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Nationwide Survey of Soldier Perceptions of Reserve Component (RC) Training

Mark Eisley and Myron P. Viner
Allen Corporation of America

September 1989

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and noncommissioned officers with paid time outside of drills for planning purposes, and reducing or reallocating unit nontraining requirements. A variety of options for increasing the amount of available training time were also endorsed. These options focused on individual skill development and included the notions of self-conducted training and seasonal active duty. In regard to training realism, most soldiers agreed that more realistic training could be achieved through increased availability of wartime equipment and greater use of simulators and training devices. Results of the survey suggest that improved training could reduce attrition and promote readiness.

Technical Report 861

**Nationwide Survey of Soldier
Perceptions of Reserve Component
(RC) Training**

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Simulators and Training Devices

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FOREWORD

Effective and efficient Reserve Component (RC) training is of paramount importance under Total Force Policy. Relative to Active Component (AC) training, however, RC training presents unique challenges. RC soldiers must overcome greater small-unit geographical dispersion and train with less time, mission-essential equipment, and access to major training/maneuver areas than their AC counterparts. Contained in this report are the results of a nationwide survey conducted to identify the specific kinds of training problems encountered in the RC environment and offer solutions to the problems from the perspective of the soldier.

The survey was conducted by the Training Technology Field Activity-Gowen Field (TTFA-GF), whose mission is to improve the effectiveness and efficiency of RC training through the use of the latest in training technology. The research task supporting this mission is entitled "Application of Technology to Meet RC Training Needs" and is organized under the "Training For Combat Effectiveness" program area.

The National Guard Bureau (NGB), Office of the Chief, Army Reserve (OCAR), and U.S. Army Forces Command (FORSCOM) sponsored this project under a Memorandum of Understanding, signed 12 June 1985, establishing the TTFA-GF. The results of this survey have been presented to Assistant Secretary of Defense (Reserve Affairs); Director, NGB; Director, Army National Guard; Chief and Deputy Chief, Army Reserve; Chief, Training Support Branch, NGB; Chief, Training Division, OCAR; Chief, RC Training Integration Division, DAMO-TRR; Chief, RC Branch FORSCOM; Director, Training Development and Analysis Directorate, U.S. Army Training and Doctrine Command (TRADOC); the 1988 Adjutant's General Conference; and the Adjutant General of Idaho.



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

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NATIONWIDE SURVEY OF SOLDIER PERCEPTIONS OF RESERVE COMPONENT (RC) TRAINING

EXECUTIVE SUMMARY

Requirement:

Effective and efficient Reserve Component (RC) training is of paramount importance under current Total Force Policy. Relative to Active Component (AC) training, RC training presents unique challenges. RC units, for example, must overcome greater geographical dispersion, and train with less time, mission-essential equipment, and access to major training areas than their AC counterparts. The present survey asked Army RC soldiers what kind of training problems they were encountering in this environment and how these problems might be solved.

Procedure:

Separate survey instruments were constructed for officers, noncommissioned officers (E5-E9), and junior enlisted soldiers (E1-E4). Questions for each group were developed on the basis of (a) guidance from Forces Command (FORSCOM), the National Guard Bureau (NGB), and Office of the Chief, Army Reserve (OCAR); (b) findings from a prior review of RC-related survey literature; and (c) results of a related assessment of RC training needs within the state of Idaho. Questions focused on identifying potential solutions to problems perceived in the areas of training and soldier retention, with the emphasis placed on training.

A nationwide, stratified, random sample of 7,446 Army Selected Reserve soldiers was selected from the Reserve Components Common Personnel Data System data base. At the time of survey distribution, 1,530 soldiers were no longer in the same unit under which they were listed in the data base. This left a total of 5,916 potential respondents. Surveys were mailed to these soldiers through their commanding officers. Soldiers returned completed surveys in sealed, postage-paid, preaddressed envelopes to their commanders, who then mailed them back to the collection center. Overall survey return rate was 69.4%. Table 1 shows the number and percentage of soldiers who responded by rank and component.

Table 1
Numbers and percentages of surveys returned

Rank	<u>Army National Guard (ARNG)</u>		<u>U.S. Army Reserve (USAR)</u>		<u>Total</u>	
	Number	%	Number	%	Number	%
Jr. enlisted	960	68	465	54	1425	63
NCO	960	76	430	61	1390	71
Officer	730	80	559	72	1289	76
Combined	2650	74	1454	62	4104	69

Findings:

Few differences in responses were found on the basis of where soldiers were located, i.e., Continental United States Army (CONUSA) or what component they were in, i.e., United States Army Reserve (USAR) or Army National Guard (ARNG). Some differences were found, however, on the basis of rank. These will be discussed in relation to the survey questions on which they occurred.

In general, survey results showed that soldiers are satisfied with being in the RC. Thus, the problems and solutions presented below in regard to training and retention should be interpreted against this positive backdrop.

Training

In regard to training, soldiers perceived two basic problem areas: insufficient time and realism. Their problems are discussed in turn below, along with their suggested solutions.

Problem: Insufficient Training Time

Most (56%) NCOs and officers felt that they needed more time to train subordinates. Most (66%) soldiers also agreed that more time should be devoted to training individual skills before attempting unit training. They did not agree, however, that less time should be spent on unit training. Thus, more individual skill training was desired but not at the expense of unit training.

Although the perception was that more individual skill training time is needed, soldiers indicated that they were unwilling to spend any additional time under current training options. Less than half (32%) of the RC soldiers surveyed, for example, would be willing to devote additional time in the form

of more weekend drills, extra annual training (AT) periods (38%), longer AT periods (44%), or longer multiple unit training assemblies (43%). Thus, more acceptable ways to increase time for individual skill training are needed. Some suggested solutions are listed below. They include eliminating wasted drill time, increasing the quality and availability of formal training options, and providing an opportunity for self-conducted training.

Solutions to Insufficient Training Time

1. Use drill time more efficiently. NCOs indicated that only 35% of their drill time was spent conducting training. Junior enlisted soldiers said that only 31% of their drill time was spent receiving training while 28% of drill time was actually spent doing nothing. Fifty-eight percent of all soldiers surveyed felt that the biggest reason drill time was not used well was because of interference from nontraining requirements, e.g., administrative tasks. Wasted time needs to be eliminated and time spent on nontraining activities needs to be reduced at the unit level so that a greater percentage of available drill time can be spent building or maintaining requisite skills. Some of the ways to eliminate wasted time include

a. Provide more hip-pocket/opportunity training. One way to increase drill time efficiency is through the use of hip-pocket/opportunity training, i.e., individual skill training conducted by squad/section leaders during breaks and pauses in collective training activities. Hip-pocket training provides more usable training time because it converts existing wasted or "down time" into productive training time. Although soldiers felt that hip-pocket training needed improvement, they endorsed it as one of the ways for making training more effective and efficient (see Table 2).

b. Give NCOs and officers more paid time to plan. As shown in Table 3, about half (49%) of the NCOs and officers felt that they did not have enough time to plan and prepare for training. In addition, although there were differences in perception across ranks, over half (58%) of all soldiers surveyed felt that training needed to be better planned and organized. Currently, NCOs and officers spend an average of 2 hours out of every 16-hour drill planning training rather than conducting training. They also spend an average of 4 unpaid hours per month planning training outside of drill. Apparently, the amount of planning time is still not enough given most soldiers' perception of disorganization. NCOs (64%) and officers (72%) did say that they would be willing to devote more time outside of drill if they were paid to do so. This time could be used for planning, with the result being increased drill efficiency without increased drill frequency. Without additional pay, however, it is unlikely that a sufficient amount of extra planning time will be donated in the future.

Table 2

Percentage of soldiers agreeing with questions about hip-pocket/opportunity training

Survey question	E1-E4	E5-E9	Officers	Overall
Hip-pocket training materials are important contributors to NCO success in training subordinates	--a	--	--	69
Hip-pocket/opportunity training needs to be improved	--	--		63
Hip-pocket/opportunity training should be conducted more often	--	--	--	59
Better hip-pocket training would really improve my unit's training	--	--	--	61

^aPercentages are listed separately for all three ranks only when the percentages for at least two ranks reliably differ from one another.

Table 3

Percentage of soldiers agreeing with questions about planning

Survey question	E1-E4	E5-E9	Officers	Overall
Training needs to be better planned/organized	61	59	46	58
Not enough time to prepare	--a	--	--	49

^aJunior enlisted soldiers were not asked this question.

c. Increase the flexibility/variety of training options. Options that require full unit attendance, such as longer or more frequent drill or AT periods, will not be successful because most part-time soldiers are not willing to devote additional time in these ways. If attendance is enforced, then attrition could go

up. The flexibility/variety of training options needs to be increased to accommodate those soldiers who are willing to spend more time per se. The Army can leverage this willingness only if training options require the individual soldier, and not the entire unit, to be present. Example options might include (a) drills that focus only on individual skills, and (b) Split Unit Training Assemblies (SUTAs) for which soldiers could individually volunteer. The key is to have enough training option flexibility to (a) leverage the time offered by those who can devote it, and (b) not force into attrition those who cannot.

Some soldiers, for example, said that they were willing to participate in seasonal active duty (2 or 3 months a year). Although this option would not be for everyone, Table 4 shows that a substantial percentage of soldiers would be able to go on seasonal active duty if they could specify at least the time of year, and even a greater percentage if they could specify both the time and place. Fifty-six percent of the junior enlisted soldiers, 44% of the NCOs, and 34% of the officers surveyed agreed that they could assume full-time active duty with the RC on a seasonal basis if given the option of when and where. This extended time could be spent in military schools or training with AC units. Table 4 also shows that most soldiers, especially officers, would be willing to devote additional paid time (about 16 hours per month) between drills but not necessarily during drills. Training options should be developed that take advantage of this significant chunk of time.

2. Increase quality/availability of formal training options. This option would include allocation of more funds to send RC soldiers to AC schools for training. Officers (65%), NCOs (62%), and junior enlisted soldiers (49%) all agree that this additional funding is needed to increase AC school availability to the RC. This option would also call for the improvement of Reserve Forces (RF) schools. As shown in Table 5, RF schools are more available than AC schools, but they are perceived by RC soldiers to be lower in quality.

When offered as one of multiple means for MOS qualification, RC soldiers preferred larger proportions of training to come from AC school, supervised on-the-job training (SOJT), and home study than from RF school. When offered as a sole means for MOS qualification, RC soldiers across both components preferred AC school and SOJT over RF school. These findings reveal much potential for improvement in the reliability and quality of course offerings by RF schools.

Table 4

Percentage of soldiers willing to devote more time to the RC in specific ways

Survey question	E1-E4	E5-E9	Officers	Overall
Willing to work more paid drills	28	33	42	32
Willing to work more MUTA-5's & -6's	--	--	--	43
Willing to work more paid time between drills	63	64	72	67
Willing to work 2-3 months active duty if I select site but not time	--	--	--	15
Willing to work 2-3 months active duty if I select time but not site	--	--	--	34
Willing to work 2-3 months active duty if I select site and time	56	44	34	47

Table 5

Percentage of soldiers agreeing with questions about AC and RF schools

Survey question	Schools	
	AC	RF
Good instructors	86	69
Good course content	86	69
Good facilities	86	45
Good equipment	82	50
Easy-to-meet schedule	50	62
Enough student openings	53	60

Besides AC and RF school training, a third formal training option could be structured SOJT, e.g., an organized training plan detailing what tasks need to be trained, as well as how and when

task training is to be conducted and subsequent performance tested. Structured SOJT could be a reasonable alternative when funding for AC school attendance is not available and needed training courses are not offered through RF school. Of the soldiers surveyed, 87% agreed that SOJT was effective, and 83% agreed that MOS qualification would take longer if SOJT were eliminated. Only 23% agreed that quality would improve if SOJT were eliminated, whereas 54% agreed that attrition would increase if SOJT were no longer an option. Besides AC school training, SOJT is the method most preferred by RC soldiers for MOS reclassification training. Part of structured SOJT could involve the option of self-conducted training as described next.

3. Allow for self-conducted training. RC soldiers should be offered the opportunity to train themselves outside of regular drill while at home. As shown in Table 6, soldiers liked the notion of home study (even when coupled with followup performance testing) and believed that video-cassettes, computers, or simulators would be particularly effective instructional media within the home environment. Soldiers said that they would work more paid hours if allowed to do so at home and a greater percentage agreed that home study should be done in addition to (77%), rather than in place of (48%), regular drills.

Table 6
Percentage of soldiers agreeing with questions about home study

Survey question	E1-E4	E5-E9	Officers	Overall
I would work more paid hours if I could study at home w/ followup testing	--	--	--	68
I would do home study in addition to regular drill	--	--	--	77
I would do home study in place of regular drill	--	--	--	48
Home study with video cassettes would be effective	--	--	--	87
Home study with computers would be effective	--	--	--	65

On the basis of survey responses, it is apparent that soldiers would participate in a training option that would allow them to conduct at least some self-training under minimal unit

supervision, perhaps in the form of followup performance testing. This testing would be necessary to certify that training requirements were indeed met. Such a self-conducted training and evaluation program could form the nucleus of structured SOJT and be used to supplement Inactive Duty Training (IDT)/Annual Training (AT) and contribute substantially to solving the problems associated with MOS reclassification and skill sustainment training. Although the program could be administered through RF schools, the chain of command could continue to hold control over soldier participation, evaluation, and compensation.

If adopted, a self-conducted training program should include the following features:

1. It should be offered in addition to and not in place of regular drills.
2. It should involve materials and equipment that preferably can be taken home or at least individually scheduled for use at the armory, training center, or other local training facility.
3. Performance evaluation/testing should provide the basis for determining if soldiers have completed training and should be paid.
4. Payment should be based on the number of tasks completed and performance tests passed and not on the amount of time spent.

Problem: Insufficient Realism

Throughout the Army, realistic training during peace time is difficult to conduct because of safety and environmental concerns. In addition, RC units must overcome specific constraints, such as limited access to range/maneuver areas and lack of mission-essential equipment, that reduce training realism even further. Most RC soldiers agreed that training would be more realistic if supported by (a) more wartime equipment (76% agree), (b) more simulators and training devices (73% agree), and better physical facilities (72% agree).

Although AT is seen by soldiers in the field as being highly effective (93% agreed), there is a question as to whether even collective training is realistic enough. This is because the Multiple Integrated Laser Engagement System (MILES) is used infrequently, even among combat arms units. Seventy-three percent of the soldiers surveyed from combat arms units said that they rarely or never used MILES; 53% have never personally used MILES; 46% said that soldiers in their units knew how to operate MILES; and 26% said that someone in their unit could maintain MILES equipment. This relatively low level of experience

with MILES equipment would suggest a deficit in the number and realism of tactical engagement simulation exercises conducted. What can be done then to promote realistic training?

Solutions to Insufficient Realism

1. Increase computer/simulator availability at armories and training centers. Surveyed officers and NCOs felt that one of the greatest training obstacles they had to overcome was the lack of simulators and training devices. Soldiers of all ranks were highly in favor of adding more realism to training by having more access to whole- and part-task simulators, microcomputers, and training devices. Eighty-one percent of the soldiers surveyed, for example, agreed that simulators could help them maintain their skills; 65% felt that simulators needed to be used more often; 86% would use computers during drills, and 62% would use them between drills, if they were available.

2. Facilitate and encourage more frequent and effective use of MILES. Seventy-three percent of combat arms soldiers said that MILES would help them train better. Such technology can provide challenging opportunities to make decisions and exercise collective skills, which otherwise cannot be performed frequently. Not only would MILES usage improve collective skill proficiency, but also proficiency on such individual skills as use of cover and concealment, marksmanship, employment of crew-served weapons, and fire control techniques.

One suggested method for increasing the frequency and quality of MILES use is to set up full-time training committees to help with MILES installation on vehicles. Seventy percent of combat arms soldiers agreed with this suggestion. The same committees could also help to control and umpire MILES-based tactical engagement exercises. Sixty-seven percent of combat arms soldiers agreed that such committees should be used to fill this role.

Retention

Although the primary emphasis of the present survey was on training, some questions were also asked about soldier retention. The purpose of these questions was both to (a) identify reasons why soldiers might want to leave as well as stay in the RC, and (b) determine whether or not training quality is a factor related to attrition.

Problem: Attrition

The five most frequently mentioned reasons for soldiers wanting to leave the RC are listed in Table 7. All are about equal in importance and relate to a lack of recognition/promotion

(especially at the junior enlisted level), wasted training time and an associated limited sense of accomplishment, and civilian job and family concerns.

Table 7
Percentage of soldiers agreeing with reasons for wanting to leave the RC

Survey question	E1-E4	E5-E9	Officers	Overall
Lack of promotion	42	33	18	33
Wasted training time	34	28	25	30
Low sense of accomplishment within the RC	--	--	--	30
Lack of recognition	33	29	20	29
Civilian job/family	--	--	--	28

Solutions to Attrition

The apparent solutions to solving RC retention problems lie mostly in three areas: (a) increasing soldiers' sense of accomplishment through better training and use of time, (b) providing sufficient recognition for noteworthy performance, and (c) leveraging those aspects of the RC that motivate soldiers to stay in. As shown in Table 8, the most important reason why soldiers remain in the RC is the friendship established with other soldiers. Other reasons include doing something worthwhile, the opportunity to protect the country, leadership opportunities, and retirement benefits.

By providing better training, unit leaders can reduce wasted time and give soldiers a greater sense of accomplishment. Both will lead to better soldier retention. Correlations among survey responses revealed that quality of training is positively related to soldier satisfaction ($r = .62$), and that satisfaction is related to retention ($r = .76$). Although correlation does not prove causation, these findings at least suggest that a higher quality of training will lead to a greater level of soldier satisfaction which, in turn, will lead to greater retention.

Table 8

Percentage of soldiers agreeing with reasons for wanting to stay in the RC

Survey question	E1-E4	E5-E9	Officers	Overall
Friends in unit	--	--	--	82
Doing something worthwhile	73	81	87	79
Chance to defend country	--	--	--	77
Leadership opportunity	65	76	84	73
Retirement benefits	59	77	80	70

Unit leaders can also influence retention by ensuring that soldiers receive recognition for noteworthy accomplishment, opportunities for advancement to the extent possible, and prompt promotion when earned. A recognition system could also be implemented to acknowledge smaller increments of progress toward promotion. This would allow leaders to do even more to give RC soldiers the needed sense of accomplishment.

Lastly, unit leaders can influence retention by encouraging friendships among unit members. One way to do this would be to assign friendly "sponsors" to new unit members. Such efforts should not only increase retention, but also help to build unit cohesion.

Conclusions

Training

Insufficient time. Overall, RC soldiers perceived training to suffer from a lack of available time. While there may indeed not be enough training time available, the amount of shortfall will continue to be difficult to estimate until available time is used efficiently. Thus, efficient use of available time is necessary before a legitimate case can be made for needing more. Surveyed soldiers indicated that current training efficiency could be improved by (a) increasing emphasis on the use of hip-pocket/opportunity training, (b) providing officers and NCOs with paid time for planning outside of drill, and (c) reducing or reallocating unit nontraining requirements.

If actions such as these are taken and there still is not enough time, then the question becomes "Where can additional time be found?" Survey results indicated that soldiers were unwilling

to devote more time under current options, e.g., longer or more frequent drills or AT periods. To mandate such options would surely aggravate retention.

Fortunately, there are ways to increase training time, especially that for individual skill development, that are more acceptable to the part-time soldier. Junior enlisted soldiers, for example, endorsed the notion of self-conducted training with followup performance testing, and seasonal active duty if given the choice of time and location. Officers and NCOs said that they would be willing to spend more time planning for training if paid to do so. Additional planning time would increase training efficiency, especially during weekend drills where the need seems to be the greatest.

In general, a variety of different options is needed to give soldiers the opportunity to devote more training time in ways that fit their personal situation. Options that would not require full unit participation, e.g., self-conducted training, would seem to hold the most promise.

Insufficient realism. Most soldiers agreed that training in general could be improved through increased availability and use of wartime equipment and simulators/training devices. Actions to achieve this end should also ensure the desired level of realistic training. Better and more frequent use of MILES for simulated tactical engagement exercises, for example, would provide RC soldiers with the opportunity to make the kinds of decisions and perform the kinds of collective skills that would also be exercised within a "real" threat environment.

Retention

Although training issues were the primary concern of the present survey, soldiers were also asked about their reasons for wanting to leave or remain in the RC. Their reasons for wanting to leave related to wasted training time and an associated limited sense of accomplishment, lack of recognition/promotion, and civilian job and family concerns. Their primary reason for wanting to stay was friendship with fellow unit members.

Thus, unit leaders can influence retention in several ways. First, they can provide better training. This will serve to reduce the amount of wasted training time and give soldiers a greater sense of accomplishment. Second, they can ensure that soldiers receive recognition for noteworthy accomplishment, opportunities for advancement when possible, and prompt promotion when earned. And third, they can encourage friendships among unit members to not only increase retention, but also to build unit cohesion.

Utilization of Findings:

The perceptions of RC soldiers revealed through this survey should be helpful to agencies responsible for ensuring the effectiveness and efficiency of RC training. Survey results identify problem areas in need of attention and the feasibility of various solutions.

