualified personnel to units with skill deficits. While optimizing personnel assignments is outside the scope of this investigation, one wonders whether it is just by chance that the 116 Armored Brigade has such a favorable  $96/23 = 4.2$  under-qualified/over-qualified ratio compared to  $74/74 = 1.0$  for the 218 Infantry Brigade,  $96/117 = 0.8$  for the 48 Infantry Brigade, and  $75/126 = 0.6$  for the 155 Armored Brigade.



The aggregate deficits for the 48 and 116 Brigades in Table 22 are broken down into SL 2 deficits and SL 3 through SL 5 deficits. Tables 23 and 24 show, by MOS, SL 2 positions that are filled by SL 1 personnel. In the 48 Infantry Brigade, 20 percent of the SL 2 spaces are shown in Table 23 to be occupied by SL1 personnel. The corresponding statistic for the 116 Armored Brigade in Table 24 is 36 percent.

Tables 25 and 26 show, by MOS, SL 3 through 5 positions that are filled by personnel with lower skill levels. Table 25 shows that 16 percent of these positions in the 48 Infantry Brigade are filled by personnel who require training. And Table 26 shows that 22 percent of those filling SL 3 through 5 positions in the 116 Armored Brigade need training.

**Table 23. Training Requirements for SL 2 in the 48 Infantry Brigade**

MOS		Number in TOE, N(TOE)	Number to Train, N(Train)	N(Train) + N(TOE)
27E	Tow/Dragon Missile Electronic Repairer	5	1	0.20
29N	Switching Central Repairer	1	1	1.00
29S	Communications Security Equipment Repairer	2	1	0.50
39E	Special Electronic Devices Repairer	1	1	1.00
44B	Metal Worker	2	1	0.50
45E	M1 Abrams Tank Turret Mech	4	1	0.25
45T	Bradley FVS Turret Mechanic	7	5	0.71
52C	Utilities Equipment Repairer	2	2	1.00
55B	Ammunition Specialist	1	1	1.00
63E	M1 Abrams Tank System Mechanic	13	1	0.08
63H	Track Vehicle Repairer	12	1	0.08
63S	Heavy Wheel Vehicle Mechanic	15	2	0.13
63T	Bradley Fighting Vehicle System Mechanic	35	1	0.03
63W	Wheel Vehicle Repairer	9	1	0.11
76C	Equipment Records and Parts Specialist	21	4	0.19
88M	Motor Transport Operator	47	13	0.28
91B	Medical Specialist	44	7	0.16
91C	Practical Nurse	1	1	1.00
92A	Automated Logistical Specialist	13	4	0.31
94B	Food Service Specialist	28	4	0.14
TOTALS		263	53	0.20

**Table 24. Training Requirements for SL 2 in the 116 Armored Brigade**

MOS		Number in TOE, N(TOE)	Number to Train, N(Train)	N(Train) + N(TOE)
39E	Special Electronic Devices Repairer	1	1	1.00
45D	Self-propelled FA Turret Mechanic	1	1	1.00
45E	M1 Abrams Tank Turret Mech	4	2	0.50
45K	Armament Repairer	5	1	0.20
63B	Light Wheel Vehicle Mechanic	21	2	0.09
63E	M1 Abrams Tank System Mechanic	13	7	0.54
63H	Track Vehicle Repairer	17	1	0.06
63T	Bradley Fighting Vehicle System Mechanic	4	4	1.00
63W	Wheel Vehicle Repairer	7	1	0.14
77F	Petroleum Laboratory Specialist	12	1	0.08
88M	Motor Transport Operator	18	8	0.00
91B	Medical Specialist	27	18	0.67
91C	Practical Nurse	1	1	1.00
91Q	Pharmacy Specialist	1	1	1.00
92A	Automated Logistical Specialist	11	4	0.36
94B	Food Service Specialist	16	4	0.25
TOTALS		159	57	0.36

**Table 25. Training Requirements for SLs 3, 4, and 5  
in the 48 Infantry Brigade**

MOS		Number in TOE, N(TOE)	Number to Train, N(Train)	N(Train) + N(TOE)
29E	Radio Repairer	2	1	0.50
55B	Ammunition Specialist	2	1	0.50
63B	Light Wheel Vehicle Mechanic	21	1	0.10
63H	Track Vehicle Repairer	19	3	0.16
63T	Bradley Fighting Vehicle System Mechanic	30	6	0.20
76P	Material Control and Accounting Specialist	10	1	0.10
76V	Material Storage and Handling Specialist	4	1	0.25
76Y	Unit Supply Specialist	44	1	0.02
77F	Petroleum Laboratory Specialist	7	1	0.34
88M	Motor Transport Operator	32	11	0.28
91B	Medical Specialist	17	1	0.06
92A	Automated Logistical Specialist	15	1	0.07
94B	Food Service Specialist	40	11	0.28
TOTALS		243	40	0.16

**Table 26. Training Requirements for SLs 3, 4, and 5  
In the 116 Armored Brigade**

MOS		Number in TOE, N(TOE)	Number to Train, N(Train)	N(Train) + N(TOE)
29E	Radio Repairer	2	1	0.50
39E	Special Electronic Devices Repairer	1	1	1.00
52D	Power-Generation Equipment Repairer	3	1	0.33
55B	Ammunition Specialist	3	1	0.33
63B	Light Wheel Vehicle Mechanic	15	2	0.13
63D	Self-Propelled Field Artillery Repairer	10	2	0.20
63E	M1 Abrams Tank System Mechanic	12	4	0.33
63H	Track Vehicle Repairer	22	2	0.09
77F	Petroleum Laboratory Specialist	5	1	0.20
88M	Motor Transport Operator	15	4	0.27
91B	Medical Specialist	12	5	0.42
92A	Automated Logistical Specialist	47	3	0.06
94B	Food Service Specialist	19	9	0.47
TOTALS		166	36	0.22