NATIONWIDE SURVEY OF SOLDIER PERCEPTIONS OF RESERVE
COMPONENT (RC) TRAINING

CONTENTS

	Page
INTRODUCTION	1
The Need for Readiness	1
BACKGROUND	2
PURPOSE	2
PERTINENT LITERATURE	3
METHOD	9
Instrument Design	9
Sampling Plan	11
Data Collection	12
RESULTS	17
How to Access the Results	17
Conventions Used to Present the Results	17
Demographics	24
Involvement	38
Training Descriptions	42
Quality of Training	60
Satisfaction	91
Performance	102
Reactions to Proposed Improvements	105
Correlations Among Major Dimensions	123
CONCLUSIONS AND RECOMMENDATIONS	137
General	137
Satisfaction	138
Training Descriptions	139
Training Improvement	140
Quality of Training	143
Performance	143
Involvement	144
REFERENCES	145
APPENDIX A. Survey Instruments	A-1

CONTENTS (continued)

	Page
APPENDIX B. Results for the Army National Guard (ARNG)	B-1
C. Results for the U.S. Army Reserve (USAR)	C-1

LIST OF TABLES

Table 1. Kinds of data generated by item formats	10
2. Numbers and percentages of surveys returned	13
3. Data analysis scheme	14
4. Grand means and differences by Rank (R), Geography (G), and Component (C) for all soldiers on demographic items	20
5. Group means for all soldiers on demographic items which show a substantial difference by rank	23
6. Group means for all soldiers on demographic items which show a substantial difference by component	25
7. Percentage of ARNG and USAR respondents who answered "Yes" to dichotomous, demographic items and differences in those percentages by Rank (R), Geography (G), and Unit Type (U)	28
8. Employment status in the RC crosstabulated by component	31
9. Employment status in the RC crosstabulated by rank	32
10. Soldier gender crosstabulated by rank across both components	33
11. Soldier gender crosstabulated by component	35
12. Analysis of multiple-choice, ordinal-response questions for soldiers in the ARNG and USAR	36

CONTENTS (continued)

	Page
Table 13. Grand means and differences by Rank (R), Geography (G), and Component (C) for all soldiers on items regarding soldier involvement of training	39
14. Group means for all soldiers on items regarding soldier involvement which showed a substantial difference by Rank	41
15. Grand means and differences by Rank (R), Geography (G), and Component (C) for all soldiers on items regarding descriptions of current training	43
16. Group means for all soldiers on items regarding descriptions of current training which showed a substantial difference by rank	48
17. Group means for all soldiers on items regarding descriptions of current training which showed a substantial difference by component	50
18. Percentage of ARNG and USAR respondents who answered "Yes" to dichotomous training description items and differences in those percentages by Rank (R), Geography (G), and Unit Type (U)	55
19. Training methods for MOS qualification most used by enlisted soldiers in the USAR and ARNG	58
20. Training methods for branch qualification most used by officers in the ARNG and USAR	59
21. Grand means and differences by Rank (R), Geography (G), and Component (C) for all soldiers on items regarding quality of training	62
22. Group means for all soldiers on items regarding quality of training which showed a substantial difference by rank	78

CONTENTS (continued)

	Page
Table 23. Group means for all soldiers on items regarding quality of training which showed a substantial difference by geography	81
24. Group means for all soldiers on items regarding quality of training which showed a substantial difference by component	82
25. Preferences of junior enlisted soldiers and NCOs in the USAR and ARNG on single methods of reclassification training	86
26. Preferences of ARNG and USAR officers on single methods of retraining for change of branch	88
27. Means for all soldiers on quality of school instruction	89
28. Grand means and differences by Rank (R), Geography (G), and Component (C) for all soldiers on items regarding satisfaction	93
29. Group means for all soldiers on items regarding satisfaction which showed a substantial difference by rank	98
30. Grand means and differences by Rank (R), Geography (G), and Component (C) for all soldiers on items regarding performance ability	103
31. Group means for all soldiers on items regarding performance ability which showed a substantial difference by component	106
32. Percentage of ARNG and USAR respondents who answered "Yes" to dichotomous performance ability items and differences in those percentages by Rank (R), Geography (G), and Unit Type (U)	107
33. Grand means and differences by Rank (R), Geography (G), and Component (C) for all soldiers on items regarding reactions to proposed improvements	108

CONTENTS (continued)

	Page
Table 34. Group means for all soldiers on items regarding reactions to proposed improvements which showed a substantial difference by rank	115
35. Means by rank for seasonal full-time active duty	121
36. Pearson correlations between derived scale scores for all soldiers	125
37. Highest correlations found among the subdimensions of six categories of items	135
38. Strengths of correlations found among six dimensions of items	136
B-1. Grand means and differences by Rank (R), Geography (G), and Unit Type (U) for ARNG soldiers on demographic items	B-2
B-2. Group means on demographic items which showed a substantial difference by rank in the ARNG . . .	B-4
B-3. Percentage of ARNG respondents who answered "Yes" to dichotomous, demographic items and differences in those percentages by Rank (R), Geography (G), and Unit Type (U)	B-6
B-4. Employment status in the ARNG crosstabulated by rank	B-9
B-5. Employment status in the ARNG crosstabulated by unit type	B-11
B-6. Soldier gender crosstabulated by unit type in the ARNG	B-12
B-7. Analysis of multiple-choice, ordinal-response questions for soldiers in the ARNG	B-13
B-8. Grand means and differences by Rank (R), Geography (G), and Unit Type (U) for ARNG soldiers on items regarding soldier involvement	B-16
B-9. Group means on items regarding soldier involvement which showed a substantial difference by rank in the ARNG	B-19

CONTENTS (continued)

	Page
Table B-10. Group means on items regarding soldier involvement which showed a substantial difference by unit type in the ARNG	B-20
B-11. Grand means and differences by Rank (R), Geography (G), and Unit Type (U) for ARNG soldiers on items regarding descriptions of current training	B-22
B-12. Group means on items regarding descriptions of current training which showed a substantial difference by rank in the ARNG	B-27
B-13. Group means on items regarding descriptions of current training which showed a substantial difference by unit type in the ARNG	B-29
B-14. Group means on items regarding descriptions of current training which showed a substantial difference by geography in the ARNG	B-32
B-15. Percentage of ARNG respondents who answered "Yes" to dichotomous items regarding training descriptions and differences in those percentages by Rank (R), Geography (G), and Unit Type (U)	B-36
B-16. Training methods for MOS qualification most used by ARNG soldiers	B-39
B-17. Training methods for branch qualification most used by officers in the ARNG	B-40
B-18. Grand means and differences by Rank (R), Geography (G), and Unit Type (U) for ARNG soldiers on items regarding quality of training	B-42
B-19. Group means on items regarding quality of training which showed a substantial difference by rank in the ARNG	B-58
B-20. Group means on items regarding quality of training which showed a substantial difference by unit type in the ARNG	B-61

CONTENTS (continued)

	Page
Table B-21. Preferences of junior enlisted soldiers and NCOs in the ARNG on single methods of reclassification training	B-64
B-22. Preferences of ARNG officers on single methods of retraining for change of branch	B-65
B-23. Grand means and differences by Rank (R), Geography (G), and Unit Type (U) for ARNG soldiers on items regarding satisfaction . . .	B-67
B-24. Group means on items regarding satisfaction which showed a substantial difference by rank in the ARNG	B-72
B-25. Grand means and differences by Rank (R), Geography (G), and Unit Type (U) for ARNG soldiers on items regarding performance ability	B-77
B-26. Group means on items regarding performance ability which showed a substantial difference by rank in the ARNG	B-80
B-27. Percentage of ARNG respondents who answered "Yes" to dichotomous items and differences in those percentages by Rank (R), Geography (G), and Unit Type (U)	B-81
B-28. Grand means and differences by Rank (R), Geography (G), and Unit Type (U) for ARNG soldiers on items regarding reactions to proposed improvements	B-82
B-29. Group means on items regarding reactions to proposed improvements which showed a substantial difference by rank in the ARNG . .	B-89
B-30. Group means on items regarding reactions to proposed improvements which showed a substantial difference by unit type in the ARNG	B-92
C-1. Grand means and differences by Rank (R) and Unit Type (U) for USAR soldiers on demographic items	C-2

CONTENTS (continued)

	Page
Table C-2. Group means on demographic items which showed a substantial difference by rank in the USAR	C-4
. C-3. Group means on demographic items which showed a substantial difference by unit type in the USAR	C-6
C-4. Percentage of USAR respondents who answered "Yes" to dichotomous, demographic items and differences in those percentages by Rank (R), Geography (G), and Unit Type (U)	C-7
C-5. Soldier gender crosstabulated by rank in the USAR	C-10
C-6. Soldier gender crosstabulated by unit type in the USAR	C-12
C-7. Analysis of multiple-choice, ordinal-response questions for soldiers in the USAR	C-13
C-8. Grand means and differences by Rank (R) and Unit Type (U) for USAR soldiers on items regarding soldier involvement	C-16
C-9. Group means on items regarding soldier involvement which showed a substantial difference by rank in the USAR	C-18
C-10. Grand means and differences by Rank (R) and Unit Type (U) for USAR soldiers on items regarding descriptions of current training . . .	C-21
C-11. Group means on items regarding descriptions of current training which showed a substantial difference by rank in the USAR	C-25
C-12. Group means on items regarding descriptions of current training which showed a substantial difference by unit type in the USAR	C-27
C-13. Percentage of USAR respondents who answered "Yes" to dichotomous items and differences in those percentages by Rank (R), Geography (G), and Unit Type (U)	C-33

CONTENTS (continued)

	Page
Table C-14. Training methods for MOS qualification most used by USAR soldiers	C-36
C-15. Training methods for branch qualification most used by officers in the USAR	C-37
C-16. Grand means and differences by Rank (R) and Unit Type (U) for USAR soldiers on items regarding quality of training	C-39
C-17. Group means on items regarding quality of training which showed a substantial difference by rank in the USAR	C-54
C-18. Group means on items regarding quality of training which showed a substantial difference by unit type in the USAR	C-57
C-19. Preferences of enlisted soldiers and NCOs in the USAR on single methods of reclassification training	C-61
C-20. Preferences of USAR officers on single methods of retraining for change of branch	C-62
C-21. Grand means and differences by Rank (R) and Unit Type (U) for USAR soldiers on items regarding satisfaction	C-64
C-22. Group means on items regarding satisfaction which showed a substantial difference by rank in the USAR	C-69
C-23. Group means on items regarding satisfaction which showed a substantial difference by unit type in the USAR	C-73
C-24. Grand means and differences by Rank (R) and Unit Type (U) for USAR soldiers on items regarding performance ability	C-75
C-25. Group means on items regarding performance ability which showed a substantial difference by rank in the USAR	C-77
C-26. Group means on items regarding performance ability which showed a substantial difference by unit type in the USAR	C-78

CONTENTS (continued)

	Page
Table C-27. Percentage of USAR respondents who answered "Yes" to dichotomous items and differences in those percentages by Rank (R), Geography (G), and Unit Type (U)	C-80
C-28. Grand means and differences by Rank (R) and Unit Type (U) for USAR soldiers on items regarding enhancement of training	C-81
C-29. Group means on items regarding reactions to proposed improvements which showed a substantial difference by rank in the USAR . .	C-88
C-30. Group means on items regarding reactions to proposed improvements which showed a substantial difference by unit type (U) in the USAR	C-91

NATIONWIDE SURVEY OF SOLDIER PERCEPTIONS OF RESERVE COMPONENT (RC) TRAINING

Introduction

The Need for Readiness

The defense posture of the United States is increasingly dependent upon the RC. This is so partly because of resource constraints placed on the Active Component (AC) force structure. Heavy reliance is placed on the RC for combat arms, combat support, and combat service support units which can deploy rapidly and perform effectively. Skipper (1984) points out that "Reserve Component readiness, and the resources dedicated to support that readiness, then become important signals of national intent to both allies and Warsaw Pact nations" (p. 174).

The VISTA 1999 Task Force (1982) urged that the capabilities of the RC be enhanced to help decrease the likelihood of nuclear or conventional war.

Whether deployed to forward locations or maintained at high states of readiness in the United States for rapid deployment overseas, conventional forces are an indication of American resolve. In many cases, the presence of such strength, coupled with a high level of national support for its implementation, is sufficient to insure that it will not have to be used. (p. i)

Effective training of RC soldiers is essential for achieving and maintaining the level of combat readiness required by the Total Force Policy. Ever since the advent of this policy in 1972, RC units have been required to demonstrate performance standards not unlike those of their AC counterparts. These standards are difficult to attain and maintain, especially within the RC environment where units are geographically dispersed and training time, equipment, and access to major training areas are often limited (Smith, Hagman, & Bowne, 1986).

Although the training goals of the RC are similar to those of the AC, the challenges and constraints for delivering that training are quite distinct. Srull, Simms, and Pickett (1985) reported that:

The present approach to technical training throughout DoD is designated primarily for the Active Component and is not well suited in many cases to the needs of the Reserve Components. Many deficiencies flow from application of

active force training concepts to reservists who train in an entirely different environment. (p. iv)

A five-year investigation for the Office of the Assistant Secretary of Defense (Reserve Affairs) concluded that "The Active Force training model does not work very well in the Reserve Component environment" (Simms and Greenberg, 1986, p. 67).

Because the Total Force Policy reflects an increased reliance on the RC for national defense, effective and efficient RC training is of paramount importance. To this end, the present survey of perceived RC training effectiveness, with emphasis on Inactive Duty Training (IDT), was conducted by the Training Technology Field Activity-Gowen Field (TTFA-GF) under sponsorship of the National Guard Bureau (NGB), Office of the Chief, Army Reserve (OCAR), and U.S. Army Forces Command (FORSCOM).

Background

One of the first tasks undertaken by the TTFA-GF has been to gain perspective on the most urgent and viable avenues of attention for its future program of research. One of the preliminaries involved a detailed review of the literature on training problems and proposed solutions in the RC (Eisley & Viner, 1988). A second step was to conduct a survey of perceptions of RC training among soldiers in the Army National Guard (ARNG) and the United States Army Reserve (USAR) throughout the state of Idaho (Viner, Moore, Eisley, & Hart 1988).

Purpose

Pursuant to the mission of the TTFA-GF, and as a natural extension of the earlier survey effort in Idaho, the present survey was conducted at the request of NGB, OCAR, and FORSCOM. Its purpose was to determine, from the perspective of soldiers in the field, how IDT can be enhanced to improve readiness and soldier retention within the RC.

The survey addressed the following general questions: (a) How much and what kind of training is being conducted during IDT? (b) How effective is this training? (c) What IDT deficiencies exist and why? (d) How might existing IDT procedures be improved? (e) What new technologies/procedures might enhance IDT effectiveness and how might their implementation be accepted in the unit? (f) To what degree is IDT effectiveness related to soldier satisfaction and retention?

Answers to questions such as these will assist RC leadership in determining how and where to apply future resources to improve IDT. They will also provide TTFA-GF with the kind of information needed to ensure that future training technology applications are targeted to areas of greatest payoff within the RC.

Many previous efforts have addressed the issue of training as perceived by the commanders and staffs of selected target units in the ARNG/USAR. But few have addressed the perceptions of the individual soldier in the field as to the quality of the training being conducted or its perceived motivational value. Gaining the perspective of those who actually receive, conduct, and manage RC training should help to identify specific IDT problems and derive potential solutions particularly suited to the RC training environment. Soldier motivation is also of prime concern since it has been hypothesized that if training can be made more interesting and meaningful to individual soldiers, the result will be better retention, lower personnel turbulence, and increased individual and unit readiness.

Pertinent Literature

An extensive review of the literature relevant to RC training was performed by Eisley and Viner (1988). Performance of this review was an essential part of the preparation for the present effort. Although the review has been published as a separate document, the more salient points will be presented here.

RC Training Problems

The Office of the Assistant Secretary of Defense (Reserve Affairs) (Rice, Orlansky, & Metzko, 1986) summarized the overall challenges of sustainment and unit training in the Army RC with the following statistics:

More than 600,000 soldiers with over 400 MOSs (military occupational specialties) [are found] in approximately 6,900 units at nearly 4,000 stations. Specifically, the ARNG has 3,457 units and 2,858 armories; the average armory accommodates 148 junior enlisted soldiers. The USAR has 3,438 units and 1,098 reserve centers; the average population per center is 202 junior enlisted soldiers. In both the ARNG and the USAR, many armory/center populations reflect a variety of MOSs, few billets of any single MOS, and few experienced instructor NCOs (non-commissioned officers). And in both the ARNG and the USAR during 11 months of the year, the RC soldier availability for training (2 days/month) is 10 percent of the (20 days/month) availability of his Active Army

counterpart; it is 50 percent for the month in which the Reservist/Guardsman is on 2-week active duty. (p. 362)

Compared with the time available for training in the AC, the time available in the RC is severely limited (Skipper, 1984). To complicate the difficulty, the little time available is fragmented with nearly a month separating most training sessions. Soldiers and units in the RC are geographically dispersed from one another and often distant from centers of support and training facilities (Srull et al., 1985; U.S. Army Training Board, 1987).

Each year personnel turbulence (Srull et al. 1985) and attrition (Grissmer & Kirby, 1985) make it necessary to repeat training for a significant part of the force in new positions, units, or Military Occupational Specialties. While the freedom and flexibility possessed by individual soldiers to change their geographical location at will contributes to one problem in the RC, i.e. turbulence (Heymont & Muckerman, 1980), another far-reaching problem exists because the Army does not have reciprocal freedom and flexibility to place or relocate RC soldiers at will. RC soldiers' primary tie to their civilian jobs creates a "reassignment inflexibility" which is in direct contrast to the situation in the AC.

Initial training for individual soldiers is inadequate for attaining the RC's needs (Turley, 1986) and follow-up training in the unit is much more difficult to obtain/conduct than it is in the AC. This creates one of the most critical limiting factors for the lack of readiness in the Army RC: inadequate individual skill qualification (Office of the Secretary of Defense, 1986). The availability of institutional training from AC and RC schools is restricted because of geographical distance, the full-time civilian employment of most RC soldiers, and the abbreviated course offerings available at the somewhat more accessible RC schools.

There is a prevalent tendency in the RC to attempt to train soldiers in skills for which they do not have the necessary foundation (Viner et al., 1988). Furthermore, "the total training requirement, as it now exists, exceeds RC units' capacity to execute. . . . A review of 100 studies and reports conducted over the last 10 years reveals that finding as the one most often cited" (U.S. Army Training Board, 1987, p. 20).

The RC suffers greater shortages of the right equipment (Office of the Secretary of Defense, 1986) than the AC does. Ranges and training facilities are less available. The relevance and realism of training is often cited as a problem in the RC (Srull et al., 1985). Training management difficulties and surprise administrative demands for nontraining activities cause precious training time to be

wasted (Comptroller General of the United States, 1975; Skipper, 1984; U.S. Army Training Board, 1987; and Viner et al., 1988).

Training guidance is often inconsistent and conflicting because it comes from multiple sources through a confusing chain of command. Trainer preparation is inadequate. Training requirements are excessive and training support documents are redundant and voluminous (U.S. Army Training Board, 1987). In addition to all this, it is difficult for trainers and managers to meaningfully monitor needs and/or progress due to inadequate measures of readiness (U.S. General Accounting Office, 1986).

Solutions to RC Training Problems

While the Eisley and Viner (1988) review revealed numerous recommended solutions for meeting the RC training challenge, only a subset of those could be selected for focus in this extended investigation. Following is a list of these recommendations and the authors who made them:

a. Conduct and apply research on enlistment motivation (Orend, Gaines, & Michaels, 1977; Westat, Inc., 1986).

b. Increase soldier satisfaction--especially with military job, time demands, and esprit de corps (Defense Manpower Data Center, 1984).

c. Reduce "idle" or wasted time (Comptroller General of the United States, 1975; Viner et al., 1988).

d. Make training more rigorous and mission oriented (Heymont & Muckerman, 1980; Office of the Secretary of Defense, 1987).

e. Use advanced training technologies (e.g., Kirkland, Raney, & Hicks, 1984; Office of the Assistant Secretary of Defense, Reserve Affairs, 1986; Office of the Secretary of Defense, 1987; Rice, et al., 1986; Turley, 1986; Viner et al., 1988; VISTA 1999 Task Force, 1982; Office of the Undersecretary of Defense for Research and Engineering, 1982; U.S. Army Training Board, 1987).

f. Conduct and apply research on retention/attrition (Grissmer & Kirby, 1984).

g. Stress individual skill qualification (Viner et al., 1988).

h. Avoid attempting to train at too high an echelon for the experience level of the soldiers (Viner et al., 1988; Heymont & Muckerman, 1980; U.S. Army Training Board, 1987).

- i. Provide "dedicated training time" for NCOs to conduct individual and small unit training of subordinates (Viner et al., 1988).
- j. Use flexible scheduling (Heymont & Muckerman, 1980).
- k. Provide flexible MOS reclassification strategies (Viner et al., 1988).
- l. Provide additional training on Multiple Integrated Laser Engagement System (MILES) operation (Viner et al., 1988).
- m. Expand use of the Key Personnel Upgrade Program (KPUP) concept (U.S. Army Training Board, 1987).
- n. Use merit pay for home study (Viner et al., 1988).
- o. Reduce the number of skills and tasks to the absolute minimum number of truly essential tasks (U.S. Army Training Board, 1987).
- p. Coordinate, consolidate and clarify expectations from the various sources of guidance (U.S. Army Training Board, 1987).
- q. Streamline inspection procedures (U.S. Army Training Board, 1987 and Skipper, 1984).
- r. Eliminate redundant and unsupported administrative requirements (U.S. Army Training Board, 1987).
- s. Simplify procedures and reports (Viner et al., 1988).
- t. Modernize equipment (U.S. Army Training Board, 1987).
- u. Reconfigure training courses to RC needs (U.S. Army Training Board, 1987).

Conclusions from the Review of Literature

The RC faces training challenges which are quite distinct from those of the AC. The most prominent challenges are severely limited time for training, the geographical dispersion of units, and the reassignment inflexibility of part-time soldiers. These difficulties interact to effect most problems encountered within the RC training environment.

Five categories of training problems in the RC were identified from the literature. These were: (a) lack of soldier availability, (b) lack of prerequisite aptitudes and skills, (c) lack of learning motivation, (d) lack of time to

conduct training, and (e) lack of training resources available at local unit levels.

Factors contributing to a lack of soldier availability include difficulty in attracting and retaining high quality recruits. Solutions which address these problems are: (a) conduct and apply research on enlistment motivation, (b) recombine existing weak units to make stronger ones, (c) give more accurate expectations to candidate enlistees, (d) improve enlistment standards, (e) increase soldier satisfaction, (f) utilize training time more efficiently, (g) make training more interesting and meaningful, and (h) conduct and apply research on retention/attrition.

Factors contributing to a lack of prerequisite aptitudes and skills include (a) premature large unit training, (b) personnel turbulence, (c) attrition, and (d) inadequate individual skill training. Solutions which address these problems are: (a) focus more on training at the individual and smaller unit level, (b) make training more interesting and meaningful, (c) change present policies which force trained soldiers out, (d) create a separate program of initial training for the RC, (e) make flexible and abundant use of high-tech training media, and (f) implement a flexible MOS reclassification strategy.

Factors contributing to a lack of learning motivation on the part of soldiers include (a) lack of relevance and realism in training, (b) lack of adequate feedback to individual soldiers on their training progress, and (c) soldier dissatisfaction. Solutions proposed in the literature for these problems include: (a) Improve processes and standards for SOJT; (b) provide additional training on MILES operation; (c) make available more practice battlefields similar to the National Training Center (NTC); (d) maximize the use of overseas deployment for training; (e) expand the use of combined-force training; (f) maximize the use of the KPUP concept; (g) promote year-around interface between ARNG and USAR units; (h) maximize the use of field (vs. classroom) training environments; (i) maximize the use of advanced training technology; (j) revise the Skill Qualification Test (SQT) to fit RC needs, administer it regularly, and link SQT performance to rewards and promotions; (k) reduce time waste; and (l) recruit soldiers with high self-esteem and internal locus of control.

Factors contributing to a lack of time for training include: (a) budgetary constraints, (b) excessive training requirements, (c) conflicting guidance coming from complex chains of command, and (d) numerous nontraining requirements. Suggestions for remedying these difficulties include: (a) Expand the use of the KPUP concept, (b) prioritize individual

and unit skills/tasks and reduce the number required, (c) unify training guidance, and (d) streamline inspection procedures and limit the number of inspections units undergo annually.

The chief factor contributing to needed resources not being on hand when needed for training is the geographical dispersion of units and soldiers. Solutions proposed to help overcome this difficulty include: (a) more local training areas, (b) an improved RC support system, (c) central coordination of resource utilization, (d) non-reimbursable, organic air transportation to special training facilities, improved processes and standards for SOJT, and very importantly, (e) advanced training technology.

Further research would be helpful with regard to virtually any of the problems or solutions explored in this review. The literature is conspicuously dominated by opinion papers rather than empirical data. Very little feedback is reported from the perspective of NCOs or junior enlisted soldiers.

Much of the literature enthusiastically calls for greater effort in developing and implementing advanced training technology. Especially needed are systems which can be widely distributed to numerous, small, dispersed units.

Regarding the severe time limitations for RC training, the literature does not seem to favor actual increases in the time allotment. Rather, the literature leans much more favorably toward optimizing the efficient and effective use of the time already allocated.

The literature is not lacking in suggestions to improve training and readiness in the RC. While there are many interwoven problems and difficulties, numerous varieties of ideas are proposed for meeting the challenges. The reasons for lack of implementation of solutions is not, therefore, a paucity of creative, cogent suggestions. Rather, the issues which tend to prevent the system from achieving its maximum efficiency appear to be budgetary, political, and traditional. Developing, testing, and implementing new programs or policies is complicated in a complex system such as that which administers the RC.

The review of literature did not reveal many findings based directly on the perceptions of soldiers in the field, especially from among the junior enlisted ranks. The contribution made by the methodology of this effort is the additional insight provided by a nationwide sample of soldiers from all ranks.

Method

Instrument Design

Three separate pencil-and-paper, center-bound, survey instruments of type-set quality were developed: one for officers (O1-7), one for NCOs (E5-9), and another for junior enlisted soldiers (E1-4). Each survey was designed to accommodate answers entered directly on the survey booklets. Copies of the instruments are included in Appendix A.

Item selection. Specific survey questions were developed on the basis of (a) the results of an extensive review of literature (Eisley & Viner, 1988), (b) the recent assessment of RC training needs within the state of Idaho (Viner, Moore, Eisley & Hart, 1988), and (c) guidance from NGB, OCAR, and FORSCOM regarding current training issues.

The predecessor instrument, developed for the Idaho survey, was administered to 2500 RC soldiers in Idaho to determine their perceived training needs. That effort, completed in 1987, served as a pilot for development of the survey instrument used in this effort.

To meet the needs of the new survey, it was necessary to revise the original survey to correspond to the three target groups mentioned previously, as well as take into account the differences that exist between the ARNG and USAR. Additional survey items were created as needed in order to address areas needing further research as shown by the review of literature and the Idaho survey report.

All agencies involved in the survey project provided detailed comments, recommendations, and guidance on the content of the survey instrument. In addition, RC soldiers were particularly sought out to provide their expertise as to the accuracy of the items and the ability of the average RC soldier to comprehend their meaning. The large number of expert comments received resulted in a survey instrument in which all participating agencies had a developmental hand.

Research and content experts were given lists of possible survey items and were asked to modify, delete, or add items. Their responses were gathered by mail and by phone. These experts later met in a working session to confirm, modify, and prioritize the revised list of items. Representatives from FORSCOM, TRADOC, NGB, OCAR, ARI, and RC major commands were present in the working session. At that meeting the survey objectives and issues to be investigated were also reopened to question and reaffirmed.

Following the working session and during the pilot testing phase (described below), several weeks passed wherein all representatives were invited to further refine the list of items through an asynchronous computer conferencing network. Final drafts of the survey instruments were approved by NGB, OCAR, FORSCOM, TRADOC, and ARI.

The survey instruments were organized by content areas in the following order: demographics, the training environment, use of time, attitudes about the training experienced, reactions to training options, and things which affect success as a trainer (officers and NCOs only). This organization was created only for the purpose of facilitating soldiers as they responded to the items. (A different set of item categories, to be described later, was used to organize the analysis and interpretation of the data.) Within each content area questions were grouped according to the response mode required, i.e., fill in the blank, multiple choice, yes-no, Likert-type rating, and forced ranking. Table 1 describes the kind of data resulting from each kind of item. Table 1 refers

Table 1

Kinds of Data Generated by Item Formats

Response Type	Level of Data
Fill in the blank	Ratio/interval
Multiple choice	Categorical
Yes/no	Dichotomous
Likert-type ^a	Quasi-interval
Forced ranking ^b	Ordinal

^aAn item which asks respondents to answer in terms of strength of agreement. For example, "The morale in my unit is high," to which soldiers chose one of the following responses: strongly agree; agree; medium; disagree; strongly disagree. ^bAn item generating this type of response would give a list of options and then instruct respondents to rank them from 1 to n.

to data from Likert-type scales as "quasi-interval." Justification for so doing is provided under the section on statistical methods.

Pilot testing. The three instruments were pilot tested in their various stages of development with soldiers from the ARNG and the USAR. Testing took place over three iterations and revisions of the instruments. This was done to: (a) ensure that all of the training concerns of soldiers in the field were adequately represented, (b) allow the survey instruments to be

shortened to contain only those items which were deemed to be of importance to the soldiers and which were feasible to examine in written survey format, and (c) ensure that the phrasing of questions and instructions was clearly and consistently interpreted by the respondents.

The pilot testing involved 52 soldiers, of which 37 were in the ARNG and 15 in the USAR; 13 were officers, 22 were NCOs, and 17 were junior enlisted soldiers; 40 were from Idaho units, 8 from Utah, and 4 from Montana; 49 were males and 3 were females.

All of the soldiers in the pilot tests were asked for feedback about both general and specific problems they found in the instruments. This feedback was requested both during the actual process of responding to individual questions and at the end of completing the entire survey. In addition, answers were reviewed with individual soldiers to determine if the questions were eliciting responses which were valid to the intent.

Before filling out the pilot instruments soldiers were asked to give feedback about (1) items which seemed particularly important or irrelevant to their concerns; (2) items which were unclear and which words or phrases made them difficult to interpret; (3) whether or not other soldiers in their positions would find the question valid and relevant; (4) what issues or items should be added to the instrument. The last feedback dimension was particularly stressed, because one of the purposes of the survey was to discover what training concerns soldiers in the field themselves might have.

Sampling Plan

A nationwide, stratified random sample of 7,446 Army Selected Reserve soldiers was selected from among those included in the Reserve Components Common Personnel Data System data base maintained by the Defense Manpower Data Center (DMDC). The sample was stratified by Component [ARNG or USAR] and Rank [officers, noncommissioned officers (NCOs), and junior enlisted (E1-E4)]. Soldiers were sampled in proportion to population size for the RC variable, while officers were oversampled for the Rank variable. This sampling procedure resulted in 1,090 ARNG and 945 USAR officers, 1,491 ARNG and 831 USAR NCOs, and 1,867 ARNG and 1,276 USAR junior enlisted soldiers being included in the intended sample.

In addition to oversampling officers, a safety margin of 25% general oversampling was built into the sample plan to account for soldiers selected from the DMDC data base whose addresses were not valid. The goal of the follow-up methods (described later) was to accumulate at least 4,200 completed survey forms from the remaining 6,000 valid addresses. This is

equivalent to a 70% return rate. A return rate of 70% is the traditionally accepted level to insure that bias due to nonresponse is minimized.

The ARNG contains a preponderance of combat units, while the USAR contains a preponderance of combat service support units. Unfortunately it was not possible for the DMDC to stratify on type of unit (combat, combat support, or combat service support). Since this was a factor of primary interest, it was necessary to draw a sample sufficiently large to accommodate the natural allocations of types of units which would result from random selection. Taking this into account, a return of 4,200 survey forms would allow for the following types of statistical certainty:

a. For proportions: a 95% certainty that a proportion of one-half reported for each of the analysis cells is within five percent of the true population proportion (Levy & Lemeshow, 1980).

b. For scale ratings: power at a .90 level to detect the true means on scale ratings within one-half of a scale point on a five-point scale (Neter & Wasserman, 1974; and Winer, 1971).

c. For tests on differences between means: power at a .90 level to detect differences between means for all of the two-way interactions between factors of primary interest, e.g., component, rank, geographical area, and unit type (Shavelson, 1981).

Data Collection

Survey distribution. Surveys were mailed by the Government Printing Office (GPO) to the 7446 of the 7500 selected RC soldiers through their commanding officers. (Unit names or addresses were not available for 54 of the selected soldiers.) Soldiers returned the completed survey in a sealed postage-paid, preaddressed envelope to their commanders, who, in turn, took account of them and returned them to TTFA-GF.

A separate package was sent for each soldier, even when more than one soldier in a unit was sampled. Each package was addressed to the unit commander and contained the following: (a) a cover letter to the commanding officer; (b) a carbon copy (for the commanding officer) of the letter received by individual respondents from the Director of the ARNG and the Chief of the Army Reserve; (c) instructions for the unit commander; (d) the cover letter to the respondent from the Director of the ARNG and the Chief of the Army Reserve; (e) instructions for the respondent; (f) a survey form appropriate to the rank of the intended respondent; and (g) a postage-paid, preaddressed return envelope.

The instructions to the commanding officer, (c) above, requested that he or she complete the back page of the survey. This page contained questions about the unit as a whole.

Survey distribution took place during the last week of September, 1987. Data collection lasted until February 29, 1988 for the ARNG, and April 11, 1988 for the USAR.

Preparation and follow-up. A series of encouragement procedures was conducted to increase the probability of obtaining a minimum return rate of 70%. Each step in the follow-up plan was contingent upon the failure of the preceding step to deliver the desired rate of return. Follow-up steps included:

- a. Distribution of Information Papers and messages regarding the survey to the field by NGB and OCAR.
- b. Lists of designated respondents and their units sent to each State and Army Reserve Command (ARCOM) HQ.
- c. Identification of nonrespondents by letter and phone call to major and subordinate commands and units.

Return rates. Data collection efforts achieved a 69.4 percent return rate overall. The rate for the ARNG was 74.1 and for the USAR, 62.2. A breakdown by rank of these percentages and the numbers they represent are shown in Table 2. The percentages in Table 2 are based on first subtracting Table 2

Numbers and Percentages of Surveys Returned

Rank	ARNG		USAR		Total	
	Number	%	Number	%	Number	%
Jr. enlisted	960	68	465	54	1425	63
NCO	960	76	430	61	1390	71
Officer	730	80	559	72	1289	76
Combined	2650	74	1454	62	4104	69

from the selected sample (n = 7446) all soldiers whose unit commanders said they were no longer in the unit the DMDC data base had recorded for them (M= 1530). Thus, return rates were determined by dividing the number of returned surveys by the number of soldiers still accessible, to the knowledge of the

investigators, through their original units, i.e., 5916 soldiers overall.

As indicated earlier, a 25% sample loss was predicted due to the time-accuracy lag in DMDC's data base. The number of surveys returned with an indication that the soldier was no longer in his or her original unit was 1530. The number of surveys not returned at all was 1812. Some of the latter were undoubtedly intended for soldiers who also were no longer in their original units.

Soldiers were informed that if they did not wish to participate they had the option to leave their surveys blank and simply seal them in the preaddressed envelope for return through their commanding officers. Only eleven surveys were returned blank.

Statistical methods. Responses to all survey items were analyzed by Rank (officer, NCO, junior enlisted soldier), Geography (1st, 2nd, 4th, 5th, 6th Army), Component (ARNG, USAR), and the factorial combination of these. Additional analyses were performed which included type of Unit (combat arms, combat support, or combat service support) as a factor.

Descriptive statistics are reported for all variables. For categorical or dichotomous data this implies the reporting of proportions; for ratio and ordinal data, this implies the reporting of means. Robust statistical techniques traditionally used in the behavioral sciences were used to test for relationships between variables. The different kinds of data (resulting from the different kinds of question formats) were analyzed according to the scheme shown in Table 3.

Table 3
Data Analysis Scheme

Type of Independent Variable	Type of Dependent Variable	Types of Analyses
Categorical	Categorical	Chi-square
Categorical	Ordinal	Kruskal-Wallace test
Categorical	Quasi-interval or ratio	Analysis of variance
Quasi-interval or ratio	Quasi-interval or ratio	Pearson correlation

Table 3 indicates that analysis of variance (ANOVA) techniques were used to analyze data from Likert-type, ordinal scales. This has become common practice in the social sciences, even though it violates one of the assumptions of ANOVA, namely that the data should be at least at the interval level. But the justification for the use of ANOVA with Likert-type scales in this report extends beyond that of common practice. It has a logical and statistical basis, as will be shown.

A large number (over 300) of the items in the survey instruments for this report are Likert scales. Such items represent the bulk of the analyses. It was therefore desirable to present that bulk of analyses and findings in a manner which lends itself to ready interpretation and cross comparison. John Sagers (1986) points out that since the research community is much more familiar with concepts and terminology (such as "mean") associated with ANOVA techniques, the latter provide a more practical basis for communication with other researchers. Well-published statisticians, such as Snedecor & Cochran (1967) and Lee Hendrix (personal communication), defend the use and robustness of t-tests and ANOVA techniques with Likert-type scales. They indicate that data from Likert-type scales are more similar to interval data than to other types of ordinal data. This is because respondents perceive the response categories to be evenly spaced. Responses to such scales do not have the same problems that other types of ordinal data have where it is very certain that the intervals are not equal.

The chief concern with the violation of the "interval data" assumption of ANOVA techniques with Likert scale data is that Type I error (the rejection of alternate hypotheses which may in fact be true) could increase if this assumption is not met. However, studies (e.g., Sagers, 1986; Schooley, 1985) have compared ANOVA techniques with the Kruskal-Wallace (uses ranks rather than the actual scale values) test and the Weighted Least Squares method proposed by Grizzle, Starmer & Kock (1969). The three techniques were approximately equal in power regardless of shape of the dependent variable's distribution, location (e.g., mean) on the dependent variable's continuum, size of the sample, or number of levels on the factors. Thus Type I error is not increased by using ANOVA techniques where Likert-type items are concerned.

ANOVAs were performed on all ratio and quasi-interval items in the survey. Some n 's would not permit the valid analysis of a full model containing all of the following factors: Rank (R) Geography (G), Component (C), Unit type (U), and MOS type (M). The fullest overall ANOVA model that cell sizes would support (so that there were no cells less than 15 persons in number) was:

$$y = \text{mean} + R + G + C + RG + RC + GC + RGC + \text{error}.$$

The use of the MOS type in any of the models with either Geography or Unit type renders the model invalid because of very small or missing cells. Since the n 's within the ARNG were more complete in all of the subcategories it was possible to analyze the data for the ARNG with the following three-factor model:

$$y = \text{mean} + R + G + U + RG + RU + GU + \text{error}.$$

Within the USAR the n 's allowed for the following to be the most complete model which would be valid:

$$y = \text{mean} + R + U + RU + \text{error}.$$

Preliminary analysis indicated that there were many more differences attributable to Unit type than to MOS type. Since Unit type and MOS type are somewhat similar and in fact would be confounded in any one model where they are found together, it was decided that the most practical and informative analysis would be to include the Unit type and omit MOS type in the grand models.

Comparisons for Geography were made on the basis of deviations from the overall effect. That is, the mean for each Army was compared against the overall mean. The rationale for this is that individual differences between one army or another would not be of interest even to the armies concerned. Instead each army was more meaningfully compared with the overall mean for the Continental U.S. (CONUS). For example, there would be little utility in reporting that Fourth Army is statistically different from Fifth Army on a particular item. In such cases, it usually only meant that armies were at opposite extremes of a range of means. But if Fourth Army, for example, differed substantially from the CONUSA norm, then perhaps a lesson should be learned from or shared with Fourth Army.

The Kruskal-Wallis test mentioned in Table 3 is a one-way analysis of variance which is appropriately used with ordinal data. This test ranks all cases from all groups in a single series, computes the rank sum for each group separately, and computes the Kruskal-Wallis H statistic which has approximately a Chi-square distribution. The summary value associated with the Kruskal-Wallis test which can be used for comparisons is the mean rank.

Table 3 also indicates the use of Pearson correlation between ratio as well as quasi-interval variables. Spearman rank correlation is often used with ordinal data where scale interval cannot be assumed to be roughly equal. However, as was explained earlier, data from Likert-type scales behave more

like interval data than other types of ordinal data. This is because respondents perceive the response categories to be evenly spaced. Pearson correlation has been shown to be as robust and more versatile than the techniques which do not take advantage of all that the quasi-interval data have to offer. Another important reason for treating Likert scales as interval data is because it was necessary for the derivation of scales resulting from factor analyses. Such scales made possible the consolidation of what would otherwise have been 124,000 correlations into only a few hundred.

Results

How to Access the Results

The results of the survey effort are divided into three major segments. The first segment is contained in the main body of this report. It describes results for the ARNG and USAR combined, since very few statistically significant differences were found between the two components. Findings for the ARNG alone are found in Appendix B. Findings for the USAR alone are found in Appendix C.

Conventions Used to Present the Results

The variables in the survey are divided into seven major categories. These include items in the areas of demographics, soldier involvement, descriptions of current training, quality of training, satisfaction, performance ability, and reaction to proposed improvements. Obviously, numerous items could have been placed in more than one of the above categories. However, each item was assigned to the category to which it was most particularly relevant. The analysis categories were chosen to meet the interests of the sponsors of this survey effort. Thus, they did not correspond exactly to the content areas which organized the items for ease of response on the printed instruments. Nevertheless, there is strong resemblance between the two sets of categories. The overlap among the two structures is shown below:

<u>Instrument structure</u>	<u>Analysis structure</u>
Yourself	Demographics
Training Environment	Training Descriptions
Use of Time	Training Descriptions, Soldier Involvement, Quality of Training
Personal Feelings and Assessment	Quality of Training, Performance Ability, Satisfaction

Reactions to Some
Training Options

Training Improvements

Things that Affect My
Success as a Trainer

Training Improvements, Quality of
Training, Performance Ability

Survey items are listed in the left-most columns of nearly all of the tables. Items are described in abbreviated form and each item is referred to with a survey item number (e.g., "NA15"). The first character of the survey item number represents the survey form in which the question is found (E = Junior enlisted soldier, N = NCO, and O = Officer). Since most items are found across all three survey forms and the NCO form held the largest number of common items, most of the survey item numbers begin with the letter N. The second character of the survey item number refers to the section of the survey in which the item is found. The numerals in the right most digits of the survey item number refer to the question number within a section. For example, survey item number NA15 would be question number 15 in section A of the NCO survey. This particular item could also be found under different sections or question numbers in the other two surveys. But for the sake of the tables, it suffices to identify the question only once.

Throughout this document "Rank," with an upper-case "R," refers to the three-level factor of junior enlisted soldiers (E1-E4s) versus NCOs versus officers and warrant officers. The term "rank," with a lower case "r," simply refers to soldiers' military rank. This convention is similarly followed with regard to Geography versus geography and Component versus component.

There are three kinds of significance associated with the findings reported herein. The terminology used to describe differences that are statistically significant will be "statistical significance," "statistically significant," "nonsignificant," and other such terms as dictated by tradition in the social sciences. Such terms give no indication as to the size of a difference--only that it is a reliable difference which would be found again and again in virtually any sample drawn from the same population.

The second kind of terminology will be applied to differences which are of large enough size to be noteworthy. In the literature such differences are sometimes labeled "practically" or "educationally" significant (or insignificant, as the case may be). In order to make clear in this report the distinction between statistical significance and practical significance, the latter will be referred to as "substantial" differences. Substantial differences have to be defined according to the judgment of the researcher. An example of such a definition would be: "Differences of five percent or

greater were deemed to be substantial and therefore worth pointing out."

The third kind of difference is that which is of some value or importance to the users of this report. Some differences, while substantial and statistically significant, may at the same time be of little research interest. Such differences often serve only to describe, verify, or quantify what is already commonly assumed. For example, a finding that more ARNG soldiers have attended ARNG school than have USAR soldiers would only verify an obvious assumption. It would be of little research or decision-making interest even when the difference is statistically significant and substantial. Terms used to describe those differences which are of interest to the consumers of this report are "meaningful," "important," "interesting," along with their opposites.

ANOVAs were performed on all ratio and quasi-interval items. Given the three major ANOVA models this involved roughly 1000 analyses. Associated with each of these F -tests are several bits of statistical information. If all of these data were provided in tabular or textual form, the volume of the data would be extremely cumbersome. Therefore the findings of the F -tests are reported very simply in the last four columns of the means tables such as Table 4. Because n 's for the selected ANOVA models were more than adequate, there was never a case where a definitionally substantial difference was found where it was not also statistically significant at least at the .001 level. It is therefore safe for the reader to assume that for any given item, F has at least one hundred degrees of freedom for the denominator (error term). Frequently the degrees of freedom for the error term actually range in the thousands. F -ratios for effects which are substantial and statistically significant at the .001 level are typically greater than 20.0 even where degrees of freedom for the effect equals one or two. When the degrees of freedom for the effect is equal to four as in the case with Geography, F typically equals or is greater than 8.0.

Whenever means were found to be significantly different based on ANOVA, the existence and directions of those differences are noted in tables such as Table 4. This is true only if the differences were not only statistically significant but also of some meaningful size. For example, a difference of 1.2 years versus 1.3 years of service in the USAR may be statistically significant, but immaterial in any other regard. A difference was deemed to be substantial enough to report if it was (a) a Likert scale with a difference of more than a quarter of a scale point on the five point scale; (b) a difference of five percent on items that requested a percentage response; or (c) a difference greater than one quarter of the

Table 4

Grand Means and Differences by Rank (R), Geography (G), and Component (C) for All Soldiers on Demographic Items

Item	Mean	n	Differences			Interactions
			Ra	G	Cb	
Items asked of all ranks						
NA15: Years of experience in the AC-Coast Guard	.007	4045	-	-	-	-
NA16: Years of experience in the AC-Marines	.106	4045	-	-	-	-
NA13: Years of experience in the AC-Navy	.143	4045	-	-	-	-
NA14: Years of experience in the AC-Air Force	.174	4045	-	-	-	-
NA3: Years of experience in other RC organizations	.411	4039	E<N,O	-	-	-
NA12: Years of experience in the AC-Army	1.853	4036	E<N,O	-	-	-
NA5: Years of experience in your current duty MOS	2.541	4033	E,O<N	-	-	-
NA2: Years of experience in the USAR	3.165	4036	E<N,O	-	G<R	RC
NA1: Years of experience in the ARNG	6.179	4038	E<N,O	-	G>R	RC
NA4: Years of experience your current unit	6.551	4042	-	-	-	-
(table continues)						

(table continues)

Item	Differences				
	Mean	N	R	G	C
NA8: What is your age?	33.634	4002	E<N,O	-	-

Note. Unit of measure varies and are indicated in each item description. All differences reported are statistically significant at the .001 level and substantial (at least a quarter of a scale point, or 5%, or one-fourth of the sd).

aRank: E = Enlisted soldiers (E1-E4s). N = NCOs (E5-E9s). O = Officers and warrant officers. bComponent: G = Guard (ARNG). R = Reserve (USAR). cInteraction terms: RG = rank by geography. RU = rank by unit type. RC = rank by component. GU = geography by unit type. GC = geography by component.

standard deviation on any other kind of item requesting ratio data.

If the above rules for judging which differences were of substance created any type of error it was definitely on the conservative side so that small differences were more likely to be reported when they were not in fact of real substance rather being omitted when there was any question. Traditional rules of thumb for Likert scales suggest that a difference of one half of a scale point is substantial enough to be noteworthy. (A whole scale point is the distance, for example, between "agree" and "strongly disagree.") However, for extra safety to avoid neglecting a small difference which may be important for decision making, this research uses the smaller standard.

Whenever a significant difference is reported in tables of means, such as Table 4, by an indication of its existence and its direction, the means for those differences are reported in breakdown tables such as Table 5.

The means for Likert-type items reflect corresponding levels on the Likert scale. For example, a mean of 1.5 would reflect a response midway between "strongly agree" and "agree". A mean of 3.000 would reflect a mean response of "medium". In the case of Likert-type items, the smaller the mean, the more favorable the response.

Positive Likert-type items are those where a strong agreement indicates a favorable response. A favorable response on a positive item could range between 1 (strongly agree) to 3 (medium). Negative Likert-type items were reversed statistically so as to agree with positive ones. Thus a mean of 1 (strongly agree) would reflect a favorable response, rather than an unfavorable one. This was done in order to accommodate the ordering of items according to favorability of responses.

Just as a difference between groups of less than a quarter scale point on the Likert Scale was considered not substantial, so also a difference of less than a quarter of a scale point between items within a group should not be considered by the reader to be substantial or worthy of note. A rule of thumb for the reader when comparing item means to determine which items were most favorably responded to, is to ignore differences between items that are less than 0.25. For example, the difference between NE77 with a mean of 1.728 and NE75 with a mean of 1.898 is statistically significant because of the sizable ns obtained. However, it would not be of practical importance, since the difference between the two means is only 0.17. However, the difference between the mean for NE77 (1.728) and NE76 (2.277) would not only be

Table 5

Group Means for All Soldiers on Demographic Items Which Show a Substantial Difference by Rank

Item	E1-E4s			NCOs			Officers			Overall	
	Mean	n		Mean	n		Mean	n		Mean	sd
NA1: Years of experience in the ARNG	2.69	1396		8.50	1361		7.52	1281		6.18	7.69
NA2: Years of experience in the USAR	1.12	1395		3.45	1361		5.09	1280		3.17	5.52
NA3: Years of experience in other RC organizations	.17	1397		.56	1361		.52	1281		.41	1.51
NA5: Years of experience in your current duty MOS	1.78	1392		3.58	1360		2.27	1281		2.54	3.54
NA8: What is your age?	25.32	1380		37.94	1349		38.09	1273		33.63	9.72
NA12: Years of experience in the AC-Army	.97	1392		2.26	1361		2.38	1283		1.85	3.15

Note. Unit of measure varies and are indicated in each item description.

statistically significant, but also a difference worthy of note or action.

All seven categories of survey items are explored in the main body of this section of the report. Analyses include soldiers from both the ARNG and the USAR. The analyses in this section generally tested for differences by Rank, Geography and Component.

Demographics

Items placed in the Demographics category provide information on the background of individual soldiers. Table 4 lists several of these items, their means, and whether or not differences exist by Rank, Geography, or Component. The items in Table 4 all rendered ratio data, thus making comparisons of means plausible. The means in Table 4 are listed in order of magnitude starting with the smallest.

As can be seen in Table 4, items NA15, NA16, NA13, NA14, and NA3 show that there was a very low level of experience in types of military experience other than experience in soldiers' current organization (ARNG or USAR). Experience in the Active Army was an exception. The average number of years of experience in the Active Army was 1.85. Junior enlisted soldiers had significantly less experience in the Active Army than NCOs or officers. The means for the three Ranks (E1-E4s, NCOs, and officers) are shown in Table 5. There it can be seen that the mean for E1-E4s was .97 years of active Army service. In contrast the average years of active service in the Army for NCOs and officers was 2.26 and 2.38 respectively.