## V. FINDINGS

- **Mid-1993 shortages of qualified personnel by MOS are identified for the 48 and 116 Brigades in Tables 4 and 5, respectively. The shortages are shown for grade levels E3-E4, which are equivalent to SLI, and for grade levels E5-E8, which correspond to SLS 2 through 5.**

- **The curricula (in content and length) and standards in AIT are the same for ARNG personnel as they are for active Army personnel.**

- **Resident courses at proponent schools, which are attended by nonprior-service personnel in the RCs as well as by new recruits in the active Army, provide training in almost all critical tasks. In a 21-MOS sample, only 5 percent of 769 technical tasks were left for the units to teach. The tasks not taught in the resident courses are related to obsolete equipment or involve knowledge transfer from similar tasks that are taught in AIT.**

- **Reclassification training for prior service personnel, who fill MOS positions for which they are not qualified, appears most in need of reinforcement by some form of supplementary training. Because of employment commitments, prior service personnel are usually unable to attend resident courses in AIT. Although reclassification trainees should be the principal beneficiaries of supplementary training, the courseware developed for them could also be used to extend AIT for nonprior service personnel and/or to provide sustainment training for all SL 1 personnel.**

## APPENDIX

### UNIT ALLOCATIONS

(Source: Ref. 4)

<u>Brigade</u>	<u>State</u>	<u>Page</u>
48 Infantry .....	GA .....	A-3
116 Armored .....	ID/OR .....	A-5
155 Armored .....	MS .....	A-9
218 Infantry .....	SC .....	A-11

ARMG ORGANIZATION MASTER - STATE/TPSK SEQUENCE

TPSK/EL	UIC	UNIT NO	PAR US BR LEV RS	DESCRIPTION	MOME LOCATION	ST	MTOE/TBA	FEBREC DATE	STRUCTURED STRENGTH			AUTHORIZED STRENGTH				
									OFF	WO	EHL	AGG	OFF	WO	EHL	AGG
04024	WVBLFF	0048	IN	BDE	MECH	26A			0	0	0	0	0	0	0	0
04024 05	WVBNH1	0848	EN	CO	DET 1	26A		170647	0	0	0	0	0	0	0	0
04024 05	WVBNH2	0848	EN	CO	DET 2	26A		280656	0	0	0	0	0	0	0	0
04024 05	WVBNH3	0848	EN	CO	DET 3	26A		041246	0	0	0	0	0	0	0	0
04024 05	WVBNH4	0848	EN	CO		26A	05147JNG030188	221148	6	0	156	162	6	0	156	162
04024 06	WVBL99	0048	IN	MHC	BDE AUG TBA	26A	VVBL990193		0	1	1	2	0	1	1	2
04024 06	WVBLA1	0048	IN	MHC	BDE DET 1	26A		111147	0	0	0	0	0	0	0	0
04024 06	WVBLA4	0048	IN	MHC	BDE MECH	26A	87102LNG100293	121246	46	4	275	325	46	4	275	325
04024 07	WVBP11	0348	AR	TRP	TRP E DET 1 CAV	26A		030549	0	0	0	0	0	0	0	0
04024 07	WVBPAA	0348	AR	TRP	TRP E CAV	26A	17387LNG130193	160248	5	0	153	158	5	0	153	158
04024 14	WV3399	0118	FA	BN	01 155 SP AUG TBA	26A	NGWV3990190	300982	0	0	10	10	0	0	10	10
04024 14	WV33A0	0118	FA	BN	01 BTY A 155 SP	26A		220348	5	0	121	126	5	0	121	126
04024 14	WV33B0	0118	FA	BN	01 BTY B 155 SP	26A		180647	5	0	121	126	5	0	121	126
04024 14	WV33C0	0118	FA	BN	01 BTY C 155 SP	26A		180647	5	0	121	126	5	0	121	126
04024 14	WV33D0	0118	FA	BN	01 BTY D 155 SP	26A		240456	0	0	0	0	0	0	0	0
04024 14	WV33E0	0118	FA	BN	01 SVC BTY 155 SP	26A		031246	2	1	105	108	2	1	105	108
04024 14	WV33F0	0118	FA	BN	01 MHB 155 SP	26A		210447	35	1	232	268	35	1	232	268
04024 14	WV33G0	0118	FA	BN	01 MHB DET 1	26A		300982	0	0	0	0	0	0	0	0
04024 14	WV33H0	0118	FA	BN	01 155 SP	26A	06375LNG100293		52	2	700	754	52	2	700	754
04024 35	WVBP99	0148	CS	BN	FWD SPT AUG TBA	26A	NGWVBP990192	141055	0	0	5	5	0	0	5	5
04024 35	WVBPAA	0148	CS	BN	CO A SBT	26A		281149	4	1	161	166	4	1	161	166
04024 35	WVBPBB	0148	CS	BN	CO B MAINT	26A		160647	4	6	286	296	4	6	286	296
04024 35	WVBPB1	0148	CS	BN	CO B DET 1	26A		300556	0	0	0	0	0	0	0	0
04024 35	WVBPB2	0148	CS	BN	CO C REB	26A		010148	17	0	100	117	17	0	100	117
04024 35	WVBPB3	0148	CS	BN	MHC	26A		080747	18	14	119	151	18	14	119	151
04024 35	WVBPB4	0148	CS	BN	FWD SPT	26A	63085LNG100193		43	21	666	730	43	21	666	730
04024 40	VPC299	0108	AR	BN	01 AUG TBA	26A	NGWVPC2990191	150348	0	0	10	10	0	0	10	10
04024 40	VPC2A0	0108	AR	BN	01 CO A TANK	26A		191147	5	0	57	62	5	0	57	62
04024 40	VPC2E3	0108	AR	BN	01 CO B TANK	26A		131147	5	0	57	62	5	0	57	62

ARMY ORGANIZATION MASTER - STATE/TPSN SEQUENCE

TPSN/EL	UIC	UNIT NO	PAR US BR LEV R3	DESCRIPTION	HOME LOCATION	ST	NICE/TDA	FEBREC DATE	STRUCTURED STRENGTH			AUTHORIZED STRENGTH				
									OFF	WO	EML	AGG	OFF	WO	EML	AGG
04024 40	WPC200	0108 AR BN	01	CO C TANK	DALTON	2GA		140148	5	0	57	62	5	0	57	62
04024 40	WPC200	0108 AR BN	01	CO B TANK	CANTON	2GA		191247	5	0	57	62	5	0	57	62
04024 40	WPC210	0108 AR BN	01	HHC TANK	CALHOUN	2GA		150947	21	1	309	331	21	1	309	331
04024 40	WPC211	0108 AR BN	01	HHC TANK BET 1	DOUGLASVILLE	2GA		150348	0	0	0	0	0	0	0	0
04024 40	WPC24A	0108 AR BN	01	TANK	CALHOUN	2GA	17375LWG030193		41	1	537	579	41	1	537	579
04024 41	WZ60AA	0024 IN BET		REAR CP OP CELL	FT STEUART	2GA	87103LWG020192	310348	7	0	12	19	7	0	12	19
04024 42	WPD999	0121 IN BN	01	MECH AUG TDA	DUBLIN	2GA	HGUPRA990190	121147	0	0	10	10	0	0	10	10
04024 42	WPDAA0	0121 IN BN	01	CO A MECH	COVINGTON	2GA		260248	5	0	104	109	5	0	104	109
04024 42	WPDAB0	0121 IN BN	01	CO B MECH	THOMASTON	2GA		011247	5	0	104	109	5	0	104	109
04024 42	WPDAB1	0121 IN BN	01	CO B DET 1	WINNER	2GA		011080	0	0	0	0	0	0	0	0
04024 42	WPDAB0	0121 IN BN	01	CO B MECH	GAINESVILLE	2GA		310348	5	0	104	109	5	0	104	109
04024 42	WPDAB0	0121 IN BN	01	CO B MECH	LAURENCEVILLE	2GA		081292	5	0	104	109	5	0	104	109
04024 42	WPDAB0	0121 IN BN	01	CO E ANTIARMOR	EATONTON	2GA		310348	5	0	55	60	5	0	55	60
04024 42	WPDAB0	0121 IN BN	01	HHC MECH	WINNER	2GA		271146	21	1	308	330	21	1	308	330
04024 42	WPDAT1	0121 IN BN	01	HHC MECH BET 1	MILLENBERGVILLE	2GA		121147	0	0	0	0	0	0	0	0
04024 42	WPDAAA	0121 IN BN	01	MECH	DUBLIN	2GA	07245LWG405093		46	1	779	826	46	1	779	826
04024 42	WPD999	0121 IN BN	02	MECH AUG TDA	ALBANY	2GA	HGUPB990190	250656	0	0	10	10	0	0	10	10
04024 42	WPD9A0	0121 IN BN	02	CO A MECH	VALPOSTA	2GA		261146	5	0	104	109	5	0	104	109
04024 42	WPD9B0	0121 IN BN	02	CO S MECH	CORDELE	2GA		221146	5	0	104	109	5	0	104	109
04024 42	WPD9B1	0121 IN BN	02	CO B MECH BET 1	MOULTRIE	2GA		270449	0	0	0	0	0	0	0	0
04024 42	WPD9C0	0121 IN BN	02	CO C MECH	AMERICUS	2GA		270148	5	0	104	109	5	0	104	109
04024 42	WPD9B0	0121 IN BN	02	CO B MECH	EASTMAN	2GA		230148	5	0	104	109	5	0	104	109
04024 42	WPD9B1	0121 IN BN	02	CO B DET 1	PERRY	2GA		110249	0	0	0	0	0	0	0	0
04024 42	WPD9B0	0121 IN BN	02	CO E ANTIARMOR	FITZGERALD	2GA		080349	5	0	55	60	5	0	55	60
04024 42	WPD9B0	0121 IN BN	02	HHC MECH	ALBANY	2GA		251146	21	1	308	330	21	1	308	330
04024 42	WPD9B1	0121 IN BN	02	HHC MECH BET 1	TIFTON	2GA		250656	0	0	0	0	0	0	0	0
04024 42	WPD9BA	0121 IN BN	02	MECH	ALBANY	2GA	07245LWG405093		46	1	779	826	46	1	779	826
									292	31	4103	4426	292	31	4103	4426