On the average the soldiers in this sample had had 3.2 years of experience in the USAR (NA2) and 6.2 years of experience in the ARNG (NA1). Since the responses of soldiers from both components are averaged together, these means are smaller than those presented in Table 6 where the data were analyzed separately for USAR soldiers and then for ARNG soldiers. As would be expected, junior enlisted soldiers recorded significantly fewer years of experience in both organizations than did NCOs and officers. The means for these groups are shown in Table 5. NCOs in the sample reported having fewer years of experience in the USAR than did officers. Officers in the sample reported having fewer years of experience in the ARNG than did NCOs. As would be expected, the "C" column in Table 4 indicates that current members of the ARNG reported having fewer years of experience in the USAR than did current members of the USAR. The reverse was true for number of years of experience in the ARNG.

On the average, soldiers had 2.5 years experience in their current duty position or MOS (NA5). NCOs had more experience

Table 6

Group Means for All Soldiers on Demographic Items Which Show a Substantial Difference by Component

Item	ARNG		USAR		Overall	
	Mean	n	Mean	n	Mean	sd
NA1: Years of experience in the ARNG	9.28	2590	.64	1448	6.18	7.69
NA2: Years of experience in the USAR	.40	2593	8.13	1443	3.17	5.52

Note. Unit of measure varies and is indicated in each item description.

in their current positions than did either junior enlisted soldiers or officers. Table 5 shows that NCOs had an average of 3.6 years of experience while junior enlisted soldiers and officers had only 1.8 and 2.3 years respectively in their current duty positions.

Soldiers in the RC reported having an average of 6.6 years of experience in their current units (NA4). This figure held regardless of Rank, Geography, or Component. The average age of soldiers (NA8) in this sample was 33.6 years old. As would be expected, the ages of junior enlisted soldiers (mean=25.3) were substantially less than NCOs (mean=37.9) or officers (mean=38.1). These figures are shown in Table 5.

Nine yes-no questions were asked of all Ranks regarding demographics. These are listed in Table 7 which reports the percentage of respondents who answered yes to each item along with any differences by Rank, Geography, or Component. The items in Table 7 are listed in the order of their occurrence in the survey instrument.

Fifteen percent of the soldiers in this sample said they were combat veterans. Fewer junior enlisted soldiers reported combat experience than did NCOs or officers. Only 5% of junior enlisted soldiers reported having combat experience, while 21.7% of the NCOs and 19.7% of the officers reported combat experience. No differences in responses for this item were found for Geography or Component.

Item NA26 showed that fewer than half (44.4%) of the soldiers in the sample indicated that their employers pay them while they are at Annual Training (AT). Interestingly, fewer junior enlisted soldiers reported receiving pay from employers during AT than NCOs, and fewer NCOs than officers. These differences are both statistically significant and substantial. While 58.6% of the officers reported that they are paid by employers during AT, only 51.8% of the NCOs reported being paid during AT by their employers. Fewer than half as many junior enlisted soldiers (23.0%) reported being paid by employers. This is possibly due to the fact that junior enlisted soldiers naturally would have been employed for a shorter period of time than NCOs and officers, simply because they were younger and closer to the beginning of their careers. This would imply that they would probably have had lower employment benefits than their NCO and officer associates. This substantial difference may be worthy of note and/or action, especially in the areas of public relations with employers and the level of pay extended to junior enlisted soldiers during AT. Analysis also revealed a significant difference in responses to this item which can be attributed to Geography. While 44.4% of the soldiers across all of the CONUSAs received remuneration from employers during AT, 5% more than that average received

remuneration in First Army, and 6% less than that received remuneration in the Fourth Army. No differences in this item were revealed for the Component factor.

Soldiers in this sample were asked if the work they do in their military occupations (MOS or branch) was similar to the work they do in their full-time jobs. Nearly a third (31.5%) responded "yes." A significant difference by Rank existed in these responses. While only 18.1% of the junior enlisted soldiers responded "yes," 32.1% of NCOs and 45% of the officers reported a similarity between their military and their full-time work. This would seem to imply that officers tend to have management-related jobs. No differences were found by Geography or Component for this item.

A quarter of the soldiers in the sample reported that they own a personal computer (item NA30). Significant and substantial differences exist by Component and Rank but not by Geography. Only 22.6% of ARNG soldiers reported having a personal computer, while 30.3% of the USAR soldiers indicated that they had one. These differences are paralleled almost identically with regard to whether their computers are IBM PC compatible (item NA31). Fourteen percent of the junior enlisted soldiers, 21% of the NCOs, and 42% of the officers said they owned personal computers. Of those who answered "yes" to this item, 27.7% indicated that their computer was IBM PC compatible. There is a significant and substantial difference in responses to this item by rank. This difference across Ranks identically parallels the proportions of those who own a personal computer.

Although 77.8% of the soldiers in the sample were employed full time as civilians (NA32), a substantially smaller proportion (66.8%) of the junior enlisted soldiers were employed full time than were NCOs (81.8%) or officers (85.6%). Conversely, more than twice as many (30.1%) junior enlisted soldiers were employed part time (item NA33) than were NCOs (11.1%) or officers (also 11.1%).

While very few NCOs or officers (5.4% and 6.8% respectively) indicated that they were full-time students, nearly a quarter (23%) of the junior enlisted soldiers reported that they were full-time students. This makes for a total of 11.9% full-time students among the sample. The difference by Rank in full-time students reverses itself somewhat with regard to part-time students. Here, over a quarter (25.1%) of the officers said they were part-time students, while only 13.5% and 12.2% of the NCOs and junior enlisted soldiers respectively, said that they were part-time students.

Two nominal variables offering multiple-choice responses were included in the survey instrument. The first of these has

Table 7

Percentage of ARNG and USAR Respondents Who Answered "Yes" to Dichotomous, Demographic Items and Differences in Those Percentages by Rank (R), Geography (G), and Unit Type (U).

Differences^a

Item	%Yes	n	R ^b	G ^c	U ^d
Items asked of all ranks					
NA25: Are you a combat veteran?	15.3	4000	E<N,O	-	-
NA26: Does your employer pay you while you are AT?	44.4	3550	E<N<O	1>M>4	-
NA29: Is your MOS similar to your full-time (civ/mil) job	31.5	3903	E<N<O	-	-
NA30: Do you own a personal computer?	25.4	4026	E<N<O	-	G<R
NA31: If yes, is it IBM PC compatible?	27.7	1833	E<N<O	-	G<R
NA32: Are you employed full time as a civilian	77.8	3802	E<N,O	-	-
NA33: Are you employed part time as a civilian	18.2	2604	E>N,O	-	-
NA34: Are you a full-time student?	11.9	3555	E>N,O	-	-
NA35: Are you a part-time student?	16.9	3335	E,N<O	-	-

(table continues)

^aA 5% difference in the percentage of soldiers answering "yes" was considered substantial enough to report. Differences of this magnitude were significant (Chi-square adjusted residual) at least at the .01 level. ^bRank: E = Junior enlisted soldiers (E1-E4s). N = NCOs (E5-E9s). O = Officers and warrant officers. ^cGeography: 1, 2, . . . = 1st Army, 2nd Army, ... M = Mean for all armies. ^dComponent: G = Guard (ARNG). R = Reserve (USAR).

to do with employment status in the RC. The majority (82.2%) of soldiers in the overall sample were part-time participants only (M-Day soldiers). Eight percent were full-time technicians; 7.5% had Active Guard/Reserve (AGR) status; .5% were on state active duty; and 1.8% were in some other employment status in the RC. Table 8 shows how these employment statuses break down by Component. There was a statistically significant difference between the percentage of part-time soldiers in the ARNG (77.6%) and those in the USAR (90.5%). This is accounted for in the significantly greater percentages of technicians, AGRs and soldiers on state active duty in the ARNG. In the case of technicians and AGRs these differences between the ARNG and USAR were not only statistically significant but probably of substance since the difference in percentages is greater than 5%. The adjusted residuals listed in Table 8 are standardized for the Chi-square distribution and adjusted for continuity (Haberman, 1978). These adjusted residuals provide a standard for comparing the degree to which each percentage reported in Table 8 differs from the hypothetically expected value. The larger the absolute value of the adjusted residual, the greater the degree of difference between the expected and the observed values. For example, the expected value for part-time soldiers in the ARNG would have been 82.2%. The percentage actually observed in this sample was 77.6%, substantially lower than the expected value. Thus, the adjusted residual for this figure is a negative value and one that is highly significant statistically (generally anything over 1.645 would be statistically significant).

Statistically significant differences in employment status in the RC were not found for Geography, Chi-Square (4, $N = 3830$) = 14.47, $p = .56$. However, there were differences attributable to Rank which were both statistically significant and substantial. Table 9 shows the details of the crosstabulation between employment status in the RC and Rank. Most of the differences reported in Table 9 can be accounted for by the fact that a larger proportion of NCOs had full-time positions in the RC than did junior enlisted soldiers.

The second nominal variable (in this case a dichotomy) asked soldiers their gender. Ten percent of the sample was composed of female soldiers. When the number of male versus female soldiers was crosstabulated across the three Ranks, some statistically significant differences did emerge. Table 10 shows the details of this breakdown. As can be seen there, a substantially higher percentage of female soldiers are found in the junior enlisted soldier category than those found in the NCO category. No significant differences by Geography existed in the male to female ratio. However, there was a statistically significant and substantial difference by Component. The National Guard had 5.8% females and the USAR

Table 8

Employment Status in the RC Crosstabulated by Component

Employment status in RC	ARNG		USAR	
	% of soldiers ^a	Adjusted residual	% of soldiers ^b	Adjusted residual
Part-time soldier	77.6%	-9.9**	90.5%	9.9**
Technician	10.2%	6.8**	4.0%	-6.8**
AGR	9.6%	6.5**	3.8%	-6.5**
State active duty	0.6%	2.2*	0.1%	-2.2*
Other	1.9%	0.7	1.6%	-0.7

Note. Overall Chi-square (4, N = 3830) = 104.4, $p < .001$.^an = 2467. ^bn = 1363.* $p < .05$. ** $p < .001$.

Table 9

Employment Status in the RC Crosstabulated by Rank

Employment status in RC	Junior enlisted soldiers			NCOs		Officers	
	% of soldiers ^a	Adjusted residual	% of soldiers ^b	Adjusted residual	% of soldiers ^c	Adjusted residual	
Part-time soldier	91.1%	10.5***	75.5%	-7.6***	79.4%	-3.0**	
Technician	2.1%	-9.7***	11.2%	5.3***	10.9%	4.5***	
AGR	3.4%	-7.0***	11.4%	6.5***	7.9%	0.6	
State active duty	0.8%	1.9*	0.2%	-1.5	0.4%	0.4	
Other	2.6%	2.5**	1.5%	-1.2	1.4%	-1.4	

Note. Overall Chi-square (8, $N = 3830$) = 173.4, $p < .001$.

^a $n = 1320$. ^b $n = 1294$. ^c $n = 1216$.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 10
Soldier Gender Crosstabulated by Rank Across Both Components

Gender	Junior enlisted Soldiers		NCOs		Officers	
	% of soldiers ^a	Adjusted residual	% of soldiers ^b	Adjusted residual	% of soldiers ^c	Adjusted residual
Female	13.2%	4.8*	7.3%	-4.2*	9.6%	-.6
Male	86.8%	-4.8*	92.7%	4.2*	90.4%	.6

Note. Overall Chi-square (2, N = 4019) = 26.58, $p < .001$.

^an = 1382. ^bn = 1358. ^cn = 1279.

* $p < .001$.

had 17.6% females. Table 11 gives the details of these findings.

The first five items in Table 12 are demographic items. The remainder of the items in that table will be discussed in later sections. All of the items in Table 12 called for a multiple-choice response where the options can be considered ordinal. Item NA21 asked soldiers how many people lived in the largest city or town within 25 miles of their homes. The mode response was "5," which translates to "more than 250,000." The third column in Table 12 gives the percentage of soldiers who selected the mode response. In the case of NA21, 31.2% selected answer 5. The smaller the percentage in the third column of Table 12, the greater becomes the spread of distribution of responses among the multiple choices available. The fourth, fifth, and sixth columns in Table 12 show the result of the Kruskal-Wallis test. This analysis tests for statistically significant differences among two or more options which are ordinal. In the case of item NA21, the Kruskal-Wallis tests revealed a statistically significant difference by Rank, Geography, and Component. Officers tended to live in more densely populated areas than junior enlisted soldiers and NCOs. Soldiers in the 2nd Army tended to live in more rural areas than soldiers in all of the armies in general. Soldiers in the ARNG tended to live in less densely populated areas than soldiers in the USAR.

Item NA22 in Table 12 asked soldiers for their highest level of civilian education. The mode response was "3," which translates to "high school completed with diploma or GED." This option was selected by 35.6% of the soldiers in the sample. Junior enlisted soldiers had received significantly less civilian education than NCOs, and NCOs significantly less than officers. Soldiers in 6th Army had received significantly more education than soldiers across the whole Army. Soldiers in the ARNG had received significantly less civilian education than soldiers in the USAR.

Question NA23 in Table 12 asked soldiers the size of the smallest group of soldiers they trained with on a regular basis. The mode response was "1," which translated is "squad/section/crew." This response was selected by 64.6% of the respondents. Junior enlisted soldiers typically responded that they trained with smaller groups than did NCOs. Soldiers in the ARNG responded that they trained in smaller groups than did soldiers in the USAR.

Item NU1 in Table 12 asks what level of unit was commanded by the commanding officer (CO) of the individual respondent. The mode response to this item was "3," which translates to "company/troop/battery." This option was selected by 62.2% of soldiers' commanders. The COs of officers tended to respond

Table 11
Soldier Gender Crosstabulated by Component

Gender	ARNG		USAR	
	% of soldiers ^a	Adjusted residual	% of soldiers ^b	Adjusted residual
Female	5.8%	-11.9*	17.6%	11.9*
Male	94.2%	11.9*	82.4%	-11.9*

Note. Overall Chi-square (1, N = 4019) = 140.9, p = .001.

^an = 2577. ^bn = 1442.

*p < .001.

Table 12

Analysis of Multiple-Choice, Ordinal-Response Questions for Soldiers in the ARNG and USAR

Method	Mode	% at the mode	Differences		
			Rank ^a	Geog. ^b	Component ^c
Items asked of all ranks					
NA21: Population of home town	5	31.2	E, N<O*	2<M*	G<R*
NA22: Highest level of civilian education	3	35.6	E<N<O*	6>M*	G<R*
NA23: Smallest group of soldiers I train with	1	64.6	E<N*	-	G<R*
NB13: Who personally conduct tng in unit?	8	30.1	E<N*	-	-
NU1: Level of unit CO commands	3	62.2	E, N<O*	-	G<R*
NE5: How often would an extra AT prd hlp unt?	1	28.2	E, N<O*	2<M<4*	G>R*
ND25: What level of tng should be emphasized?	1	35.9	E, N<O*	-	G>R*
Item asked of officers only					
OA21: I am responsible for tng what size group?	1	44.6	-	-	-

(table continues)

(table continues)

Note. Differences were analyzed for statistical significance using the Kruskal-Wallis test.

a Rank: E = Enlisted Soldier (E1-E4s). N = NCOs (E5-E9s). O = Officers and warrant officers. b Geography: 1, 2, . . . = 1st Army, 2nd Army, ... M = Mean for all armies. c Component: G = Guard (ARNG), R = Reserve (USAR).

* $p < .001$.

with higher options than did the COs of junior enlisted soldiers and NCOs. Commanders in the USAR tended to respond with higher options than did commanders in the ARNG. This is merely a reflection of the fact that the USAR, with its preponderance of technical and support units, (e.g., medical, legal, etc.) tends to have a higher officer-to-enlisted ratio.

Involvement

Items in the soldier "Involvement" category provide information on some of the demands made of soldiers in terms of travel and time committed to the RC, as well as their degree of involvement as trainers. The main cluster of these items is shown in Table 13. Three items regarding Involvement were asked of all three Ranks. The first, NB3, asked how many persons the particular soldier is responsible to train in an average Multiple Unit Training Assembly (MUTA-4). A total of 3,693 soldiers responded to this question. For that number the average number of trainees was 21.4. The average number of trainees for officers was significantly greater than corresponding averages for NCOs and junior enlisted soldiers. Table 14 shows that officers were responsible for the training of an average of forty-seven soldiers during a MUTA-4 while NCOs and junior enlisted soldiers were responsible for training fifteen and four soldiers respectively.

The next item asked of all three Ranks was NC3, "How many hours do you travel one way to attend drills at your unit's armory or reserve center?" The 4,006 soldiers who gave valid responses to this question indicated that they traveled .84 hours (50 minutes) to attend drills. Table 13 indicates that officers traveled significantly more than did NCOs or junior enlisted soldiers. Table 14 shows that the mean for officers was 1.12 hours while the mean for NCOs and junior enlisted soldiers was .66 and .75 respectively.

Soldiers were also asked how many hours they were willing to travel to drill (NC4). The overall response was nearly double that of the amount of time they already spend traveling. Table 13 shows that the overall mean for willingness to travel was 1.5 hours and that there was no significant difference between the three Ranks. Officers were willing to travel 1.85 hours to drill, which is half again as much as they were already traveling. Junior enlisted soldiers were willing to travel 1.34 hours to drill which is 3/4 again as much as what they were already traveling. NCOs were willing to travel 1.32 hours to drill, which is exactly twice as much as they were already traveling. One Involvement item was asked of junior enlisted soldiers and NCOs only. NB4 asked "How many soldiers do you personally train during the average 16-hour drill period (MUTA-4)?" This item is different from NB3 in that the emphasis is on personal delivery of training versus overwatch

Table 13

Grand Means and Differences by Rank (R), Geography (G), and Component (C) for All Soldiers on Items Regarding Soldier Involvement of Training

Item	Mean	n	Differences			Interactions ^b
			R ^a	G	C	
Items asked of all ranks						
NB3: During avg MUTA-4 how many pers are you resp to train	21.422	3693	E,N<O	-	-	-
NC3: How many hrs do you travel one-way to attend drills	.837	4006	E,N<O	-	-	-
NC4: How many hrs per MUTA-4 willing to travel to drill	1.502	3952	-	-	-	-
Items asked of enlisted soldiers and NCOs only						
NB4: How many soldiers you per- sonally train per avg MUTA-4	4.276	2511	E<N	-	-	-
Items asked of NCOs and officers only						
NB2: What percentage of your unit's training do you plan?	27.191	2456	N<O	-	-	-
NC5: How many hrs per MUTA-4 spent eval perf. of subord	5.371	2548	N>O	-	-	-
NC6: How many hrs spent at drill preparing for next drill	2.031	2533	-	-	-	-
NC7: How many unpaid hrs preparing for next drill	4.070	2505	-	-	-	RC
(table continues)						

(table continues)

Item	Differences				
	Mean	N	R	G	C
NC8: How many paid hrs outside of drill prep for next drill	2.098	2463	-	-	-

Items asked of officers only

OB2: What percentage of your unit training do YOU conduct	18.527	1204	-	-	-

Note. Unit of measure varies and are indicated in each item description. All differences reported are statistically significant at the .001 level and substantial (at least a quarter of a scale point, or 5%, or one-fourth of the sd).

aRank: E = Enlisted soldiers (E1-E4s). N = NCOs (E5-E9s). O = Officers and warrant officers. bInteraction terms: RG = rank by geography. RU = rank by unit type. RC = rank by component. GU = geography by unit type. GC = geography by component.

Table 14

Group Means for all Soldiers on Items Regarding Soldier Involvement Which Showed a Substantial Difference by Rank

Item	E1-E4s		NCOs		Officers		Overall	
	Mean	n	Mean	n	Mean	n	Mean	sd
NB2: What percentage of your unit's training do you plan?	-	-	20.38	1256	34.33	1200	27.19	31.99
NB3: During avg MUTA-4 how many pers are you resp to train	3.75	1227	14.68	1272	46.76	1194	21.42	78.68
NB4: How many soldiers you personally train per avg MUTA	2.01	1236	6.47	1275	-	-	4.28	8.96
NC3: How many hrs do you travel one-way to attend drills	.75	1388	.66	1352	1.12	1266	.84	1.37
NC5: How many hrs per MUTA-4 spent eval perf. of subord	-	-	7.25	1317	3.36	1231	5.37	6.57

Note. Units of measure vary and are indicated in each item description.

of training. Table 13 shows that the average number of soldiers personally trained by junior enlisted soldiers and NCOs is 4.3. The average is significantly higher for NCOs than it is for junior enlisted soldiers, with means of 6.5 and 2.0 respectively.

The next set of items in Table 13 were asked of NCOs and officers only. As can be seen in that section, on the average officers and NCOs reported that they individually plan 27% of their units' training (NB2). The average is significantly greater for officers ($\bar{M} = 34.3\%$) than for NCOs ($\bar{M} = 20.4\%$). Officers and NCOs spent an average of 5.4 hours per MUTA-4 evaluating the performance of subordinates (NC5). This average is greater for NCOs ($\bar{M} = 7.3$ hours) than for officers ($\bar{M} = 3.4$ hours). Officers and NCOs reported spending an average of 2.0 hours of drill time preparing for the next drill (NC6). They said they spend an average of 4.1 hours of unpaid time preparing for the next drill (NC7). They also reported spending an average of 2.1 paid hours outside of drill time in preparation for the next drill (NC8).

One Involvement item was asked of officers only. On this item (OB2), officers reported that on the average they personally conduct 18.5% of their units' training.

Another Involvement item asked of officers only rendered nominal data. OA15 asks, "What is your primary duty assignment?" Of the 1263 valid responses to this question, 9.4% were platoon leaders, 32.2% were staff officers, 6.5% were executive officers, 14.1% were commanders at the company/battery/troop or higher levels, and 37.8% were "other."

Training Descriptions

Items in the "Training Description" category provide information on how training was being conducted at the time data were being collected. Many of the items in this category provide ratio and quasi-interval data. Such items are listed in Table 15. Full agreement (means ranging from 2.00 to 2.24) with descriptions of current training was found on the following items:

1. NB28: My unit leader(s) insist that subordinates maintain high standards of task performance.
2. NB65: Audio-visual equipment is used by my unit for training.
3. NB64: Training aids (e.g., mock-ups, models, charts, simulation devices) are used by my unit for training.
4. ND41: The NCOs in my unit look out for the welfare of their soldiers.