TOTALS FOR TPSN: 04024



ARMS ORGANIZATION MASTER - STATE/TPSM SEQUENCE

TPSM/EL	UIC	UNIT NO	PAR US BR LEV RS	DESCRIPTION	MORSE LOCATION	ST	NTOE/TDA	FEOREC DATE	STRUCTURED STRENGTH			AUTHORIZED STRENGTH				
									OFF	WO	ENL	AGG	OFF	WO	ENL	AGG
04004	WYLFHFF	0116	AR	BDE	CAV	610			0	0	0	0	0	0	0	0
04004	WYD190	0004	IN	MHC	AUG CARRIER	610			0	0	0	0	0	0	0	0
04004	WY06AG	0116	EN	BM	CO A	610		180447	5	0	98	103	5	0	98	103
04004	WY06B0	0116	EN	BM	CO B	610		091047	5	0	98	103	5	0	98	103
04004	WY06B1	0116	EN	BM	CO B BET 1	610		010277	0	0	0	0	0	0	0	0
04004	WY06B2	0116	EN	BM	CO B BET 2	610		010277	0	0	0	0	0	0	0	0
04004	WY06C0	0116	EN	BM	CO C	610		180447	5	0	98	103	5	0	98	103
04004	WY06C1	0116	EN	BM	CO C DET 1	610		060156	0	0	0	0	0	0	0	0
04004	WY06D0	0116	EN	BM	MHC	610		180447	10	1	116	127	10	1	116	127
04004	WY06AA	0116	EN	BM		610	05335LNG010193		25	1	410	436	25	1	410	436
04004	WYLFH99	0116	AR	MHC	BDE AUG TDA	610	NGVYLP90190	190547	0	1	1	2	0	1	1	2
04004	WYLFHAA	0116	AR	MHC	BDE CAV	610	87102LNG080190	190547	46	4	236	286	46	4	236	286
04004	WYLEAO	0148	FA	BM	01 BTRY A	610		020356	5	0	110	115	5	0	110	115
04004	WYLEA1	0148	FA	BM	01 BTRY A DET 1	610		000000	0	0	0	0	0	0	0	0
04004	WYLEB0	0148	FA	BM	01 BTRY B	610		230947	5	0	110	115	5	0	110	115
04004	WYLEB1	0148	FA	BM	01 BTRY B DET 1	610		240747	0	0	0	0	0	0	0	0
04004	WYLECO	0148	FA	BM	01 BTRY C	610		280349	5	0	110	115	5	0	110	115
04004	WYLEC1	0148	FA	BM	01 BTRY C DET 1	610		220947	0	0	0	0	0	0	0	0
04004	WYLES0	0148	FA	BM	01 SVC BTRY	610		000000	2	1	86	89	2	1	86	89
04004	WYLES1	0148	FA	BM	01 SVC BTRY DET 1	610		190647	0	0	0	0	0	0	0	0
04004	WYLET0	0148	FA	BM	01 MHB	610		190647	27	1	146	174	27	1	146	174
04004	WYLEA4	0148	FA	BM	01 155 SP	610	06365LNG150193		44	2	562	608	44	2	562	608
04004	WYQ297	0145	CS	BM	AUG TDA	610	W8UTQ2970190	080147	0	0	5	5	0	0	5	5
04004	WYQ299	0145	CS	BM	RATES AUG	610			0	0	0	0	0	0	0	0
04004	WYQ2A0	0145	CS	BM	CO A SBT	610		200547	4	1	164	169	4	1	164	169
04004	WYQ2A1	0145	CS	BM	CO A SBT DET 1	610		070447	0	0	0	0	0	0	0	0
04004	WYQ2A2	0145	CS	BM	CO A SBT DET 2	610		060751	0	0	0	0	0	0	0	0
04004	WYQ2B0	0145	CS	BM	CO B HAIN?	610		280989	4	6	295	305	4	6	295	305
04004	WYQ2B1	0145	CS	BM	CO B DET 1	610		210891	0	0	0	0	0	0	0	0
04004	WYQ2B2	0145	CS	BM	CO B DET 2	610		060147	0	0	0	0	0	0	0	0

ARMG ORGANIZATION MASTER - STATE/TPSN SEQUENCE

TPSN/EL	UIC	UNIT NO	PAR BR	US LEV	RS	DESCRIPTION	HOME LOCATION	ST	MTOE/TDA	FEBREC DATE	STRUCTURED STRENGTH OFF WO ENL AGG	AUTHORIZED STRENGTH OFF WO ENL AGG
04004 35	WT02CD	0145	CS	BN	CO	C MED	BOISE	610		020675	17 0 94 111	17 0 94 111
04004 35	WT02TD	0145	CS	BN	MHC	CALDWELL	610			080147	18 8 117 143	18 8 117 143
04004 35	WT02AA	0145	CS	BN		CALDWELL	610	630851MG030191			43 15 670 728	43 15 670 728
04004 40	WTP399	0116	AR	BN	O2	AUG	TWIN FALLS	610	NGWTP3990190	100147	0 0 10 10	0 0 10 10
04004 40	WTP3A0	0116	AR	BN	O2	CO A	ENHETT	610		070851	5 0 57 62	5 0 57 62
04004 40	WTP3B0	0116	AR	BN	O2	CO B	BURLEY	610		060547	5 0 57 62	5 0 57 62
04004 40	WTP3C0	0116	AR	BN	O2	CO C	RUPERT	610		200647	5 0 57 62	5 0 57 62
04004 40	WTP3D0	0116	AR	BN	O2	CO D	GOODING	610		060647	5 0 57 62	5 0 57 62
04004 40	WTP3D1	0116	AR	BN	O2	CO D BET 1	JEROME	610		070547	0 0 0 0	0 0 0 0
04004 40	WTP3T0	0116	AR	BN	O2	MHC	TWIN FALLS	610		100147	21 1 297 319	21 1 297 319
04004 40	WTP3T1	0116	AR	BN	O2	MHC BET 1	BOHML	610		220547	0 0 0 0	0 0 0 0
04004 40	WTP3T2	0116	AR	BN	O2	MHC BET 2	HAILEY	610		011249	0 0 0 0	0 0 0 0
04004 40	WTP3AA	0116	AR	BN	O2	CAV	TWIN FALLS	610	173751MG230193		41 1 525 567	41 1 525 567
04004 41	WZGMAA	0004	IN	BET	REAR CP	OP CELL	BOISE	610	871031MG020192	000000	7 0 12 19	7 0 12 19