Table 15

Grand Means and Differences by Rank (R), Geography (G), and Component (C) for All Soldiers on Items Regarding Descriptions of Current Training

Item	Mean	n	Differences			
			R ^a	G	C ^b	Interactionse
Items asked of all ranks						
NB28:d Unit ldrs insist subord maintain high stand of perfor	2.035	3896	-	-	-	-
NB65:d Audio-visual equipment is used by my unt	2.067	3801	E>N,O	-	-	-
NB64:d Training aids used by my unit.	2.092	3785	-	-	-	-
ND41:d NCOs in my unit look out for the welfare of soldiers	2.210	3946	-	-	-	-
ND38:d Active Army assistance is available to my unit	2.239	3225	E>N>O	-	-	-
NB66:d TEC tapes for the Bessler Cue-See are used by my unit.	2.336	3531	E>N	-	-	RG
NB63:d Mini-ranges are used by my unit	2.446	3584	-	-	-	-
NB25:d My unit trains with same equipment used in wartime	2.575	3801	-	-	G<R	-
NE56:d I use the job aids I have in my work in the ARNG/USAR	2.623	3631	-	-	G<R	RC
NB23:d Tng schedule often gets changed from the original	3.072	3846	E,N<O	-	-	-
(table continues)						

(table continues)

Differences

Item	Mean	N	R	G	C	Interactions
NB59:e How often is MILES used in your unit to train sqd/sec	3.404	2639	-	-	G<R	-
NB61:e How often is MILES used in unit to trn co/trp/btry	3.406	2562	E,N<O	-	G<R	-
NB60:e How often is MILES used in your unit to train plt/det	3.406	2610	-	-	G<R	-
NB58:e How often is MILES used in your unit to trn crew/team	3.416	2633	-	-	G<R	-
NB57:e How often is MILES used in your unit to train individ	3.466	2657	-	-	G<R	-
NE94:d Simulators: are available to me during drills	3.496	3196	E,N<O	-	G<R	-
ND47:d Soldiers in my unit know how to operate MILES	3.501	2367	E,N<O	-	G<R	-
NE93:d Simulators: are available to me between drills	3.843	3123	-	-	G<R	-
NU6: Assigned strength for Off/WOs	31.170	3039	E,N<O	-	G<R	GC
NU4: Authorized strength for Off/WOs	31.891	3054	E,N<O	-	G<R	-
NC2: What percent of your tng time is spent on indiv lvl tng	41.742	3685	-	-	-	-
NA24: How many soldiers are in your unit?	124.380	3366	E<O	-	-	-
NU7: Assigned strength for E1 to E9	144.997	3029	E,N<O	-	-	-

(table continues)

Differences

Item	Mean	N	R	G	C	Interactions
NU5: Authorized strength for E1 to E9	145.643	3039	E,N<O	-	-	RC
Items asked of enlisted soldiers and NCOs only						
NA7: Number of times you've changed MOS involuntarily	.287	2044	E<N	-	-	-
NC13a: Hrs waiting while doing non-MOS/nonadmin tasks	.817	2514	E>N	-	-	-
NC11a: Hrs waiting while doing non-MOS, admin tasks	.845	2525	-	-	-	-
NA6: Number of times you've changed MOS voluntarily	.970	2467	E<N	-	-	-
NC12a: Hrs waiting while doing nonlearning MOS work	1.037	2525	E>N	-	-	-
NC14a: How many hours spent in just doing nothing	1.050	2545	E>N	-	-	-
NC10a: Hrs waiting while receiving tng from Off/NCOs	1.264	2560	E>N	-	-	-
NC11: Hrs doing non-MOS admin tasks during avg 16-hr drill	2.516	2585	-	-	-	GC
NC14: Hrs in travel/breaks/meals, etc during avg 16-hr drill	2.604	2582	-	-	-	-
NC13: Hrs doing non-MOS/non-admin tasks in avg 16-hr drill	2.797	2581	-	-	-	-
NC12: Hrs in nonlearning MOS work during avg 16-hr drill	4.659	2570	-	-	-	-

(table continues)

Differences

Item	Mean	N	R	G	C	Interactions

NC10: Hrs receiving tng from Off/NCOs during avg 16-hr drill	5.671	2599	-	-	-	-
NB5: How many months since your last SQT in your duty MOS	7.260	2596	-	-	-	-

Items asked of NCOs and officers only

NB24: ¹ Tng priorities change too often to meet quarterly req	3.194	2474	-	-	-	-
NB62: How often is MILES used in your unit to train bn/sqdn	3.522	1531	N<O	-	G<R	-

Items asked of NCOs only

NC9a: Hrs waiting while training others	1.275	1217	-	-	-	-
NC9: Hrs training others during the avg 16-hr weekend drill	6.920	1228	-	-	-	-

Note. Items not footnoted rendered ratio data in the unit of measure implied in the item descriptions. All differences reported are statistically significant at the .001 level and substantial (at least a quarter of a scale point, or 5%, or one-fourth of the sd).

^aRank: E = Enlisted soldiers (E1-E4s). N = NCOs (E5-E9s). O = Officers and warrant officers. ^bComponent: G = Guard (ARNG). R = Reserve (USAR). ^cInteraction terms: RG = rank by geography. RU = rank by unit type. RC = rank by component. GU = geography by unit type. GC = geography by component. ^dLikert scale. ^eFour-point, quasi-interval scale with 1 being "often."

5. ND38: Active Army assistance from Readiness Group personnel, Advisors, and Mobile Training Teams is available to my unit. Analysis of variance on item NB65 revealed that officers ($\bar{M} = 1.92$) and NCOs ($\bar{M} = 2.01$) perceived a greater degree of use of audio/visual equipment in training than did junior enlisted soldiers ($\bar{M} = 2.26$), $F(2, 3771) = 52.60$, $p < .001$. This difference was statistically significant and substantial (a difference of .25 or greater). Detailed figures for the three Ranks are provided in Table 16 under item NB65.

Analysis of variance on item ND38 showed that officers ($\bar{M} = 1.92$) perceived that active army assistance was more available to their units than did NCOs ($\bar{M} = 2.25$), and NCOs perceived it to be more available than did junior enlisted soldiers ($\bar{M} = 2.63$).

Mild agreement (means ranging from 2.26 to 2.99) was found for the following descriptions of training:

1. NB66: Training Extension Course (TEC) tapes for the Bessler Cue-See are used by your unit for training.

2. NB63: Mini-ranges at the armory/training center or local training area (LTA) are used by your unit for training.

3. NB25: My unit trains with the same kind of equipment that it would use during wartime.

4. NE56: I actually use the job aids I have for my work in the ARNG or USAR.

Analysis of variance revealed the following significant differences on the above items: NCOs ($\bar{M} = 2.13$) perceived that TEC tapes for the Bessler Cue-See are used more in training than junior enlisted soldiers ($\bar{M} = 2.54$) perceived them to be. Differences by Component were found in responses to NB25 and NE56. Means for these items are broken down in Table 17. There it can be seen that USAR soldiers ($\bar{M} = 2.81$) are less inclined than ARNG soldiers ($\bar{M} = 2.44$) to agree that their units train with the same equipment which would be used in war time (NB25). ARNG soldiers ($\bar{M} = 2.53$) were more inclined than USAR soldiers ($\bar{M} = 2.81$) to agree that they use the job aids they have in their work.

On the average soldiers neither agreed nor disagreed that the training schedule often gets changed from the original plan (NB23). However, as indicated in the "R" column of Table 15, officers tended to disagree more with this statement than did the junior enlisted soldiers or NCOs. Table 16 shows the breakdowns of the responses to NB23 according to Rank. There it can be seen that while junior enlisted soldiers ($\bar{M} = 3.04$) and NCOs ($\bar{M} = 2.90$) were basically neutral about the statement, officers ($\bar{M} = 3.29$) mildly disagreed with it.

Table 16

Group Means for All Soldiers on Items Regarding Descriptions of Current Training Which Showed a Substantial Difference by Rank

Item	E1-E4s			NCOs			Officers			Overall	
	Mean	n		Mean	n		Mean	n		Mean	sd
NA6: Number of times you've changed MOS voluntarily	.40	1222		1.53	1245		-	-		.97	1.81
NA7: Number of times you've changed MOS involuntarily	.15	1093		.45	951		-	-		.29	.81
NA24: How many soldiers are in your unit?	108.93	996		114.08	1192		147.87	1178		124.38	151.34
NB23:a Tng schedule often gets changed from the original	3.04	1301		2.90	1297		3.29	1248		3.07	1.23
NB61:b How often is MILES used in unit to trn co/trp/btry	3.32	927		3.34	902		3.59	733		3.41	.90
NB62: How often is MILES used in your unit to train bn/sqdn	-	-		3.40	846		3.68	685		3.52	.81
NB65:a Audio-visual equipment is used by my unit	2.26	1304		2.01	1286		1.92	1211		2.07	.89
NB66:a TEC tapes for the Bessler Cue-See are used by my unit.	2.54	1185		2.13	1242		2.35	1104		2.34	.99
NC10a: Hrs waiting to receive training from Off/NCOs	-	-		1.48	1311		1.03	1249		1.26	2.13
NC12a: Hrs waiting while doing nonlearning MOS work	1.17	1293		.90	1232		-	-		1.04	2.05
NC13a: Hrs waiting while doing non-MOS/nonadmin tasks	.94	1287		.68	1227		-	-		.82	1.93

(table continues)

Item	E1-E4s		NCOs		Officers		Overall	
	Mean	n	Mean	n	Mean	n	Mean	sd
NC14a: How many hours spent in just doing nothing	1.26	1300	.83	1245	-	-	1.05	1.89
ND38: ^a Active Army assistance is available to my unit	2.63	929	2.25	1144	1.92	1152	2.24	.95
ND47: ^a Soldiers in my unit know how to operate MILES	3.31	839	3.48	854	3.76	674	3.50	1.31
NE94: ^a Simulators: are available to me during drills	3.38	1128	3.41	1072	3.72	996	3.50	1.17
NU4: Authorized strength for Off/WOs	14.60	998	24.03	1061	57.61	995	31.89	61.19
NU5: Authorized strength for E1 to E9	122.89	995	124.52	1059	191.34	985	145.64	137.13
NU6: Assigned strength for Off/WOs	14.50	993	23.12	1061	56.65	985	31.17	60.08
NU7: Assigned strength for E1 to E9	121.93	990	124.86	1063	190.33	976	145.00	135.36

Note. Items not footnoted rendered ratio data in the unit of measure implied in the item descriptions.

^a Likert scale. ^b Four-point, quasi-interval scale with 1 being "often."

Table 17

Group Means for All Soldiers on Items Regarding Descriptions of Current Training Which Showed a Substantial Difference by Component

Item	ARNG		USAR		Overall	
	Mean	n	Mean	n	Mean	sd
NB25:a My unit trains with same equipment used in wartime	2.44	2446	2.81	1355	2.57	1.28
NB57:b How often is MILES used in your unit to train individ	3.38	1831	3.65	826	3.47	.84
NB58:b How often is MILES used in your unit to trn crew/team	3.31	1823	3.66	810	3.42	.89
NB59:b How often is MILES used in your unit to train sqd/sec	3.29	1825	3.65	814	3.40	.91
NB60:b How often is MILES used in your unit to train plt/det	3.29	1805	3.66	805	3.41	.90
NB61:b How often is MILES used in unit to trn co/trp/btry	3.28	1775	3.68	787	3.41	.90
NB62: How often is MILES used in your unit to train bn/sqdn	3.40	1046	3.79	485	3.52	.81
ND47:a Soldiers in my unit know how to operate MILES	3.36	1662	3.85	705	3.50	1.31
NE56:a I use the job aids I have in my work in the ARNG/USAR	2.53	2378	2.81	1253	2.62	1.03
NE93:a Simulators: are available to me between drills	3.75	2074	4.03	1049	3.84	1.07
NE94:a Simulators: are available to me during drills	3.35	2126	3.78	1070	3.50	1.17

(table continues)

Item	ARNG		USAR		Overall	
	Mean	n	Mean	n	Mean	sd
NU4: Authorized strength for Off/WOs	24.82	1976	44.86	1078	31.89	61.19
NU6: Assigned strength for Off/WOs	24.91	1962	42.58	1077	31.17	60.08

Note. Items not footnoted rendered ratio data in the unit of measure implied in the item descriptions.

^aLikert scale. ^bFour-point, quasi-interval scale with 1 being "often."

Soldiers mildly disagreed with three of the Likert-type items asked of all Ranks regarding current training. These were:

1. NE94: Simulators are available to me during drills ($M = 3.496$).
2. ND47: Soldiers in my unit know how to operate MILES ($M = 3.501$).
3. NE93: Simulators are available to me between drills ($M = 3.843$).

Soldiers in the ARNG disagreed substantially less with all three of the above items than did soldiers in the USAR. Breakdown means for these items by Component are shown in Table 17. On two of these items (ND47 and NE94), officers disagreed substantially more than did NCOs or junior enlisted soldiers (see Table 16 for breakdown means).

Five items treat the frequency with which MILES is used at various organizational levels. The responses to these items can range from 1 (often) to 4 (never). At nearly every level the average response was somewhere between rarely and never: For use of MILES on the individual level, the mean response was 3.466; on the crew-team level the response was 3.416; on the squad/section level the response was 3.404; at the platoon/detachment level and the company/troop/battery levels the mean response was 3.406. Thus, soldiers seemed to be indicating that MILES is used less at the individual and small unit levels than at larger unit levels.

Six items regarding Training Description that were asked of all Ranks provided ratio-level data. One of these, NC2, asked what percentage of soldiers' training time is spent on individual-level training. The average response to this question was 41.7 percent. No differences by Rank, Geography, or Component were revealed by the analysis of variance. The other five ratio items involved unit size. NA24 shows that the average unit size for soldiers in the sample was 124 soldiers. Data provided by commanding officers of soldiers in the sample shows that assigned and authorized strength for E1s-E9s was approximately 145 per unit (items NU7 and NU5). Assigned and authorized strength for officers and warrant officers in these same units was reported by commanding officers to be approximately 31 (items NU6 and NU4).

All of the Training description items that were asked only of junior enlisted soldiers and NCOs produced ratio data. NA7 asked the number of times soldiers had involuntarily changed their MOSs. The average was .29 times, with junior enlisted soldiers having changed less frequently than NCOs. Means for individual Ranks on items which show a significant difference are shown in Table 16. Item NA6 asked soldiers the number of times they had changed MOS voluntarily. The average was .97

times, again with junior enlisted soldiers indicating fewer changes than NCOs.

Item NB5 asked soldiers how many months it had been since their last Skills Qualification Test (SQT). The average was 7.3 months.

The remainder of the items in Table 15 that were asked of junior enlisted soldiers and NCOs only have to do with how drill time is utilized with regard to training or nontraining tasks. Soldiers said they spend an average 16-hour drill period in the following way: 5.7 hours receiving training from officers and NCOs, 1.3 hours of which is spent waiting for other people or events; 2.5 hours doing non-MOS administrative tasks, .8 hours of which are spent waiting for other people or events; 4.7 hours in nonlearning MOS work, 1 hour of which is spent waiting for other people or events; 2.8 hours doing tasks which are both non-MOS and nonadministrative, .8 hours of which is spent waiting for other people or events; 2.6 hours in travel, breaks, or meal time, 1.1 hours of which are spent in just doing nothing. Obviously these hours do not add up perfectly to the 16-hour drill period. However, they are interesting in and of themselves as proportions of their own total. The actual total equals 18.247 hours, of which 31.1% is spent receiving training, 13.8% is spent doing non-MOS/administrative tasks, 25.5% is spent in nonlearning MOS work, 15.3% is spent doing non-MOS/nonadministrative tasks, and 14.3% is spent in travel, breaks, and mealtime. Of that same 18.25 hours, 5.0 hours (27.5%) were estimated to be spent waiting for other people or events or doing nothing, while engaged in one or more of the above activities.

Two Training Description items were asked of NCOs and officers only. Item NB24 stated that training priorities change too often to meet quarterly requirements. On the average, soldiers neither agreed nor disagreed with this statement. Analysis of variance revealed no differences by Rank, Geography, or Component. The second item fits in with items described earlier regarding the frequency of MILES use. NB62 asks how often MILES is used to train on the battalion and squadron level. The average response of 3.52 indicates that MILES is used very seldom on that level. Officers seemed to feel that it was used less often on that level than NCOs perceived it to be. Table 16 shows the specifics of this breakdown. Apparently MILES is used at the battalion/squadron level less than any other level. However, the difference between the means is not substantial.

Two Training Description items were asked of NCOs only. Since NCOs are principally responsible for personal delivery of training to other soldiers, they were asked how many hours during a 16-hour weekend drill they spend in that kind of

activity (NC9). The average response was 6.9 hours. Of that time, 1.28 hours was reportedly spent waiting for other people or events. Analysis of variance revealed no difference by Rank, Geography, or Component for these items.

Two of the items in Table 12 are Training Description items. Item NB13 asked who personally conducts most of the training in the soldiers' units. The modal response to this item was "8" which translated is "section leader." This option was selected by 30.1% of the soldiers in the sample. NCOs tended to select options indicating soldiers with more responsibility than did junior enlisted soldiers.

Item OA21 asked officers only what size of group they were responsible for training on a regular basis. The mode response was "1" which translated is "squad/section/crew." This option was selected by 44.6% of the responding officers.

Several Training Description items were dichotomous in nature. These yes-no items are listed in Table 18. As can be discerned from the descriptions of those items, they cover a variety of training topics. The second column in Table 18 gives the percentage who answered "yes" to each item. Rather than relist these percentages here in the text, the reader is simply directed to the table. Substantial differences by Rank, Geography, and Component were found on many of the items in Table 18. These are described in detail below.

When asked if they had ever trained with an AC unit while in the RC (NB17), officers (59.4%) answered "yes" more frequently than did NCOs (53.1%) and NCOs answered "yes" more frequently than did junior enlisted soldiers (38.7%). Soldiers in the USAR (55.5%) responded "yes" more frequently than did soldiers in the ARNG (47.1%).

When asked if they had ever personally used MILES during training (NB19), soldiers in 6th Army (32.8%) responded "yes" more frequently than did soldiers across all CONUSAs (27.6%). Soldiers in the ARNG (32.2%) responded "yes" more often than soldiers in the USAR (19.4%).

When asked if their units had access to a Local Training Area (LTA) within two hours of their armory or training center (NB20), 87.3% of all soldiers responded "yes." No substantial differences were found by Rank, Geography, or Component. Those soldiers who did not have an LTA within two hours were asked: "Does the lack of an LTA hurt training in your unit?" (NB21). Fewer junior enlisted soldiers (36.0%) than NCOs (46.9%) or officers (46.8%) answered "yes" to this question. Fewer soldiers in 2nd Army (36.7%) and more soldiers in 5th Army (53.0%) answered "yes" to this question than soldiers across all the CONUSAs (42.8%).

Table 18

Percentage of ARNG and USAR Respondents Who Answered "Yes" to Dichotomous Training Description Items and Differences in Those Percentages by Rank (R), Geography (G), and Unit Type (U).

Item	%Yes	n	R ^b	Differences ^a	
				G ^c	C ^d
Items asked of all ranks					
NB17: Have you ever trained with an AC unit while in RC	50.1	3983	E<N<O	-	G<R
NB19: Have you personally ever used MILES during training?	27.6	3912	-	6>M	G>R
NB20: Does your unit have access to an LTA within 2 hrs?	87.3	3863	-	-	-
NB21: If not, does lack of an LTA hurt tng in your unit?	42.8	815	E<N,O	2<M<5	-
NE40: A full-time tng comm is already available to my unit	20.7	2771	E,N>O	2>M	-
NE45: My next higher HQ already uses a SUTA drill schedule	33.4	2360	-	-	G>R
NE50: My unit already follows an adaptable drill schedule	19.0	3324	E>N>O	-	-
NU3: Has a FT tng off/NCO been asg to your unit for 9 mos	82.9	3159	E,N>O	2>M	G>R

(table continues)

(table continues)

Differences

Item	%Yes	n	R	G	C

Item asked of junior enlisted soldiers and NCOs only

NB18: A full-time tng Off/NCO in your next higher HQ?	89.5	2556	-	-	G>R

Item asked of NCOs and officers only

NB16: Do you conduct small unit tng when officers are gone?	68.9	2518	-	-	-

Item asked of NCOs only

NB22: Have you completed the right NCOES for your grade?	77.8	1325	-	-	-

Item asked of officers only

OB9: OK if NCOs do training without officers present	82.0	1209	-	-	-

^aA 5% difference in the percentage of soldiers answering "yes" was considered substantial enough to report. ^bRank: E = Junior enlisted soldiers (E1-E4s). N = NCOs (E5-E9s). O = Officers and warrant officers. ^cGeography: 1, 2, . . . = 1st Army, 2nd Army, . . . M = Mean for all armies. ^dComponent: G = Guard (ARNG). R = Reserve (USAR).

NE40 asked soldiers if a full-time training committee was already available to their units. Fewer officers (15.3%) than junior enlisted soldiers (23.7%) and NCOs (23.5%) answered "yes" to this question. More soldiers in 2nd Army (25.8%) answered "yes" to this question than did soldiers across all the CONUSAs (20.7%).

When asked if their next higher headquarters already used a Split Unit Training Assembly (SUTA) drill schedule (NE45), more soldiers in the ARNG (38.9%) answered "yes" than did soldiers in the USAR (21.7%). Commanding Officers (COs) of soldiers were asked if their units had a full-time training officer/NCO during the previous nine months (NU3). COs of junior enlisted soldiers (86.4%) and NCOs (85.5%) answered "yes" to this questions more often than COs of officers (76.6%). COs of soldiers in 2nd Army (88.8%) answered "yes" to this question more often than COs of soldiers across all the CONUSAs (82.9%). COs of ARNG soldiers responded "yes" (93.8%) more frequently than did COs of soldiers in the USAR (63.1%).

One item in Table 18 was asked of junior enlisted soldiers and NCOs only. NB18 asked soldiers themselves if a full-time training officer/NCO was available in their next higher headquarters. Junior enlisted soldiers and NCOs in the ARNG (93.3%) responded "yes" more often than their counterparts in the USAR (81.1%).

Tables 19 and 20 give an analysis of the degree to which each of the major training methods is employed in the RC. Table 19 shows the training methods for MOS qualification used by junior enlisted soldiers and NCOs. The survey items which collected this information produced rank-order data. One method for summarizing the responses is shown in the fourth column of Table 19 which is titled "Most used by what %." A less accurate, but still useful, summary of responses for each of the items in Table 19 is shown in column three, "Mean rank." Both column four and column three of Table 19 were considered together to order the training methods according to degree of use for MOS qualification. The result is the order in which the methods are listed in Table 19. As can be seen there, AC school is the method most used for MOS qualification: 58.1% of the junior enlisted soldiers and NCOs in the sample indicated this was the method they had used most. Supervised on-the-job training (SOJT) was most used by 45% of the junior enlisted soldiers and NCOs in the sample. The remaining methods were ranked in the following order: RF school, correspondence courses, ARNG school, unit school, and civilian school.

Differences in the degree to which each of the training methods were used for MOS qualification were tested by Rank, Geography, and Unit type using the Kruskal-Wallis test. Table 19 shows a number of significant differences. Four of the

Table 19

Training Methods for MOS Qualification Most Used by Enlisted soldiers in the USAR and ARNG

					Differences	
Method	n	Mean rank	Most used by what %	Rank ^a	Geog. ^b	Component ^c
NB6: AC school	1910	2.3	58.1	E<N***		
NB7: SOJT	2085	2.0	45.1	E>N***	-	G<R***
NB10: RF school	1298	4.2	14.9	E>N***	-	G>R***
NB12: Corrspdnce crs	1333	3.6	11.9	E>N***	-	-
NB9: ARNG school	1378	4.4	9.7	E>N***	2<M*	G<R***
NB11: Unit school	1410	4.0	9.1	-	2<M**	-
NB8: Civilian school	1633	4.8	9.0	-	-	-

58

Note. The smaller the rank assigned, the more used the method. Thus E<N means that enlisted soldiers ranked the method as being more used than did NCOs. Differences were analyzed for statistical significance using the Kruskal-Wallis test.

^aRank: E = Junior enlisted soldiers (E1-E4s). N = NCOs (E5-E9s) ^bGeography: 1, 2, . . . = 1st Army, 2nd Army, ... M = Mean for all armies. ^cComponent: G = Guard (ARNG). R = Reserve (USAR).

*p < .05. **p < .01. ***p < .001.

Table 20

Training Methods for Branch Qualification Most Used by Officers in the ARNG and USAR

Method	n	Mean rank	Most used by what %	Differences	
				Geog. ^a	Component ^b
OB4: AC school	1016	1.604	66.7	-	G<R**
OB5: Civilian school	731	2.618	45.6	-	G>R***
OB6: RF school	765	2.473	35.7	6<M*	-
OB7: Corrsdnce course	930	2.166	39.0	-	-

Note. The smaller the rank assigned, the more used the method. Thus E<N means that junior enlisted soldiers ranked the method as being more used than did NCOs. Differences were analyzed for statistical significance using the Kruskal-Wallis test.

^aGeography: 1, 2, . . . = 1st Army, 2nd Army, ... M = Mean for all armies.

^bComponent: G = Guard (ARNG). R = Reserve (USAR).

*p < .05. **p < .01. ***p < .001.

training methods for MOS qualification were used less by junior enlisted soldiers than by NCOs. These methods were: SOJT, RF school, correspondence courses, and ARNG school. The opposite is true for AC school. That is, NCOs used AC school as the primary means for MOS qualification less than junior enlisted soldiers did.

Soldiers in the ARNG used two of the methods more than did soldiers the USAR. These were SOJT and ARNG school. Two of the training methods for MOS qualification were used more by soldiers in the USAR than by soldiers in the ARNG. These methods were AC school and RF school. Soldiers in 2nd Army used ARNG school and Unit school as methods for MOS qualification more than did soldiers across all CONUSAs.

T20 shows the training methods used by officers for branch qualification. AC school was the method most used, followed by civilian school, RF school, and correspondence courses. Officers in the ARNG used AC school as a branch qualification method more than did officers in the USAR. The opposite is true for civilian school. Soldiers in 6th Army used RF school more than did soldiers across all CONUSAs.