TOTALS FOR TPSN: 04004

206 24 2431 2661 206 24 2431 2661

ARMY ORGANIZATION MASTER - STATE/TPSN SEQUENCE

TPSN/EL	UIC	UNIT NO	PAR US BR	LEV	RS	DESCRIPTION	MORNING LOCATION	ST	MTOE/TDA	FEDREC DATE	STRUCTURED STRENGTH			AUTHORIZED STRENGTH				
											OFF	VO	ENL	AGG	OFF	VO	ENL	AGG
04004 07	WGLEAA	0116	AR	TRP		TRP E CAV	WOODBURN	6OR	17387LWG120190	030747	6	0	146	152	6	0	146	152
04004 14	WYLET1	0148	FA	BN	01	HMB DET 1	BURNS	6OR		130549	3	0	26	29	3	0	26	29
04004 14	WYLET2	0148	FA	BN	01	HMB DET 2	ONTARIO	6OR		160848	5	0	15	20	5	0	15	20
04004 35	WYQ2T1	0145	CS	C		HMC DET 1	CLACKANAS	6OR		070290	0	1	3	4	0	1	3	4
04004 40	WYU199	0116	AR	BN	03	HMC CAV AUG TDA	LA GRANDE	6OR	NGH01990190	230647	0	0	10	10	0	0	10	10
04004 40	WYU1A0	0116	AR	BN	03	CO A	BAKER	6OR		170947	5	0	57	62	5	0	57	62
04004 40	WYU1B0	0116	AR	BN	03	CO B	HERMISTON	6OR		160290	5	0	57	62	5	0	57	62
04004 40	WYU1C0	0116	AR	BN	03	CO C	MILTON-FREEWATER	6OR		030347	5	0	57	62	5	0	57	62
04004 40	WYU1D0	0116	AR	BN	03	CO D	ONTARIO	6OR		160848	5	0	57	62	5	0	57	62
04004 40	WYU1E0	0116	AR	BN	03	HMC CAV	LA GRANDE	6OR		230647	21	1	297	319	21	1	297	319
04004 40	WYU1F1	0116	AR	BN	03	HMC CAV DET 1	PERPLETON	6OR		010348	0	0	0	0	0	0	0	0
04004 40	WYU1AA	0116	AR	BN	03	CAVALRY	LA GRANDE	6OR	17375LWG230193		41	1	525	567	41	1	525	567
04004 42	WYLG99	0082	IN	BN	01	HMC AUG TDA	BEND	6OR	NGWTLG990189	270248	0	0	10	10	0	0	10	10
04004 42	WYLGAD	0082	IN	BN	01	CO A	LEBANON	6OR		101247	5	0	107	112	5	0	107	112
04004 42	WYLGBO	0082	IN	BN	01	CO B	KLAMATH FALLS	6OR		120290	5	0	107	112	5	0	107	112
04004 42	WYLGCO	0082	IN	BN	01	CO C	SALEM	6OR		150547	5	0	107	112	5	0	107	112
04004 42	WYLGDO	0082	IN	BN	01	CO D	REDMOND	6OR		100151	5	0	107	112	5	0	107	112
04004 42	WYLGEO	0082	IN	BN	01	CO E	THE BALLS	6OR		090848	5	0	60	65	5	0	60	65
04004 42	WYLGFO	0082	IN	BN	01	HMC	BEND	6OR		270248	20	2	279	301	20	2	279	301
04004 42	WYLGTT	0082	IN	BN	01	HMC DET 1	BURNS	6OR		130549	0	0	0	0	0	0	0	0
04004 42	WYLGAA	0082	IN	BN	01	CAVALRY	BEND	6OR	07245LWG121092		45	2	767	814	45	2	767	814
TOTALS FOR TPSN: 04004											100	4	1502	1606	100	4	1502	1606

ARMY ORGANIZATION MASTER - STATE/TFPM SEQUENCE

TFPM/EL	UIC	UNIT NO	PAR US BR LEV RS	DESCRIPTION	MORSE LOCATION	ST	RTOE/TDA	FEDREC DATE	STRUCTURED STRENGTH			AUTHORIZED STRENGTH				
									OFF	WO	ENL	AGG	OFF	WO	ENL	AGG
00001	WTRAFF	0155	AR	BDE	TUPELO	2MS			0	0	0	0	0	0	0	0
00001 05	WTRBA1	0134	EM	CO	UNION	2MS		010856	0	0	0	0	0	0	0	0
00001 05	WTRBAA	0134	EN	CO	CARTHAGE	2MS	05147LNG010194	211155	6	0	161	167	6	0	161	167
00001 06	WTRAP9	0155	AR	HHC	TUPELO	2MS	MGVTHA990191	120451	0	1	1	2	0	1	1	2
00001 06	WTRAAA	0155	AR	HHC	TUPELO	2MS	87102LNG010293	120451	46	4	275	325	46	4	275	325
00001 07	WTRCAA	0098	AR	TRP	LOUISVILLE	2MS	17387LNG010193	110447	5	0	153	158	5	0	153	158
00001 14	WPKD99	0114	FA	BN	STARKVILLE	2MS	MGUPK0990193	171246	0	0	14	14	0	0	14	14
00001 14	WPKD00	0114	FA	BN	COLUMBUS	2MS		161052	5	0	121	126	5	0	121	126
00001 14	WPKD01	0114	FA	BN	ACREMAN	2MS		070356	5	0	121	126	5	0	121	126
00001 14	WPKD02	0114	FA	BN	EUPORA	2MS		171152	0	0	0	0	0	0	0	0
00001 14	WPKD03	0114	FA	BN	BURANT	2MS		250254	5	0	121	126	5	0	121	126
00001 14	WPKD04	0114	FA	BN	LEXINGTON	2MS		111246	0	0	0	0	0	0	0	0
00001 14	WPKD05	0114	FA	BN	KOSCIUSKO	2MS		220948	2	1	105	108	2	1	105	108
00001 14	WPKD06	0114	FA	BN	STARKVILLE	2MS		171246	36	1	208	245	36	1	208	245
00001 14	WPKD07	0114	FA	BN	STARKVILLE	2MS	06375LNG090293		53	2	676	731	53	2	676	731
00001 35	WTHM01	0106	CS	BN	CP -HELBY	2MS			0	0	0	0	0	0	0	0
00001 35	WTHM97	0106	CS	BN	MONTICELLO	2MS	MGVTH870190	250150	0	0	5	5	0	0	5	5
00001 35	WTHM99	0106	CS	BN	CP SHELBY	2MS			0	0	0	0	0	0	0	0
00001 35	WTHM00	0106	CS	BN	MAGEE	2MS		300751	4	1	164	169	4	1	164	169
00001 35	WTHM01	0106	CS	BN	PRENTISS	2MS		211155	0	0	0	0	0	0	0	0
00001 35	WTHM02	0106	CS	BN	CP SHELBY	2MS		021153	4	6	296	306	4	6	296	306
00001 35	WTHM03	0106	CS	BN	TAYLORSVILLE	2MS		121054	0	0	0	0	0	0	0	0
00001 35	WTHM04	0106	CS	BN	MONTICELLO	2MS		000000	0	0	0	0	0	0	0	0
00001 35	WTHM05	0106	CS	BN	CP MCCAIN	2MS		000000	0	0	0	0	0	0	0	0
00001 35	WTHM06	0106	CS	BN	KATLEHURST	2MS		090249	17	0	94	111	17	0	94	111
00001 35	WTHM07	0106	CS	BN	MONTICELLO	2MS		250150	18	9	121	148	18	9	121	148
00001 35	WTHM08	0106	CS	BN	MONTICELLO	2MS	63085LNG090194		43	16	675	734	43	16	675	734
00001 40	WPK098	0198	AR	BN	AMORY	2MS			0	0	0	0	0	0	0	0
00001 40	WPK099	0198	AR	BN	AMORY	2MS	MGVFK0990189	070247	0	0	9	9	0	0	9	9