Quality of Training

The type of survey items which were grouped into the "Quality of Training" category have to do with soldiers' perceptions and value judgments about the training they have received. Those items aimed at ascertaining general quality of training were:

1. ND90: In the past year poor quality of training has made me feel like leaving the ARNG or USAR.
2. ND89: In the past year too much wasted training time has made me feel like leaving the ARNG or USAR.
3. ND49: The training needs of the soldiers in my unit are adequately met during IDT.
4. ND37: Training in my unit is too repetitive.
5. NC10b: On an average 16-hour weekend drill period (MUTA-4), how much of your time spent receiving training which is directly supervised by NCOs or officer is really helping to build or maintain your skills?
6. NC9b: On an average 16-hour weekend drill period (MUTA-4), how much of your time is spent really helping other soldiers to build or maintain their skills?
7. NE81: I consider individual training to be an effective means for training individual soldiers.

Examples of Quality of Training items wherein soldiers evaluate specific methods, materials, or persons associated with training include the following: "NE75: I consider supervised on-the-job training (SOJT) to be an effective means for training individual soldiers." "ND26: My unit's leaders know their jobs." "NE102: Soldier Training Publications or Soldier's Manuals are helpful when available in sufficient quantity."

Certain items in the survey asked soldiers to identify obstacles to training. Such evaluations also fit conceptually in the "quality of training" category. Examples of items about obstacles to training included: "NC24: Training time is wasted in my unit because topics trained are not important to the unit mission." "ND29: Changes in my unit's training schedule hurt the quality of the training." "NC20: Maintenance inspections detract from the efficient training of my unit."

The Quality of Training category of items is different from the Performance category in that the latter type of items asked soldiers to evaluate their own or their unit members' performance of duty position skills. Such performance could partially be seen as an outcome of training and other factors. Quality of Training items, on the other hand, asked soldiers to evaluate the training itself rather than its outcome. Table 21 contains the means for all Quality of Training items which are quasi-interval and ratio in nature. The questions in Table 21 are sorted and listed in order of their means within the Rank(s) of which they were asked. Thus item NE77, having the smallest mean, is listed at the top of the section of Table 21 containing items answered by all three Ranks. (NE77 states, "I consider Annual Training to be an effective means for training individual soldiers.") The means for Likert-type items reflect corresponding levels on the Likert Scale. For example, a mean of 1.5 would reflect a response midway between "strongly agree" and "agree". A mean of 3.000 would reflect a mean response of "medium". In the case of Likert-type items, the smaller the mean, the more favorable the response. For example, NE77, having the smallest mean of any of the Likert-type items regarding Quality of Training that were asked of all three Ranks, received the most favorable response.

The vast majority of the items regarding Quality of Training were rated on the favorable side of the Likert scale. Positive Likert-type items are those where a strong agreement indicates a favorable response. A favorable response on a positive item could range between 1 (strongly agree) to 3 (medium). Negative Likert-type items were reversed statistically so as to agree with positive ones. Thus a mean of 1 (strongly agree) would reflect a favorable response, rather than an unfavorable one. This was done in order to

Table 21

Grand Means and Differences by Rank (R), Geography (G), and Component (C) for All Soldiers on Items Regarding Quality of Training

Item	Differences				
	Mean	n	Ra	Gb	Cc Interactions ^d
Items asked of all ranks					
NE77: Effective for individual training: AT	1.668	2601	-	-	-
ND34: AC schools do a good job of training soldiers	1.848	3662	-	-	-
NE15: AC schools have good facilities	1.877	3049	-	-	-
NE75: Effective for individual tng: SOJT	1.887	2596	-	-	-
NE13b: AC Schools have good instructors	1.891	3051	-	-	-
NE57: Job aids are useful	1.898	3759	-	-	-
NE103: Helpful in sufficient quantity: FMs	1.909	3933	-	-	-
NE104: Helpful in sufficient quantity: Tech Manuals	1.912	3914	-	-	-
NE14: AC schools have good course content	1.915	3053	-	-	-
NE102: Helpful in sufficient quantity: STPs/SMs	1.918	3930	-	-	-

(table continues)

Differences

Item	Mean	N	R	G	C	Interactions
NE16: AC schools have good equipment	1.933	3056	-	-	-	-
NE109: Helpful in sufficient quantity: ARTEP or equivalent	2.032	3699	-	-	-	-
NB26: NCOs in my unit require soldiers to meet SM standards	2.067	3905	-	-	-	-
NE6b: ARNG schools have good instructors	2.072	1937	-	-	-	-
NE110: Helpful in sufficient quantity: Tng Circulars	2.080	3780	-	-	-	-
NE7: ARNG schools have good course content	2.086	1941	-	-	-	-
NC29:e Time not wasted with tng over the soldiers' heads	2.095	3875	-	-	-	-
NE111: Helpful in sufficient quantity: Field Circulars	2.102	3732	-	-	-	-
NE108: Helpful in sufficient quantity: Job Books	2.109	3857	-	-	-	-
ND26: My unit's leaders know their jobs.	2.129	3975	-	-	-	-
NE105: Helpful in sufficient quantity: TEC lessons for QC	2.145	3529	-	-	-	-
NE76: Effective for individual tng: IDT	2.163	2565	-	-	-	-
NE106: Helpful in sufficient quantity: Army Regs	2.216	3890	-	-	-	-

(table continues)

Item	Differences				
	Mean	N	R	G	C
ND39: Active Army assistance is helpful to my unit	2.224	3191	E>O	-	-
NB49: My unit has enough ARNG Regs to support tng	2.246	2704	-	-	-
NE21: RF schools have good course content	2.248	2061	-	-	RC
NB48: My unit has enough Army Regulations to support tng	2.261	3776	-	-	-
NB54: NCOs help well with SM tasks on which subs are weak	2.261	3829	-	-	-
NB55: NCOs correct individual soldier weaknesses well	2.262	3850	-	-	-
ND32: ARNG schools do a good job of training soldiers	2.268	2824	-	-	G<R
NE107: Helpful in sufficient quantity: NG Regs	2.268	2944	-	-	G<R
NE8: ARNG schools have good facilities	2.273	1952	-	-	-
NE20b: RF schools have good instructors	2.304	2062	-	-	-
NC24:e Time not wasted with topics unimport to unit miss.	2.334	3805	-	-	-
NB50: My unit has enough Job Books to support training	2.372	3682	-	-	-
NB43: In my unit, unit training is supervised well	2.374	3916	-	-	-

(table continues)

Item	Differences				
	Mean	N	R	G	C
NE9: ARNG schools have good equipment	2.376	1944	-	-	RC
NB41: In my unit, ARTEP tng is tailored to wartime mission	2.413	3489	-	-	-
NE24: RF schools have easy-to-meet course schedules	2.419	2059	-	-	-
ND33: RF schools do a good job of training soldiers	2.446	2900	-	-	-
NB42: In my unit, individual training is supervised well	2.452	3963	-	-	-
ND90: Poor quality of training has not made me want to leave	2.453	3884	E>O	-	-
NE25: RF schools have enough classroom openings	2.462	2016	-	-	-
NE10: ARNG schools have easy-to-meet course schedules	2.486	1950	-	-	-
NB51: My unit has enough ARTEPs/Tac Tng Guides to spt tng	2.489	3459	-	-	-
NB44: My unit has enough STPs/SMs to support training	2.495	3871	-	-	-
NB56: NCOs use gaps in tng well to help subs imp indiv skls	2.506	3799	-	-	-
NB40: In my unit, ARTEP training is interesting	2.519	3534	-	-	-
NB45: My unit has enough Field Manuals to support training	2.522	3843	-	-	-

(table continues)

Differences

Item	Mean	N	R	G	C	Interactions
NB39: In my unit, ARTEP training is realistic	2.544	3517	-	-	-	-
NB46: My unit has enough Tech Manuals to support training	2.545	3806	-	-	-	-
NB52: My unit has enough Training Circulars to spt tng	2.551	3561	-	-	-	-
NE22: RF schools have good facilities	2.568	2047	E<O	-	-	-
NE11: ARNG schools have enough classroom openings	2.583	1926	-	-	-	-
NB47: My unit has enough TEC tapes to support training	2.615	3418	-	-	G<R	-
NB38: ARTEP tng is tailored to needs/abilities of soldiers	2.629	3469	-	-	-	-
NB53: My unit has enough Field Circulars to support tng	2.633	3470	-	-	-	-
NE23: RF schools have good equipment	2.655	2025	E<O	-	-	-
NE18: AC schools have enough classroom openings	2.709	2901	E<N<O	6>M	-	-
NC27:e Time not wasted with equip often breaking down	2.726	3752	E>O	-	-	-
NC30:e Time not wasted with sldrs who don't try hard	2.740	3885	-	-	-	-
NE17: AC schools have easy-to-meet course schedules	2.755	2862	E,N<O	-	-	RC

(table continues)

Item	Differences					
	Mean	N	R	G	C	Interactions
ND89:e Too much wasted tng time has not made me want to leave	2.770	3892	E>O	-	-	-
NC26:e Time not wasted with tng that is not well organized	2.776	3892	E>O	-	-	-
NE26: RF schools have enough funding for soldiers to go	2.819	1933	-	-	-	-
ND49: Tng needs of soldiers in my unit are met during IDT	2.822	3659	-	-	-	-
NE19: AC schools have enough funding for soldiers to go	2.890	2786	E<N<O	6>M	-	-
NE12: ARNG schools have enough funding for soldiers to go	2.904	1881	E<O	-	-	-
NB27: The way my unit uses MILES helps mission capab	2.908	1525	-	-	G<R	-
ND29:e Tng sched changes do not hurt qual of tng in my unit	3.004	3871	-	-	-	-
NC28:e Time not wasted with tng facil/equip/materl unavail	3.111	3870	-	-	G<R	-
NC25:e Time not wasted with other regmnts interfering with tng	3.592	3871	E<O	-	-	-
NE59: In my unit hip pocket tng needs no improvement	3.683	3665	E<N	-	-	-

Items asked of junior enlisted soldiers and NCOs only

ND37:e Training in my unit is not too repetitive	3.114	2647	-	-	-	-

(table continues)

Differences

Item	Mean	N	R	G	C	Interactions
NC10b:f How many hrs help build/maintain your skills	4.023	2558	-	-	-	-
ND21:f Percent of reclass tng like to get from correspond	9.982	2071	-	-	-	-
ND18:f Percent of reclass tng like to get from Unit school	11.109	2055	-	-	-	-
ND17:f Percent of reclass tng like to get from ARNG school	11.361	2059	-	-	G>R	-
ND16:f Percent of reclass tng like to get from RF school	12.080	2076	-	-	G<R	RC
ND20:f Percent of reclass tng like to get from home study	12.446	2075	-	-	-	-
ND19:f Percent of reclass tng like to get from civilian sch	14.495	2091	-	-	-	-
ND22:f Percent of reclass tng like to get from SOJT	26.032	2304	-	-	G>R	-
ND15:f Percent of reclass tng like to get from AC school	34.821	2317	-	-	-	-

Items asked of NCOs and officers only

NE78: Effective for individual tng: Active Army schools	1.740	2558	-	-	-	RC
NE86: Effective for individual tng: Overseas deployment tng	1.879	2341	-	-	-	RC
NF38: NCOs can perform skills they are resp to teach others	1.909	2529	-	-	-	-

(table continues)

Differences

Item	Mean	N	R	G	C	Interactions
NE81: Effective for individual tng: individual training	1.944	2599	-	-	-	-
NE97:g SOJT helps soldiers to be MOS qualified faster	1.970	2546	-	-	-	-
NF36: I have good training skills	1.971	2559	-	-	-	-
NE82: Effective for individual tng: unit training	1.991	2589	-	-	-	-
NE85: Effective for individual tng: unit exercises	2.025	2563	-	-	-	-
NE84: Effective for individual tng: joint tng exercises	2.194	2204	-	-	-	-
NE79: Effective for individual tng: RF schools	2.253	2327	-	-	G>R	-
NE83: Effective for individual tng: joint readiness exer	2.254	2174	-	-	-	-
NE80: Effective for individual tng: MOBEXs	2.344	2474	-	-	-	-
NE98:e SOJT helps the quality of training	2.388	2515	-	-	-	-
NC22:e Phys fitness tests don't detract from eff tng of unit	2.478	2507	-	-	-	-
NE100:e SOJT helps the quality of indiv tng	2.528	2488	-	-	-	-
NC16:e AT evals don't detract from efficnt tng of my unit	2.538	2406	N>O	-	-	-

(table continues)

Differences

Item	Mean	N	R	G	C	Interactions
NE101:e SOJT helps the quality of unit tng	2.561	2481	-	-	-	-
NE99:g SOJT helps personnel retention	2.659	2407	-	-	-	-
NC17:e IDT evals don't detract from efficient tng of my unit	2.661	2301	-	-	-	-
NF21:e Insufficient people to help conduct tng not a prob	2.716	2251	-	-	-	-
NC21:e Phys exams don't detract from efficient tng of my unit	2.718	2473	-	-	-	-
NC20:e Maint Insp don't detract from efficient tng of my unit	2.819	2373	-	-	-	-
NF20:e Insufficient classroom space not a problem	2.88	2259	-	-	-	-
NF23:e Unit reorganization not a tng obstacle	2.916	2123	-	-	-	-
NF18:e Lack of a local training area not a problem	2.964	2244	-	-	-	-
NF15:e Insufficient training materials not a problem	3.015	2267	-	-	G<R	RC
NC19:e Annual Genl Insp don't hurt efficient tng of unit	3.090	2458	-	-	-	-
NF40:e Unit doesn't lack realstc chances to use equip/skills	3.125	2494	-	-	-	-
NF19:e Lack of other physical facilities not a problem	3.133	2238	-	-	-	RC

(table continues)

Differences

Item	Mean	N	R	G	C	Interactions
NF39:e Don't get conflicting tng guidance from diff higher HQ	3.137	2474	-	-	-	-
NC18:e Cmd Visits/Insp don't hurt effient tng of my unit	3.164	2475	-	-	-	-
NF22:e Soldier turnover is not a problem for tng my subords	3.272	2255	-	-	-	-
NF13:e Insuficnt time to prepare not a probl for tng subords	3.331	2268	-	-	-	RC
NC15:e My unit doesn't train on more tasks than can learn in avail time	3.377	2333	-	-	-	-
NF14:e Insufficient time to conduct tng not a problem	3.494	2269	-	-	-	-
NF17:e Short age of the right equip r tng problem	3.578	2248	-	-	-	-
NF16:e Lack of simulators/tng devices not a problem	3.633	2197	-	-	-	RC
ND23:f What % of unit NCOs have good training skills	68.270	2530	-	-	-	-
ND24:f What % of unit NCOs can perf skills they teach	70.592	2503	-	-	-	-

Items asked of officers only

OD18:f Would want corresp course for what % of retrain	13.109	1009	-	-	G>R	-
(table continues)						

Item	Differences				
	Mean	N	R	G	C
OD15:f Would want RF school for what % of retraining	17.118	1040	-	-	-
OD17:f Would want Home Study for what % of retraining	17.310	1020	-	-	-
OD16:f Would want civilian school for what % of retnng	17.322	1003	-	-	-
OD14:f Would want AC school for what % of retraining	49.854	1154	-	-	-
Items asked of NCOs only					
NF2: Contrib to my tng success: prev ldr/counseling tng	1.955	1054	-	-	-
NF3: Contrib to my tng success: prev tng on "how to train"	2.053	1044	-	-	-
NF4: Contrib to my tng success: higher HQ guidance	2.053	1044	-	-	-
NF5: Contrib to my tng success: reference books	2.056	1080	-	-	-
NF11: Contrib to my tng success. trainers' manuals	2.062	1072	-	-	-
NF7: Contrib to my tng success: help with conduct of tng	2.130	1069	-	-	-
NF1: Contrib to my tng success: suggestions from others	2.165	1028	-	-	-
NF6: Contrib to my tng success: help with tng set-up	2.199	1073	-	-	-

(table continues)

Item	Differences				
	Mean	N	R	G	C
NF10: Contrib to my tng success: hip pocket tng matls	2.298	1043	-	-	-
NF9: Contrib to my tng success: simulators	2.354	914	-	-	-
ND55: I've had success tng my subord to reqd rdns levels	2.363	1233	-	-	-
NF8: Contrib to my tng success: computers	2.799	804	-	-	-
NC9c:f How many hrs help build/maintain your ldr skills	3.694	1215	-	-	-
NC9b:f How many hours really help others maintain skills	4.145	1221	-	-	-
Items asked of junior enlisted soldiers only					
ED52: NCOs in unit perf skills they are resp to trn othr on	2.195	1347	-	-	-
ED51: The NCOs in my unit have good training skills	2.211	1348	-	-	-

Note. The majority of items in this table are Likert scales. Exceptions are footnoted. All differences reported are statistically significant at the .001 level and substantial (at least a quarter of a scale point, or 5%, or one-fourth of the sd).

aRank: E = Junior enlisted soldiers (E1-E4s). N = NCOs (E5-E9s). O = Officers and warrant officers. bGeography: 1, 2, . . . = 1st Army, 2nd Army, ... M = Mean for all armies. cComponent: G = Guard (ARNG). R = Reserve (USAR). dInteraction terms: RG = rank by geography. RU = rank by unit type. RC = rank by component. GU = geography by unit type. GC = geography by component. eThis item has been rephrased and the polarity of its mean reversed so as to parallel the "positive" Likert scales. fThis item rendered (table continues)

ratio data in the unit of measure implied in the item description. ¶This item is rephrased to parallel other items in this table.

accommodate the ordering of items according to favorability of responses.

As can be seen in Table 21, the Quality of Training items that received a mean response of "agree" (2.00) or better and were asked of all three Ranks were:

1. NE77: Annual Training is an effective means for training individual soldiers.
2. ND34: Active Component schools do a good job of training ARNG or USAR soldiers.
3. NE15: Active Component schools have good facilities.
4. NE75: Supervised On-the Job Training (SOJT) is an effective means for training individual soldiers.
5. NE13b: Active Component schools have good instructors.
6. NE57: Job aids such as diagrams or checklists which are readily available are useful.
7. NE103: Field Manuals are helpful when available in sufficient quantity.
8. NE104: Technical Manuals are helpful when available in sufficient quantity.
9. NE14: Active Component schools have good course content.
10. NE102: Soldier Training Publications/Soldier's Manuals are helpful when available in sufficient quantity.
11. NE16: Active Component schools have good equipment.

Several Likert-type items regarding Quality of Training were asked of only NCOs and officers. Of these, seven items received a mean response of "agree" (2.00) or better. These were:

1. NE78: Active Component schools are an effective means for training individual soldiers.
2. NE86: Overseas Deployment Training (ODT) is an effective means for training individual soldiers.
3. NF38: I can perform the skills that I am responsible to teach others.
4. NE81: Individual training is an effective means for training individual soldiers.
5. NE97: If Supervised On-the-Job Training (SOJT) were eliminated as a method of MOS reclassification training, I think it would take longer for soldiers to become MOS qualified.
6. NF36: I have good training skills.

7. NE82: Unit training is an effective means for training individual soldiers."

Fourteen Likert-type items regarding Quality of Training were asked of NCOs only. Only one of these was responded to with a mean of less than 2.0. This item was NF2, "Previous training in leadership and counselling techniques is an important contributor to my success in personally training subordinates." Neither of the Likert-type items regarding Quality of Training that were asked of only junior enlisted soldiers were responded to with a mean of less than 2.0.

Just as a difference between groups of less than a quarter scale point on the Likert Scale was considered not substantial, so also a difference of less than a quarter of a scale point between items within a group would not be considered substantial or worthy of note. A whole scale point is the distance, for example, between "agree" and "strongly disagree." Therefore, when comparing item means to determine which items were most favorably responded to, it is important to ignore differences between items that were less than 0.25. For example, the difference between NE75 with a mean of 1.887 and NB26 with a mean of 2.067 is statistically significant because of the sizable ns obtained. However, it would not be of practical importance, since the difference between the two means is only 0.18. However, the difference between the mean for NE77 (1.668) and NE76 (2.163) would not only be statistically significant, but also a difference worthy of note or action.

Table 21 lists numerous items regarding Quality of Training that received moderate agreement, i.e., means ranging from 2.00 to 3.00. Means in this range indicate favorability; that is, the facet of training being evaluated was seen as having good quality. Rather than relist all of these here, the reader is directed to the table.

Although soldiers responded favorably to training in general, a few of the Quality of Training items received a mean response which was less than favorable (though not strongly so) i.e., less than 3.00. As responses to these items imply, there are certain areas which, while not strongly negative, still need attention more urgently than others. Those areas which seem to need attention are (in order, starting with the least favorable mean):

1. NE59: Hip pocket training.
2. NF16: Lack of simulators and training devices.
3. NC25: Too many nontraining requirements.
4. NF17: Shortage of the right equipment.
5. NF14: Insufficient time to conduct training.

6. NC15: Training on more tasks than can be learned in available time.
7. NF13: Insufficient time to prepare training.
8. NF22: Soldier turnover.
9. NC18: Too many command visits and inspections.
10. NF39: Conflicting training guidance from different higher headquarters.
11. NF19: Lack of physical facilities other than LTAs (firing ranges, armories, training centers, etc.)..
12. NF40: Lack of realistic chances to use equipment and skills.
13. ND37: Too much repetition in training.
14. NC28: Wasted time because of unavailable facilities, equipment, or materials.
15. NC19: Interference of annual general inspections.
16. NF15: Insufficient training materials.
17. ND29: Too many changes in unit training schedules.

See Table 21 for the means and descriptions of these items.

Several facets of training were judged differently by soldiers in the various Ranks. These differences are noted in the Rank column of Table 21. Breakdown means for the three Ranks are given in Table 22 whenever a difference by Rank is noted in Table 21. These differences by Rank which are especially noteworthy are expressed textually below.

In seven instances, officers responses differed significantly from those of junior enlisted soldiers, and in three cases, from responses of NCOs. Differences between means ranged from .36 to .67 of a scale point. Officers disagreed more than junior enlisted soldiers on the following items:

1. NC25: Training time is not wasted due to other requirements interfering with training.
2. NE17: AC schools have easy to meet course schedules.
3. NE18: AC schools have enough classroom openings.
4. NE19: AC schools have enough funding for soldiers to go.
5. NE59: In my unit hip pocket training needs no improvements.

Officers agreed more than junior enlisted soldiers on the following items:

Table 22

Group Means for All Soldiers on Items Regarding Quality of Training Which Showed a Substantial Difference by Rank

Item	E1-E4s			NCOs			Officers			Overall	
	Mean	n		Mean	n		Mean	n		Mean	sd
NC16: ^a AT evals don't detract from efficient training of my unit	-	-		2.67	1252		2.39	1154		2.54	1.11
NC25: Time not wasted with other reqmnts interfering with tng	3.41	1333		3.59	1311		3.79	1227		3.59	1.12
NC26: ^a Time not wasted with tng that is not well organized	2.96	1353		2.75	1308		2.60	1231		2.77	1.15
NC27: ^a Time not wasted with equip often breaks down	2.83	1329		2.76	1276		2.57	1147		2.73	1.12
ND39: Active Army assistance is helpful to my unit	2.38	921		2.21	1139		2.11	1131		2.22	.91
ND89: Too much wasted tng time has not made me want to leave	2.95	1362		2.78	1308		2.56	1222		2.77	1.21
ND90: Poor quality of training has not made me want to leave	2.61	1358		2.45	1310		2.28	1216		2.45	1.07
NE12: ARNG schools have enough funding for soldiers to go	2.73	438		2.89	790		3.04	653		2.90	1.16
NE17: AC schools have easy-to-meet course schedules	2.49	835		2.67	921		3.02	1106		2.75	1.12
NE18: AC schools have enough classroom openings	2.39	859		2.69	936		2.97	1106		2.71	1.12
NE19: AC schools have enough funding for soldiers to go	2.51	801		2.89	908		3.18	1077		2.89	1.22

(table continues)

Item	E1-E4s		NCOs		Officers		Overall	
	Mean	n	Mean	n	Mean	n	Mean	sd
NE22: RF schools have good facilities	2.42	434	2.50	774	2.70	839	2.57	.92
NE23: RF schools have good equipment	2.49	433	2.59	776	2.81	816	2.65	.94
NE59: In my unit hip pocket tng needs no improvement	3.47	1235	3.71	1266	3.88	1164	3.68	.98

Note. The items in this table are Likert scales.

aThis item has been rephrased and the polarity of its mean reversed so as to parallel the "positive" Likert scales.