ARMY ORGANIZATION MASTER - STATE/TPSN SEQUENCE

TPSN/EL	UIC	UNIT NO	PAR US BR LEV RS	DESCRIPTION	HOME LOCATION	ST	MTOE/TDA	PERREC DATE	STRUCTURED STRENGTH			AUTHORIZED STRENGTH				
									OFF	NO	EML	AGG	OFF	NO	EML	AGG
00001 40	WPKQAO	0198 AR BN	01	CO A TANK	BALDWIN	2MS		281155	5	0	57	62	5	0	57	62
00001 40	WPKRGO	0198 AR BN	01	CO B TANK	BOONEVILLE	2MS		040647	5	0	57	62	5	0	57	62
00001 40	WPKRGO	0198 AR BN	01	CO C TANK	LUKA	2MS		160947	5	0	57	62	5	0	57	62
00001 40	WPKQAO	0198 AR BN	01	CO D TANK	NETTLETON	2MS		021255	5	0	57	62	5	0	57	62
00001 40	WPKQTO	0198 AR BN	01	MHC TANK	ANDRY	2MS		070247	21	1	309	331	21	1	309	331
00001 40	WPKQTI	0198 AR BN	01	MHC DET 1	FULTON	2MS		160751	0	0	0	0	0	0	0	0
00001 40	WPKQAA	0198 AR BN	01	TANK	ANDRY	2MS	17375LNG030193		41	1	537	579	41	1	537	579
00001 40	WPKGPP	0198 AR BN	02	TANK AUG TDA	GREENVILLE	2MS	HGXRF6990189	021246	0	0	9	9	0	0	9	9
00001 40	WPKRGO	0198 AR BN	02	CO A TANK	MOOREHEAD	2MS		271048	5	0	57	62	5	0	57	62
00001 40	WPKGGO	0198 AR BN	02	CO B TANK	INDIANOLA	2MS		100447	5	0	57	62	5	0	57	62
00001 40	WPKGGO	0198 AR BN	02	CO C TANK	CLEVELAND	2MS		280547	5	0	57	62	5	0	57	62
00001 40	WPKFPO	0198 AR BN	02	CO D TANK	ROLLING FORK	2MS		220556	5	0	57	62	5	0	57	62
00001 40	WPKGTO	0198 AR BN	02	MHC TANK	GREENVILLE	2MS		021246	21	1	309	331	21	1	309	331
00001 40	WPKGTT	0198 AR BN	02	MHC DET 1	LELAND	2MS		250456	0	0	0	0	0	0	0	0
00001 40	WPKGAA	0198 AR BN	02	TANK	GREENVILLE	2MS	17375LNG030193		41	1	537	579	41	1	537	579
00001 40	WPKHAA	0021 AR DET		REAR CP OP CCLL TUPELO		2MS	87103LNG030192	000000	7	0	12	19	7	0	12	19
00001 42	WPKLPP	0155 IN BN	01	AUG TDA	MCOMB	2MS	HGXPKL990189	120847	0	0	13	13	0	0	13	13
00001 42	WPKLJO	0155 IN BN	01	CO A MECH	TYLENTON	2MS		300547	5	0	102	107	5	0	102	107
00001 42	WPKLGO	0155 IN BN	01	CO B MECH	KATCHEZ	2MS		260847	5	0	102	107	5	0	102	107
00001 42	WPKLCS	0155 IN BN	01	CO C MECH	WENDENHALL	2MS		211254	5	0	102	107	5	0	102	107
00001 42	WPKLPO	0155 IN BN	01	CO D MECH	GLOSTER	2MS		011177	5	0	102	107	5	0	102	107
00001 42	WPKLEO	0155 IN BN	01	CO E ANTIARMOR	MAGNOLIA	2MS		141255	5	0	60	65	5	0	60	65
00001 42	WPKLTO	0155 IN BN	01	MHC MECH	MCOMB	2MS		120847	21	1	308	330	21	1	308	330
00001 42	WPKLTY	0155 IN BN	01	MHC DET 1	HEADVILLE	2MS		030747	0	0	0	0	0	0	0	0
00001 42	WPKLVE	0155 IN BN	01	MHC DET 2	BROOKHAVEN	2MS		280449	0	0	0	0	0	0	0	0
00001 42	WPKLJZ	0155 IN BN	01	MHC DET 3	PORT ELSBOR	2MS		101156	0	0	0	0	0	0	0	0
00001 42	WPKLJA	0155 IN BN	01	MECH	MCOMB	2MS	07245LNG404093		46	1	776	823	46	1	776	823

TOTALS FOR TPSN: 00001

288 26 3853 4167 288 26 3853 4167

ARNG ORGANIZATION MASTER - STATE/TPSN SEQUENCE

04001	WBOFF	0218	IN BDE	MECH	HEUBERRY	ZSC		0	0	0	0	0	0	0	0	0	0	0	0
04001	WJA190	0001	IN HHC	AUG CARRIER	HEUBERRY	ZSC		0	0	0	0	0	0	0	0	0	0	0	0
04001	WP73AA	0125	EM CO	SEP BDE	SMITHOVILLE	ZSC	05143LXG060192	100247	7	1	201	209	7	1	201	209			
04001	WBO99B	0218	IN HHC	BDE AUG TDA	HEUBERRY	ZSC	NGWYB0980190	040152	0	1	1	2	0	1	1	2			
04001	WV85AA	0218	IN HHC	BDE	HEUBERRY	ZSC	87102LXG050192	C30347	46	4	236	286	46	4	236	286			
04001	WV8AA1	0202	AR TRP	TRP B DET 1	RIEDELAND	ZSC		251147	0	0	0	0	0	0	0	0	0	0	0
04001	WV82AA	0202	AR TRP	TRP B EAV	BEAUFORT NCAS	ZSC	17387LXG040290	110347	6	0	146	152	6	0	146	152			
04001	WP3599	0178	FA BN	01 155 SP AUG TPA	GREER	ZSC	NGWP35990190	180247	0	0	10	10	0	0	10	10			
04001	WP35A0	0178	FA BN	01 8TY A 155 SP	LYMAN	ZSC		150247	3	0	79	82	3	0	79	82			
04001	WP35B0	0178	FA BN	01 8TY B 155 SP	PACOLET HILLS	ZSC		030247	3	0	79	82	3	0	79	82			
04001	WP35C0	0178	FA BN	01 8TY C 155 SP	HANNING	ZSC		310048	3	0	79	82	3	0	79	82			
04001	WP35D0	0178	FA BN	01 SVC 8TY 155 SP	INMAN	ZSC		010459	2	1	133	136	2	1	133	136			
04001	WP35E1	0178	FA BN	01 SVC 8TY DET 1	HEMINGWAY	ZSC		040347	0	0	0	0	0	0	0	0	0	0	0
04001	WP35TD	0178	FA BN	01 HMB 155 SP	GREER	ZSC		180247	34	1	192	227	34	1	192	227			
04001	WP35AA	0178	FA BN	01 155 SP	GREER	ZSC	06365LXG110292		45	2	562	609	45	2	562	609			
04001	WV8199	0163	CS BN	AUG TDA	HAMPTON	ZSC	NGWBT990190	140247	0	0	5	5	0	0	5	5			
04001	WV81A0	0163	CS BN	CO A S & T	BAMBERG	ZSC		140547	4	1	161	166	4	1	161	166			
04001	WV81B0	0163	CS BN	CO B MAINT	ORANGEBURG	ZSC		300347	4	6	286	296	4	6	286	296			
04001	WV81C0	0163	CS BN	CO C HEB	DARLINGTON	ZSC		190247	13	4	100	117	13	4	100	117			