1. NC26: Training time is not wasted due to training that is not well organized.

2. ND89: Too much wasted training time has not made me want to leave the RC.

Only two substantial differences in Geography were found for Quality of Training items. Item NA18 asked soldiers how strongly they agreed that AC schools have enough classroom openings. Soldiers in 6th Army did not agree as strongly as did soldiers across all of the CONUSAs that such was the case. Likewise, it was soldiers in the 6th Army that mildly disagreed that AC schools have enough funding for soldiers to attend, while soldiers across all of the CONUSAs mildly agreed on the average. Breakdown means for these analyses are shown in Table 23.

Analyses of variance pointed out a number of differences by Component in how soldiers rated facets of training. Breakdown means for these analyses are shown in Table 24. Two of these differences serve to check the validity of soldiers answers. As would be expected, soldiers in the ARNG agreed more strongly than did soldiers in the USAR that ARNG schools do a good job of training soldiers (ND32). Likewise, the ARNG soldiers felt that National Guard regulations were helpful when available in sufficient quantity to a higher degree than did the 447 USAR soldiers who felt themselves qualified to venture an opinion on this item (NE107). Somewhat unexpectedly, however, soldiers in the ARNG agreed more strongly than did soldiers in the USAR that they had enough TEC tapes to support training (NB47). Soldiers in the ARNG were also more positive than were USAR soldiers about the way MILES helps their units develop mission capabilities (NB27). This difference is one of the most substantial differences found for a Likert scale in the whole survey. Soldiers in the ARNG mildly agreed ($\bar{M} = 2.78$) while USAR soldiers mildly disagreed ($\bar{M} = 3.26$). While all soldiers disagreed that time was not wasted because of facilities, equipment, or materials being unavailable, USAR soldiers disagreed with the statement more strongly than did soldiers in the ARNG (NC28).

Three items which were asked only of junior enlisted soldiers and NCOs showed substantial differences by Component. As expected, USAR soldiers said they would want a smaller percentage of their reclassification training from ARNG school than did soldiers in the ARNG (ND17). The reverse was true with regard to reclassification from the RF school (ND16). Soldiers in the ARNG indicated they would like to get a higher percentage of reclassification training through SOJT (if required to reclassify) than did soldiers in the USAR (ND22).

Two Quality of Training items that showed a difference by component were asked only of NCOs and officers. Soldiers in

Table 23

Group Means for All Soldiers on Items Regarding Quality of Training Which Showed a Substantial Difference by Geography

Item	All CONUSAs			Army showing a difference			
	Mean	n	sd	Army	Mean	n	sd
NE18: AC schools have enough classroom openings	2.71	2901	1.12	6	2.99	435	1.18
NE19: AC schools have enough funding for soldiers to go	2.89	2786	1.22	6	3.22	424	1.27

Note. The items in this table are Likert scales.

Table 24

Group Means for All Soldiers on Items Regarding Quality of Training Which Showed a Substantial Difference by Component

Item	ARNG		USAR		Overall	
	Mean	n	Mean	n	Mean	sd
NB27: The way my unit uses MILES helps mission capab	2.78	1116	3.26	409	2.91	1.36
NB47: My unit has enough TEC tapes to support training	2.50	2249	2.84	1169	2.61	1.13
NC28:a Time not wasted with tng facil/equip/materl unavail	3.01	2487	3.28	1383	3.11	1.23
ND16:b Percentage of reclass tng like to get from RF school	9.56	1378	17.05	698	12.08	18.09
ND17:b Percentage of reclass tng like to get from ARNG school	13.78	1434	5.82	625	11.36	17.10
ND22:b Percentage of reclass tng like to get from SOJT	27.02	1557	23.98	747	26.03	25.18
ND32: ARNG schools do a good job of training soldiers	2.20	2233	2.53	591	2.27	.85
NE79: Effective for individual tng: RF schools	2.37	1414	2.07	913	2.25	.89
NE107: Helpful in sufficient quantity: NG Regs	2.21	2497	2.60	447	2.27	.86
NF15:a Insufficient training materials not a problem	2.92	1406	3.17	861	3.01	1.07

(table continues)

Note. The majority of items in this table are Likert scales. Exceptions are footnoted.

^aThis item has been rephrased and the polarity of its mean reversed so as to parallel the "positive" Likert scales. ^bThis item rendered ratio data in the unit of measure implied in the item description.

the USAR agreed more than did soldiers in the ARNG that RF schools were effective for individual training (NE79). This, of course, was to be expected. However, an unexpected difference was shown for item NF15 which stated that insufficient training materials is not a problem. Soldiers in the ARNG agreed with this statement more than did soldiers in the USAR.

Several of the items in Table 21 are not Likert-type scales. Rather they obtained responses which are ratio data. Generally they are items which requested that the respondent estimate a number of hours or a percentage. These items are identified with a footnote in Table 21. With ratio items, a larger mean indicates a more favorable response.

Item NC10b, "How many hours spent receiving training help to build or maintain your skills?" must be interpreted in light of soldiers' responses to item NC10 (which was reported in Table 15), "On an average 16-hour weekend drill period (MUTA-4) how much of your time is spent receiving training that is closely supervised by NCOs or officers?" Since the average answer to the later was 5.671 hours and the mean for NC10b was 4.023 hours, soldiers were indicating that roughly 71% ($4.023 \div 5.671$) of the time they spend receiving training is actually helpful. While it is unfortunate that nearly two thirds of the soldiers' time in drills appears to be taken up by nontraining activities, it is gratifying to note that most of the time spent actually receiving training was thought by soldiers to be worthwhile.

NCOs were asked a similar question regarding how much of the time they spend in a MUTA-4 training others is perceived by themselves as being helpful to themselves (NC9c) or to those whom they are training (NC9b). These two items must be interpreted in light of NCO responses to item NC9, "On an average 16-hour weekend drill period (MUTA-4), how much of your time is spent training others?" The mean response to this item was 6.920 hours. Since the mean responses to NC9c and NC9b were 3.694 and 4.145 respectively, NCOs felt that roughly 53% of the time they spent training is helpful in building their own leadership skills and 60% of the time they spend training others is actually helpful in helping those soldiers to build or maintain their skills.

Two percentage items asked of NCOs and officers only requested estimates of NCO capabilities. The first, ND23, inquired "What percentage of the NCOs in your unit have good training skills?" The mean response was 68.3%. The second, ND24, asked "What percentage of NCOs in your unit can perform these skills they are responsible to teach?" The mean response was 70.6%. Thus, NCOs were rated fairly well in terms of their training ability, but there is still room for improvement.

The remaining non-Likert-type items in Table 21 all have to do with soldier preferences for methods of reclassification. On these items soldiers were asked to imagine they were changing MOS or branch and indicate what percentage of their training they would prefer to receive through each of various methods. For these items, the higher the mean the more preferred the training method. As can be seen in the "junior enlisted soldiers and NCOs only" section of Table 21 the most preferred method of reclassification training was AC school ($\bar{M}$ = 34.8%). The next highest preference was for SOJT ($\bar{M}$ = 26.0%). The next most preferred method of reclassification training was civilian school ($\bar{M}$ = 14.5%) followed by home study ($\bar{M}$ = 12.4%), RF school ($\bar{M}$ = 12.1%), ARNG school ($\bar{M}$ = 11.4%), unit school ($\bar{M}$ = 11.1%), and correspondence course ($\bar{M}$ = 10.0%). These figures were a reaffirmation of the way soldiers valued AC school and SOJT as methods of training. Next after these two in order of preference were two training methods that soldiers can receive away from military installations, i.e., civilian school and home study. Military schools were preferred next. Correspondence courses were at the very bottom of the preference list.

A similar but slightly different set of questions asked junior enlisted soldiers and NCOs which method for receiving reclassification training they would prefer if they could select only one method. Soldiers were asked to rank order their preferences. Table 25 shows the results of these questions. The order of preference implied by the order in which the methods are listed in Table 25 was derived by simultaneous consideration of the "Mode rank," "Mean rank," and "1st choice for what %" columns of the table. When allowed only one means of receiving reclassification training, soldiers most preferred AC school, even over SOJT. After SOJT they chose ARNG school, then unit school, then civilian school, then paid home study based on follow-up testing (possible option in the future), then RF school, followed by correspondence courses. Thus soldiers would prefer to get the bulk of the training through AC school and SOJT, mixed with a variety of other sources; but if only one source were available they would prefer AC school.

Four items in Table 21 deal with officer preferences among four training methods which could be used for branch requalification. They were asked what percentage of their training they would like to receive through each of the four methods. For these items, the higher the mean, the more preferred the training method. As can be seen in the "officers only" section of Table 21, the most preferred method of reclassification training was AC school. This method received more than double the preference assigned to the next highest method ($\bar{M}$ = 49.9% versus 17.3%). As can be seen in Table 21 civilian school, home study, and RF school received nearly the

Table 25

Preferences of Junior Enlisted Soldiers and NCOs in the USAR and ARNG on Single Methods of Reclassification Training

	Method	Mode rank	Mean rank	1st choice for what %	Differences ^a		
					Rank	Geog.	Compon. ^{b, c}
ND7:	AC school	1	3.096	46.9	-	-	-
ND14:	SOJT	1	3.385	24.8	-	-	-
ND9:	ARNG school	3	4.620	15.4	-	-	G<R*
ND10:	Unit school	5	4.699	21.8	-	-	-
ND11:	Civilian school	6	4.631	13.9	-	-	-
ND12:	Paid home study	7	5.098	20.4	-	-	-
ND8:	RF school	3	4.465	16.8	-	-	G>R*
ND13:	Corrspdnce crs	8	5.283	19.2	-	-	-

^a A 5% difference in the percentage of soldiers giving this option a first choice rating was considered substantial enough to report. Differences of this magnitude were significant (Chi-square adjusted residual) at least at the .01 level. ^b n = 2592.

^c Component: G = Guard (ARNG). R = Reserve (USAR).

*p < .001.

same indication of preference (means = 17.32, 17.32, and 17.12 respectively). Correspondence courses were least preferred for branch retraining with officers saying they would like to obtain 13.1% of their retraining through this method.

A similar but slightly different set of question asked officers which method for receiving reclassification training they would prefer if they could select only one of the five methods. Officers were asked to rank order their preferences. Table 26 shows the results of these questions. When allowed only one means of obtaining reclassification training, officers preferred AC school far above any other method. This method was even more preferred by soldiers in the ARNG than by soldiers in the USAR. The remaining four methods of reclassification training were ranked about equally with one another. However, a slight indication of the order of preference among these last four is indicated by the order in which they are listed in Table 26. This order was determined by considering simultaneously the "Mode rank" column, the "Mean rank" column, and the "1st choice for what %" column.

Quality of school instruction. Soldiers were asked to provide opinions about the quality of school instruction and facilities, as well as the practicality of attending AC, Reserve Forces (RF), and National Guard (NG) schools (NE6-26). AC schools were favored overall. However, being able to gain attendance at an AC school was judged to be more difficult than gaining attendance at an RF or NG school. Table 27 provides these comparisons.

Reasons for wasted training time. When asked whether seven specific areas contributed to wasted training time (NC24-30), soldiers, on the average, disagreed on five of the areas as being contributing factors. However, two areas were agreed with. One was having other requirements interfere with training. The second was unavailable facilities, equipment, and material. In order of agreement, the seven areas questioned were:

1. Other requirements interfere with training ($\bar{M}$ = 2.41).
2. Unavailable facilities, equipment, and material ($\bar{M}$ = 2.89).
3. Training is not well organized ($\bar{M}$ = 3.22).
4. Soldiers are not motivated to try ($\bar{M}$ = 3.26).
5. Equipment often breaks down ($\bar{M}$ = 3.27).
6. Topics trained on are not important to the unit mission ($\bar{M}$ = 3.67).
7. The training given is over the soldiers heads ($\bar{M}$ = 3.90).

Table 26

Preferences of ARNG and USAR Officers on Single Methods of Retraining for Change of Branch

	Method	Mode Rank	Mean Rank	1st Choice for what %	Differences ^a	
					Geog.	Component ^{b, c}
OD9:	AC school	1	1.853	66.2	-	G<R*
OD10:	RC school	2	2.845	38.8	-	-
OD11:	Civilian school	3	3.139	29.4	-	-
OD12:	Paid home study	4	3.399	34.5	-	-
OD13:	Correspondence course	5	3.725	36.6	-	-

^a A 5% difference in the percentage of soldiers giving this option a first choice rating was considered substantial enough to report. Differences of this magnitude were significant (Chi-square adjusted residual) at least at the .01 level. $b_n = 1249$.

^c Component: G = Guard (ARNG). R = Reserve (USAR).

*p < .5.

Table 27
Means for All Soldiers on Quality of School Instruction

Facet of school instruction	Type of School		
	AC	RF	NG
Accessibility			
Easy to meet schedule	2.8	2.4	2.5
Enough classroom openings	2.7	2.5	2.6
Enough funding for soldiers to attend	2.9	2.8	2.9
Quality			
Good instructors	1.9	2.3	2.1
Good course content	1.9	2.3	2.1
Good facilities	1.9	2.6	2.3
Good equipment	1.9	2.7	2.4

Home study options. Soldiers were asked to rate four means of instruction which would probably be effective for a home study course (NE27-30). There was general agreement that all means were effective. However, video cassettes were projected to be the most effective. The degree to which soldiers agreed with the use of video cassettes was one of the highest average positive responses on the survey. Following are the four means of instruction, listed in order as to degree of preference:

1. Video cassettes ($\bar{M}$ = 1.78).
2. Personal computers ($\bar{M}$ = 2.28).
3. Correspondence courses ($\bar{M}$ = 2.42).
4. Audio cassettes ($\bar{M}$ = 2.46).

NCO success in training subordinates. NCOs were asked to provide opinions as to whether or not eleven training assets contributed to their success in personally training subordinates (NF1-11). These questions asked for current contributions to success, not hypothetical contributions if the assets were more available or better employed. All assets were rated as making significant contributions to training success. The most highly rated item was previous training in leadership and counselling techniques. This result is perhaps due to the influence of required NCO schooling. The lowest rated items were simulators and computers, perhaps because these items are not widespread throughout the RC or related to training in all branches. Following are the eleven areas, in order of preference:

1. Previous leadership and counselling training ($\bar{M}$ = 1.96).
2. Previous training on "How to Train" and higher HQ guidance ($\bar{M}$ = 2.05).
3. Reference books and trainers' manuals ($\bar{M}$ = 2.06).
4. Personnel who help conduct training ($\bar{M}$ = 2.13).
5. Suggestions from others who have filled my position ($\bar{M}$ = 3.17).
6. Personnel that help set up training ($\bar{M}$ = 2.20).
7. Hip pocket training materials ($\bar{M}$ = 2.30).
8. Simulators ($\bar{M}$ = 2.40).
9. Computers ($\bar{M}$ = 2.80).

Training detractors. Seven events were listed as possibly detracting from efficient unit training. Soldiers were asked to judge the degree to which each event, and preparation for it, detracted from training (NC16-22). There was slight agreement that command visits and inspections, and annual

general inspections were training detractors. The rest were viewed neutrally or as nondetractors. Following are the seven events, listed in order of their perceived impact:

1. Command visits and inspections ($\bar{M}$ = 2.84).
2. Annual general inspections ($\bar{M}$ = 2.91).
3. Maintenance inspections ($\bar{M}$ = 3.18).
4. Physical exams ($\bar{M}$ = 3.28).
5. IDT evaluations ($\bar{M}$ = 3.34).
6. AT evaluations ($\bar{M}$ = 3.46).
7. Physical fitness testing ($\bar{M}$ = 3.52).

Obstacles to training subordinates. Eleven reasons were listed which could have a negative impact on the ability of leaders to train subordinates (NF13-23). Eight of the eleven reasons were, on the average, agreed with. In this case lack of simulators and training devices was judged to be the most serious obstacle to training. Following are the training obstacles, listed in order of impact:

1. Lack of simulators and training devices ($\bar{M}$ = 2.37).
2. Shortage of the right equipment ($\bar{M}$ = 2.42).
3. Not enough time to conduct training ($\bar{M}$ = 2.51).
4. Not enough time to plan and prepare ($\bar{M}$ = 2.67).
5. Soldier turnover ($\bar{M}$ = 2.73).
6. Lack of physical facilities/insufficient classroom space ($\bar{M}$ = 2.88).
7. Lack of training materials ($\bar{M}$ = 2.99).
8. Lack of a Local Training Area ($\bar{M}$ = 3.04).
9. Unit reorganization ($\bar{M}$ = 3.08).
10. Not enough people to help me conduct training ($\bar{M}$ = 3.28).

Satisfaction

Items in the "Satisfaction" category provide information on soldiers' affective responses toward various aspects of being in the RC. Quality of Training items are different from Satisfaction items in that the former asked for value judgments on how training is conducted, while the latter asked soldiers their own affective responses toward aspects of being in the RC. Like Performance, Satisfaction might be seen partially as an outcome of training rather than an evaluation of the training itself. Table 28 provides the basic details on these items. Mean responses on all Likert-type, Satisfaction items

are all favorable (i.e., means are less than 3.00, indicating agreement). The means in Table 28 are listed in order of their favorability. Accordingly, the aspect of being in the RC which soldiers found to be most satisfactory (item (ND35) was their good working relationship with their unit leaders ($\bar{M}$ = 1.851). Officers agreed with this statement more strongly than did junior enlisted soldiers. Specific means for this breakdown are shown in Table 29. Items ND85 and ND68 asked soldiers about their satisfaction in getting along with other soldiers in their units and satisfaction with their friends in their units. These items received the second and third highest agreement scores (means=1.932 and 1.940 respectively).

In addition to the top three aspects, soldiers agreed that they are satisfied with the following:

1. ND74: Doing something worthwhile and important in the RC.
2. ND66: Having a chance to help protect their country.
3. ND28: The number of awards that are given to soldiers.
4. ND62: Being in the RC in general.
5. ND57: The way the RC lets them defend their country.
6. ND73: Opportunities in the RC to be responsible and lead.
7. ND58: Opportunity in the RC to earn a retirement.
8. ND64: Their assignments in the RC.
9. ND71: The way the RC allows them to maintain military retirement benefits.
10. ND69: The way the RC provides a change of pace from civilian jobs. (See also ND60).
11. ND42: The confidence they have in their unit leaders.
12. ND75: Their status in the military.

Milder agreement (means ranging from 2.25 to 3.0) was indicated by soldiers on a variety of other items, all of which are listed in Table 28. Those items which reflected the lowest degrees of soldier satisfaction include the following areas:

1. ND36: Timeliness of promotions.
2. ND91: Ability to accomplish within the ARNG or USAR.
3. ND86: Speed of rank advancement.
4. ND27: Adequacy of recognition and awards given to soldiers in one's unit.
5. ND88: Amount of personal recognition.

Table 28

Grand Means and Differences by Rank (R), Geography (G), and Component (C) for All Soldiers on Items Regarding Satisfaction

Item	Mean	n	Differences			Interactions ^b
			R ^a	G	C	
Items asked of all ranks						
ND35: I have a good working relatnshp with my unit ldrs	1.851	3980	E>O	-	-	RG
ND85:c Not getting along with soldiers in my unit is not making me want to leave	1.932	3844	-	-	-	CR
ND68: Stay in the RC: friends I have in my unit	1.940	3985	-	-	-	-
ND74: Stay in the RC: doing something worthwhile/important	1.958	3986	E>O	-	-	-
ND66: Stay in the RC: chance to help protect my country	2.005	3972	-	-	-	-
ND28:c Right amt of awards are given to soldiers in my unit	2.039	3957	-	-	-	-
ND62: I'm satisfied with being in the ARNG/USAR	2.057	3797	E,N>O	-	-	-
ND57: I'm satisfied with how RC lets me defend my country	2.076	3976	-	-	-	-
ND73: Stay in the RC: opportu- nities to be responsible/lead	2.082	3973	E,N>O	-	-	-
(table continues)						

(table continues)

Differences

Item	Mean	N	R	G	C	Interactions
ND58: I'm satisfied with how RC lets me earn a retirement	2.093	3957	-	-	-	-
ND80:c Plans to move have not made me want to leave	2.118	3521	E>N,O	-	-	-
ND64: I'm satisfied with my assignment in the ARNG/USAR	2.135	3803	E>O	-	-	-
ND71: Stay in the RC: retire-ment benefits in the military	2.143	3952	E>N,O	-	-	-
ND69: Stay in the RC: change of pace from my civilian job	2.176	3719	-	-	-	-
ND42: I have confidence in my unit's leader(s)	2.183	3982	E,N,>O	-	-	-
ND60: I'm satisfied with how RC gives me change of pace	2.188	3973	E,N,>O	-	-	-
ND75: Stay in the RC: my status in the military	2.240	3980	E>N,O	-	-	-
ND70: Stay in the RC: the pay I receive	2.262	3983	E>N>O	-	-	-
ND61: I'm satisfied with how RC maintained my AC rank/resp	2.285	3008	E>O	-	-	-
ND59: I'm satisfied with how RC lets me get educ benefits	2.295	3830	E,N<O	-	-	CR
ND63: I'm satisfied with my pay in the ARNG/USAR	2.331	3800	E,N>O	-	-	-
ND82:c Low morale in my unit has not made me want to leave	2.332	3862	E,N>O	-	-	-

(table continues)

Differences

Item	Mean	N	R	G	C	Interactions
ND81:c Low pay in the RC has not made me want to leave	2.353	3848	E>N>O	-	-	-
ND87:c Boring work has not made me want to leave	2.377	3874	E>N>O	-	-	-
ND84:c Difficulty keeping up with knowledge/skills has not made me want to leave	2.387	3881	-	-	-	RG
ND72: Stay in the RC: the military atmosphere	2.390	3978	E>O	-	-	-
ND56: I'm satisfied with how RC lets me learn a skill	2.413	3914	-	-	-	-
ND44: Discipline is handled fairly in my unit.	2.418	3898	E, N>O	-	-	CR
ND67: Stay in the RC: good morale in my unit	2.431	3980	E, N>O	-	-	-
ND83:c Leave the RC: pressure to work to hard in my duty asg	2.433	3874	-	-	-	CR, RG
ND76: Stay in the RC: my status in the community	2.446	3913	-	-	-	-
ND30: The morale in my unit is high	2.496	3986	-	-	-	-
ND78:c Family concerns have not made me want to leave	2.622	3793	-	-	-	-
ND79:c My civilian job has not made me want to leave	2.652	3616	-	-	-	-

(table continues)

Differences

Item	Mean	N	R	G	C	Interactions
ND43: Promotions are handled fairly in my unit	2.659	3892	E,N>O	-	-	CR,RG
ND92:c Leave the RC: not do all I would like to do out of RC	2.682	3850	-	-	-	RG
ND88:c Lack of recognition for what I do has not made me want to leave	2.689	3880	E,N>O	-	-	-
ND27: Adequate recognition and awards given for good perf	2.695	3995	N>O	-	-	-
ND86:c Getting promoted slower than I wanted has not made me want to leave	2.706	3862	E>N>O	-	-	-
ND91:c Not being able to do all I would like to do in the RC has not made me want to leave	2.785	3889	-	-	-	-
ND36: Soldiers in unit are promoted when they should be	2.925	3925	E,N>O	-	-	CR,RG
ND31: I joined the ARNG/USAR in order to learn a skill	3.048	3896	E<N<O	-	-	-
ND2:d How many more yrs I'd stay in RC if asgt didn't change	5.132	3785	-	-	-	-
ND3:d How many more yrs I'd stay if RC if I could change asgt	10.676	3465	-	-	-	-
NU8:d Percentage of soldiers in your unit replaced in past year	18.014	2953	-	-	-	-

(table continues)

Item	Differences				
	Mean	N	R	G	C

Item asked of junior enlisted soldiers and NCOs only

ND65: I'm satisfied with quality of tng in my current asg	2.438	3776	-	-	-

Note. The majority of items in this table are Likert scales. All differences reported are statistically significant at the .001 level and substantial (at least a quarter of a scale point, or 5%, or one-fourth of the sd).

aRank: E = Junior enlisted soldiers (E1-E4s). N = NCOs (E5-E9s). O = Officers and warrant officers. bInteraction terms: RG = rank by geography. RU = rank by unit type. RC = rank by component. GU = geography by unit type. GC = geography by component. cThis item has been rephrased and the polarity of its mean reversed so as to parallel the "positive" Likert scales. dThis item rendered ratio data in the unit of measure implied in the item description.