ARMY ORGANIZATION MASTER - STATE/TPSN SEQUENCE

UNIT NO	PAR US	DESCRIPTION	MOORE LOCATION	ST	HTOE/TDA	FEDREC DATE	STRUCTURED STRENGTH OFF VO	ENL	AGG	AUTHORIZED STRENGTH OFF VO	ENL	AGG
04001 35	WPTTO		HAMPTON	25C		140247	18	14	151	18	14	151
04001 35	WPTAA		HAMPTON	25C	6308SLNG070292		39	25	730	39	25	730
04001 40	WPT799	02 AUG T0A	ROCK HILL	25C	M4PVT990190	070247	0	0	10	0	0	10
04001 40	WPT7A0	02 CO A TANK	GAFFNEY	25C		300649	5	0	62	5	0	62
04001 40	WPT7B0	02 CO B TANK	FT RELL	25C		200247	5	0	62	5	0	62
04001 40	WPT7C0	02 CO C TANK	CLOVER	25C		010749	5	0	62	5	0	62
04001 40	WPT7D0	02 CO D TANK	YORK	25C		250447	5	0	62	5	0	62
04001 40	WPT7E0	02 HHC TANK	ROCK HILL	25C		070247	21	1	319	21	1	319
04001 40	WPT7A	02 TANK	ROCK HILL	25C	17375LNG190293		41	1	525	41	1	525
04001 42	WPSK99	01 MECH AUG TDA	MT PLEASANT	25C	M4PVS990190	110247	0	0	10	0	0	10
04001 42	WPSKAD	01 CO A MECH	CHARLESTON	25C		100247	5	0	104	5	0	104
04001 42	WPSK93	01 CO B MECH	SUMMERVILLE	25C		140347	5	0	104	5	0	104
04001 42	WPSKCO	01 CO C MECH	WALTERBORO	25C		120247	5	0	104	5	0	104
04001 42	WPSKUG	01 CO D MECH	MORRIS CORNER	25C		070347	5	0	104	5	0	104
04001 42	WPSKED	01 CO E ANTIARMOR	ST GEORGE	25C		011078	5	0	55	5	0	55
04001 42	WPSK19	01 HHC MECH	MT PLEASANT	25C		110247	21	1	308	21	1	308
04001 42	WPSK11	01 HHC DET 1	MO CHARLESTON	25C		110247	0	0	0	0	0	0
04001 42	WPSKJA	01 MECH	MT PLEASANT	25C	07245LNG332093		46	1	779	46	1	779
04001 42	WPSM99	06 MECH AUG TDA	UNION	25C	M4PVS990190		0	0	10	0	0	10
04001 42	WPSMAD	06 CO A MECH	WINTERBORO	25C		290447	5	0	104	5	0	104
04001 42	WPSM93	06 CO B MECH	CHESTER	25C		040347	5	0	104	5	0	104
04001 42	WPSMCO	06 CO C MECH	JONESVILLE	25C		050247	5	0	104	5	0	104
04001 42	WPSM9D	06 CO D MECH	WHITFIRE	25C		130148	5	0	104	5	0	104
04001 42	WPSMED	06 CO E ANTIARMOR	GAFFNEY	25C		100447	5	0	55	5	0	55
04001 42	WPSMTO	06 HHC MECH	UNION	25C		040247	21	1	308	21	1	308
04001 42	WPSM11	06 HHC DET 1	WOODRUFF	25C		060247	0	0	0	0	0	0
04001 42	WPSM12	06 HHC DET 2	LOCKHART	25C		210347	0	0	0	0	0	0
04001 42	WPSMAA	06 MECH	UNION	25C	07245LNG332093		46	1	779	46	1	779

TOTALS FOR TFSH: 04001

276 36 3940 4252 276 36 3940 4252

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2. *Army Reserve Component Training Technology--A Progress Report*, IDA Paper P-1971, January 1987.
3. *Enlisted Career Management Fields and Military Occupational Specialties*, Army Regulation 611-701, 30 April 1992.
4. *Reserve Components Troop Basis of the Army, Annex I, Army National Guard Unit Program*, 30 September 1993.
5. *Standard Installation/Division Personnel System Data Element Dictionary*, National Guard Pamphlet (AR) 25-10, H2, Department of the Army, 2 November 1992.
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# REPORT DOCUMENTATION PAGE

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13. ABSTRACT (Maximum 180 words) This study concerns two ARNG brigades that are scheduled to rotate to the National Test Center (NTC) in three years. The purpose of the study is to identify Combat Service Support (CSS) military occupational specialties (MOSSs) that would be expected to benefit most by some form of individual training that would supplement training given to ARNG personnel by current training curricula; additional technical training for unskilled personnel is a particular concern. Measuring the benefits of the supplementary training is still uncertain; the benefits might be determined by measurements at the NTC, and/or compared with the training state of other units that do not receive supplementary training. Training requirements, by MOS, are developed for zero-skill-level personnel in a control group of two brigades whose missions and personnel strengths are comparable to those of the test brigades. Besides identifying training requirements for zero-skill-level personnel, with and without prior service, the training needs for non-zero-skill-level personnel, with and without prior service, the training needs for non-zero-skill-level personnel, who occupy positions requiring higher skill levels, are also identified.				
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