Table 29

Group Means for All Soldiers on Items Regarding Satisfaction Which Showed a Substantial Difference by Rank

Item	E1-E4s		NCOs		Officers		Overall	
	Mean	n	Mean	n	Mean	n	Mean	sd
ND27: Adequate recognition and awards given for good perf	2.70	1379	2.81	1348	2.56	1268	2.69	1.18
ND31: I joined the ARNG/USAR in order to learn a skill	2.59	1359	3.05	1326	3.56	1211	3.05	1.28
ND35: I have a good working relatnshp with my unit ldrs	2.05	1373	1.82	1348	1.67	1259	1.85	.79
ND36: Soldiers in unit are promoted when they should be	3.22	1351	2.99	1335	2.53	1239	2.93	1.21
ND42: I have confidence in my unit's leader(s)	2.77	1377	2.27	1343	1.99	1262	2.18	.92
ND43: Promotions are handled fairly in my unit	2.92	1334	2.76	1328	2.27	1230	1.65	1.12
ND44: Discipline is handled fairly in my unit	2.52	1337	2.52	1326	2.20	1235	2.42	1.01
ND59: I'm satisfied with how RC lets me get educ benefits	2.19	1357	2.20	1319	2.53	1154	2.30	1.09
ND60: I'm satisfied with how RC gives me change of pace	2.32	1370	2.25	1339	1.99	1264	2.19	.96
ND61: I'm satisfied with how RC maintained my AC rank/resp	2.50	1027	2.27	1103	2.05	878	2.28	1.00
ND62: I'm satisfied with being in the ARNG/USAR	2.30	1287	2.02	1279	1.84	1231	2.06	.86

(table continues)

Item	E1-E4s		NCOs		Officers		Overall	
	Mean	n	Mean	n	Mean	n	Mean	sd
ND63: I'm satisfied with my pay in the ARNG/USAR	2.53	1302	2.32	1282	2.02	1216	2.33	.98
ND64: I'm satisfied with my assignment in the ARNG/USAR	2.36	1304	2.12	1285	1.90	1214	2.13	.88
ND67: Stay in the RC: good morale in my unit	2.61	1374	2.47	1344	2.19	1262	2.43	1.02
ND70: Stay in the RC: the pay I receive	2.54	1375	2.26	1343	1.96	1265	2.26	.96
ND71: Stay in the RC: retirement benefits in the military	2.39	1343	2.07	1343	1.95	1266	2.14	.97
ND72: Stay in the RC: the military atmosphere	2.52	1365	2.38	1343	2.26	1270	2.39	.96
ND73: Stay in the RC: opportunities to be responsible/lead	2.31	1367	2.10	1340	1.82	1266	2.08	.90
ND74: Stay in the RC: doing something worthwhile/important	2.13	1373	1.98	1344	1.75	1269	1.96	.87
ND75: Stay in the RC: my status in the military	2.49	1370	2.19	1344	2.02	1266	2.24	.94
ND80:a Plans to move have not made me want to leave	2.36	1272	1.99	1187	1.97	1062	2.12	1.01
ND81:a Low pay in the RC has not made me want to leave	2.70	1350	2.30	1294	2.03	1204	2.35	1.07
ND82:a Low morale in my unit has not made me want to leave	2.57	1350	2.40	1302	2.00	1210	2.33	1.13

(table continues)

Item	E1-E4s		NCOs		Officers		Overall	
	Mean	n	Mean	n	Mean	n	Mean	sd
ND86: ^a Getting promoted slower than I wanted has not made me want to leave	3.14	1359	2.81	1306	2.10	1197	2.71	1.30
ND87: ^a Boring work has not made me want to leave	2.77	1351	2.32	1308	2.00	1215	2.38	1.10
ND88: ^a Lack of recognition for what I do has not made me want to leave	2.92	1352	2.75	1309	2.37	1219	2.69	1.21

Note. The items in this table are Likert scales.

^aThis item has been rephrased and the polarity of its mean reversed so as to parallel the "positive" Likert scales.

6. ND92: Ability to accomplish all they would like to do outside the ARNG or USAR without RC interference.

7. ND43: Fairness of promotions.

The general view provided by these least favorable Satisfaction means is that stagnation, i.e., lack of upward progression in the RC, is probably the major cause of soldier dissatisfaction.

It is clear from the differences indicated in the Rank column of Table 28 that Satisfaction tended to increase with Rank. That is, where differences were found, they were always in the order of officers being more satisfied than NCOs and NCOs being more satisfied than junior enlisted soldiers. Breakdowns by Rank for these items are shown in Table 29.

Three non-Likert-type items contributed to the Satisfaction picture. The first, ND2, was the number of years soldiers said they would stay in the RC even if they had to stay in their present assignment. The average response was 9.13 years. If given a chance for a new assignment (ND3) soldiers said they would stay 10.68 years, on the average.

The third non-Likert item is an indirect indicator of satisfaction. Unit commanders of respondents were asked the percentage of soldiers in their unit who were replaced in the past year. The average response was 18.01%.

Reasons for staying in the RC. Soldiers were asked to provide their opinion on eleven items regarding reasons for staying in the RC (ND66-76). All items were regarded as important reasons for remaining an RC member. The five most highly regarded items were:

1. The friends I have in my unit ($\bar{M}$ = 1.94).
2. The sense of doing something worthwhile and important ($\bar{M}$ = 1.96).
3. The chance to help protect my country ($\bar{M}$ = 2.01).
4. Opportunities to be responsible or to lead ($\bar{M}$ = 2.08).
5. Retirement benefits in the military ($\bar{M}$ = 2.14).

Reasons for leaving the RC. Soldiers were asked to provide their opinions on fifteen items regarding reasons for leaving the RC (ND78-92). The average response for all items was on the disagree side. The five items which were disagreed with the least were (in order, with the strongest reason for wanting to leave listed first):

1. Inability to accomplish all I would like to do in the RC.

2. Not advancing in rank as fast as I wanted to.
3. Not enough recognition for what I do.
4. Inability to accomplish all I would like to do outside the RC because of the time military service takes up.
5. My civilian job.

Performance

Items in the "Performance" category asked soldiers to evaluate their own or their unit members' performance of duty positions skills. Such performance could be seen as an outcome of training and other factors. All Performance items in the survey were stated with a positive valence.

The Performance item most strongly agreed with was asked of NCOs and officers only. Responses to this item, ND54, indicates solid agreement ($M = 1.956$) that the overall performance of respondents' units in Army Training and Evaluation Program (ARTEP) training was good. This item is shown at the bottom of Table 30. Fairly strong agreement was also found for item ND46, "My unit is able to conduct sustained operations by continuously operating in the field for 72 hours or more" ($M = 2.041$). Soldiers also agreed fairly strongly with the statement that soldiers in their units could perform their MOS tasks from the Soldiers Manual well. The mean for this item, ND95, was 2.295.

Milder agreement was found for the remainder of the Likert-type items in the Performance category. These items (ND96, ND94, ND45, and ND40) are listed together with their means in Table 30.

The relatively high means for all of the Likert-type items regarding Performance is noteworthy. Soldiers in the RC apparently have a high degree of confidence in their own abilities to perform the tasks for which they are trained.

Four ratio-type items are included in the Performance category. Soldiers were asked what percentage of soldiers in the three Ranks would be able to perform well if their unit were mobilized (ND4, ND5, ND6). They responded that 63.6% of the E1s to E4s, 74.1% of the NCOs, and 70.6% of the officers could perform well if their unit were mobilized. It is interesting to note that the NCOs were rated higher than the officers in their ability to perform, though this difference is small.

Soldiers from all three Ranks were asked, "What percentage of the critical tasks required for your duty assignment can you perform to standard?" (ND1). The overall average was 76.9%.

Table 30

Grand Means and Differences by Rank (R), Geography (G), and Component (C) for All Soldiers on Items Regarding Performance Ability

Item	Mean	n	R	Differences			Interactions
				G	Ca		
Items asked of all ranks							
ND46: My unit can operate in the field for 72 hrs or more	2.041	3429	-	-	G<R	-	
ND95: Soldiers in my unit can do MOS tasks from the SM	2.295	3818	-	-	-	-	
ND96: Soldiers in my unit can do missn essentl ARTEP tasks	2.315	3518	-	-	-	-	
ND94: Soldiers in my unit can do common tasks from the SMND94	2.354	3846	-	-	-	-	
ND45: Soldiers in my unit use crew-served wpns to standard	2.410	3028	-	-	G<R	-	
ND40: It's easy to maintain my duty asg individual skills	2.579	3976	-	-	-	-	
ND4:b Percent of E1-4 who could perform well if mobilized	63.646	3796	-	-	-	-	
ND6:b Percent of Offs who could perform well if mobilized	70.562	3790	-	-	-	-	
ND5:b Percent of NCOs who could perform well if mobilized	74.132	3836	-	-	-	-	
ND1:b Percentage of critical tasks I can do to standard	76.855	3810	-	-	-	-	
(table continues)							

(table continues)

Item	Differences				
	Mean	N	R	G	C

Item asked of junior enlisted soldiers and NCOs only

NB1:b Percent of MOS tasks you perf to SM standards this yr	61.980	2339	-	-	-

Item asked of NCOs and officers only

ND54: The overall perf of my unit in ARTEP tng is good	1.956	2277	-	-	-

Note. The majority of items in this table are Likert scales. Exceptions are footnoted. All differences reported are statistically significant at the .001 level and substantial (at least a quarter of a scale point, or 5%, or one-fourth of the sd).

^aComponent: G = Guard (ARNG). R = Reserve (USAR). ^bThis item rendered ratio data in the unit of measure implied in the item description.

No differences by Rank, Geography, or Component were found for this item.

Junior enlisted soldiers and NCOs were asked what percentage of MOS tasks they had performed to Soldier Manual standard during the past year (NB1). While this item did not ask how many tasks they could perform to Soldier Manual standards, the average answer of 62% is somewhat of an indication of Performance ability from the perspective of frequency, recency, or currentness.

Two items in Table 30 indicate a difference by Component. These are items ND46 and ND45. Means for these items are shown by component in Table 31. In both of these items ARNG soldiers showed more confidence in their abilities than USAR soldiers. However with both of these items the performance tasks in question are more appropriate for combat arms units than for combat service support units of which the USAR contains a preponderance.

Four items regarding soldier Performance were dichotomous in nature. These yes-no questions are shown in Table 32. The first of these items, NA27, asked junior enlisted soldiers and NCOs if they were qualified in any MOS, to which 94.8% answered "yes." The second item asked junior enlisted soldiers and NCOs if they were qualified at the correct skill level for their assignment, to which 86.6% responded "yes." Item NB15 asked only NCOs the following: "During a 16-hour drill period (MUTA-4), would you feel comfortable conducting individual/squad/section training while all of the officers were elsewhere for training?" Those who responded "yes" comprised 91.6% of the valid responses. Item OA25 asked only officers if they were branch qualified, to which 93.2% responded "yes."

Reactions to Proposed Improvements

Numerous items in the survey suggested various improvements that could be made in RC training methods. Details on the responses to these items are found in Table 33. Whenever a difference in responses existed by Rank, means for each of the Ranks are given in Table 34. The means in Table 33 are listed in order with the most favorably received suggestion for improvement at the top. Rather than relist all of these proposed improvements and their means in the text, the reader is invited to derive this information from Table 33. Important highlights from that table will be pointed out here in the text.

Among the hundreds of agree-disagree items included in the survey only one received stronger agreement than the item listed at the top of Table 33, i.e. NE28: "If a home study

Table 31

Group Means for All Soldiers on Items Regarding Performance Ability Which Showed a Substantial Difference by Component

Item	ARNG		USAR		Overall	
	Mean	n	Mean	n	Mean	sd
ND45: Soldiers in my unit use crew-served wpns to standard	2.33	2157	2.60	871	2.41	.98
ND46: My unit can operate in the field for 72 hrs or more	1.95	2327	2.24	1102	2.04	.98

Note. The items in this table are Likert scales.

Table 32

Percentage of ARNG and USAR Respondents Who Answered "Yes" to Dichotomous Performance Ability Items and Differences in Those Percentages by Rank (R), Geography (G), and Unit Type (U).

Differences^a

Item	%Yes	n	R ^b	G ^c	C ^d

Items asked of junior enlisted soldiers and NCOs only

NA27: Are you qualified in any MOS?	94.8	2718	-	-	-

NA28: Are you qualified at correct skill level for your assignment?	86.6	2579	-	-	-

Item asked of NCOs only

NB15: If no officers, could you conduct small unit training?	91.6	1326	-	-	-

Item asked of officers only

OA25: Are you branch qualified?	93.2	1219	-	-	-

^a A 5% difference in the percentage of soldiers answering "yes" was considered substantial enough to report. ^b Rank: E = Junior enlisted soldiers (E1-E4s). N = NCOs (E5-E9s). O = Officers and warrant officers. ^c Geography: 1, 2, . . . = 1st Army, 2nd Army, ... M = Mean for all armies. ^d Component: G = Guard (ARNG). R = Reserve (USAR).

Table 33

Grand Means and Differences by Rank (R), Geography (G), and Component (C) for All Soldiers on Items Regarding Reactions to Proposed Improvements

Item	Differences					Interactions ^c
	Mean	n	R ^a	G	C ^b	
Items asked of all ranks						
NE28: Home study: video cassette would be effective	1.779	3819	-	-	-	-
NE31: Good idea: unit soldiers trained with an AC unit	1.979	3907	E,N>O	-	-	RC
NB32: I need more of right equip to maintain indiv skills	1.997	3866	-	-	-	-
NE33: Good idea: unit soldiers more MOS task tng	2.016	3905	-	-	-	-
NB33: Need better facilities for tng to maintn indiv skills	2.072	3860	-	-	-	-
NB36: More sim/tng devices would help maintain indiv skills	2.105	3770	-	-	-	RC
NE34: Good idea: MILES were used more for tng in my unit	2.133	2644	E<O	-	-	-
NE115: Tng more effective if: tng refs were better org	2.146	3847	-	-	-	-
NE38: Full-time tng comm: MOS qualification training	2.147	3770	-	-	-	-
NE69: Improve unit tng: more access to computers/simulator	2.153	3827	-	-	-	-
(table continues)						

(table continues)

Item	Differences				
	Mean	N	R	G	C
NE39: Full-time tng comm: skill retention training	2.181	3753	-	-	-
NE71: Improve unit tng: better training materials	2.211	3791	-	-	RC
NE70: Improve unit tng: more rewards for good performance	2.245	3904	-	-	RC
NE36: Full-time tng comm: MILES installation on vehicles	2.251	2551	-	-	RC
NE67: Improve unit tng: better use of training time	2.253	3807	-	-	-
NE37: Full-time tng comm: ARTEP control & umpiring	2.261	3320	-	-	-
NE112: Tng more effective if: tng refs were consolidated	2.270	3722	E,N>O	-	-
NE72: Improve unit tng: better tng in common/MOS skills	2.272	3612	-	-	RC
NE55: More job aids would be helpful to me in my duty assg	2.273	3796	N<O	-	-
NE29: Home study: personal computer would be effective	2.284	3617	-	-	-
NE32: Good idea: unit soldiers did more Common task tng	2.296	3903	-	-	-
NE65: Work more RC hrs: home study with pay and follow-up	2.300	3794	-	-	-
NE68: Improve unit tng: better training preparation	2.301	3786	-	-	-

(table continues)

Differences

Item	Mean	N	R	G	C	Interactions
NE73: Improve unit tng: better hip pocket/opportunity tng	2.365	3608	-	-	-	RC
NE64: Work more RC hrs: extra paid time between drills	2.366	3844	-	-	-	-
NE30: Home study: corresp courses would be effective	2.418	3826	E<O	-	-	-
NF29:d Make funds to attend AC sch available more often	2.434	3170	-	-	-	-
NE27: Home study: audio cassette would be effective	2.463	3755	-	-	-	-
NE114: Tng more effective if: tng refs were easier to read	2.469	3839	-	-	-	RC
NB35: Tng better organized would help maintain indiv skills	2.479	3856	E,N>O	-	-	-
NB34: Less wasted tng time would help maintain indiv skills	2.491	3829	-	-	-	-
NB31: Need more tng materials to maintain individual skills	2.492	3901	E,N>O	-	-	RC
NE35: Full-time tng comm: range set up	2.518	3477	-	-	-	-
NE116: Tng more effective if: tng refs had more pictures	2.682	3814	-	-	-	-
NF26:d Offer AC tng at times that match my sched more often	2.713	3310	-	-	-	-
NE44:e SUTA drill sched: easier for me to attend drills	2.739	3227	-	-	-	-

(table continues)

Differences

Item	Mean	N	R	G	C	Interactions
NF28:d Open more AC sch classes so it's easier to get in	2.818	2984	E>N,O	-	-	-
NE49:e Adaptable drill sched: easier for me to attend drills	2.871	3413	-	-	-	-
NE41: SUTA more effective: individual readiness	2.909	3328	-	-	-	-
NF25:d Make AC courses shorter so it's easier to attend	2.910	3283	E>N,O	-	-	-
NE113: Tng more effective if: tng refs were reduced	2.911	3749	E,N>O	-	-	-
NE63: Work more RC hrs: more MUTA-5s and MUTA-6s	2.968	3744	-	-	-	RG
NE60: Work more RC hrs: a longer(3 weeks+) AT each year	3.012	3891	-	-	-	RC
NE53: Seasonal AD w/RC: specify time of year and location	3.015	3555	E<N<O	-	-	RC
NE117: Tng more effective if: there were fewer indiv tasks	3.061	3830	-	-	-	-
NE42: SUTA more effective: unit readiness	3.068	3312	-	-	-	-
NE118 Tng more effective if: my unit had fewer unit tasks	3.093	3754	-	-	-	-
NE61: Work more RC hrs: an extra AT each year	3.124	3880	-	-	-	RC
NB37: Less unit-level tng would help maintain indiv skills	3.165	3760	-	-	-	-

(table continues)

Differences

Item	Mean	N	R	G	C	Interactions
NF27:d Reduce conflict btw unit sched & AC sch tng dates	3.236	3252	E>N,O	-	-	-
NE62: Work more RC hrs: more weekend drills	3.240	3882	E>O	-	-	RG
NE46: Adaptable drill sched: more effective for indiv tng	3.256	3439	-	-	-	-
NE43: SUTA drill sched: easier for me to attend drills	3.259	3276	-	-	-	-
NF31:d Need easier way to get or- ders in time to attend AC sch	3.265	3165	-	-	-	RC
NE48: Adaptable drill sched: easier for me to attend drills	3.276	3445	-	-	-	-
NE47: Adaptable drill sched: more effective for unit tng	3.385	3427	E<O	-	-	-
NE51: Seasonal AD w/RC: specify time of year/not location	3.393	3549	E<O	-	-	RC
NE3:f How many extra MUTA-4s per year would help your unit	3.521	3571	-	-	-	-
NF30:d Need easier way to meet Prereqs to attend AC sch	3.795	3119	-	-	-	RC
NE52: Seasonal AD w/RC: specify location/not time of year	3.910	3511	E,N<O	-	-	-
NE54: Seasonal AD w/RC: specify neither time of year or loc	4.154	3458	E<O	-	-	-
NE4:f How many extra AT days per year would help your unit	5.614	3627	-	-	-	-

(table continues)

Differences

Item	Mean	N	R	G	C	Interactions
NE2:f How many extra UTAs per year would help your unit	8.006	3539	-	-	-	-
NE1:f How many ATAs per year would help your unit	13.042	3513	-	-	-	-
NC1:f How many paid hrs/mo over MUTA4 would you work for RC	23.153	3640	-	-	-	-

Items asked of NCOs and officers only

NF37: I would like to learn how to be a better trainer	1.797	2551	-	-	-	-
NE91: Use personal computer at Armory: during drills	1.876	2468	-	-	-	-
NE96: Simulators: need to be used more for training	1.948	2118	-	-	-	-
NE92: Simulators: could help me improve my own skills	2.035	2259	-	-	-	RC
NE88: Study at home for pay: in addition to weekend drills	2.086	2496	-	-	-	-
NE95: Simulators: need to be operational more of the time	2.358	1680	-	-	-	-
NE58: In my unit hip pocket tng should be done more freq	2.406	2443	E>O	-	-	-
NE90: Use personal computer at Armory: between drills	2.416	2436	-	-	-	-
NF32:a Reducing paperwork for tng would improve tng	2.658	2447	-	-	-	-

(table continues)

Item	Mean	N	Differences			
			R	G	C	Interactions
NF33: ^d Reducing paperwork for personnel would improve tng	2.677	2444	-	-	G<R	-
NF34: ^d Reducing paperwork for supply would improve tng	2.800	2424	-	-	-	-
NF35: ^d Reducing paperwork for maintenance would improve tng	2.874	2381	-	-	-	-
NE89: Study at home for pay: in place of weekend drill	2.883	2471	E<O	-	-	-

Item asked of junior enlisted soldiers only

EE35: Good idea if addnl wk of AT were done another month	2.911	1310	-	-	-	-

Note. The majority of items in this table are Likert scales. Exceptions are footnoted. All differences reported are statistically significant at the .001 level and substantial (at least a quarter of a scale point, or 5%, or one-fourth of the sd).

^aRank: E = Junior enlisted soldiers (E1-E4s). N = NCOs (E5-E9s). O = Officers and warrant officers. ^bComponent: G = Guard (ARNG). R = Reserve (USAR). ^cInteraction terms: RG = rank by geography. RU = rank by unit type. RC = rank by component. GU = geography by unit type. GC = geography by component. ^dThis item is rephrased to parallel other items in this table. ^eThis item has been rephrased and the polarity of its mean reversed so as to parallel the "positive" Likert scales. ^fThis item rendered ratio data in the unit of measure implied in the item description.

Table 34

Group Means for All Soldiers on Items Regarding Reactions to Proposed Improvements Which Showed a Substantial Difference by Rank

Item	E1-E4s		NCOs		Officers		Overall	
	Mean	n	Mean	n	Mean	n	Mean	sd
NB31: Need more tng materials to maintain individual skills	2.35	1366	2.43	1326	2.72	1209	2.49	1.20
NB35: Tng better organized would help maintain indiv skills	2.30	1354	2.43	1311	2.74	1191	2.48	1.15
NE30: Home study: corresp courses would be effective	2.30	1285	2.39	1299	2.57	1242	2.42	1.01
NE31: Good idea: unit soldiers trained with an AC unit	2.11	1346	2.04	1320	1.76	1241	1.98	.97
NE34: Good idea: MILES were used more for tng in my unit	2.00	995	2.12	919	2.33	730	2.13	1.11
NE47: Adaptable drill sched: more effective for unit tng	3.23	1150	3.39	1168	3.54	1109	3.39	1.12
NE51: Seasonal AD w/RC: specify time of year/not location	3.21	1273	3.44	1144	3.56	1132	3.39	1.38
NE52: Seasonal AD w/RC: specify location/not time of year	3.69	1264	3.88	1133	4.18	1114	3.91	1.10
NE53: Seasonal AD w/RC: specify time of year and location	2.62	1283	3.09	1145	3.38	1127	3.01	1.54
NE54: Seasonal AD w/RC: specify neither time of year or loc	4.06	1241	4.09	1106	4.32	1111	4.15	1.05
NE55: More job aids would be helpful to me in my duty assg	2.23	1330	2.18	1289	2.43	1177	2.27	.94

(table continues)

Item	E1-E4s		NCOs		Officers		Overall	
	Mean	n	Mean	n	Mean	n	Mean	sd
NE58: In my unit hip pocket tng should be done more freq	2.62	1258	2.38	1272	2.20	1172	2.41	.99
NE62: Work more RC hrs: more weekend drills	3.35	1354	3.27	1295	3.08	1233	3.24	1.26
NE89: Study at home for pay: in place of weekend drill	2.68	1340	2.91	1279	3.08	1193	2.88	1.30
NE112: Tng more effective if: tng refs were consolidated	2.41	1243	2.34	1269	2.05	1210	2.27	.88
NE113: Tng more effective if: tng refs were reduced	3.09	1264	3.06	1275	2.57	1210	2.91	1.06
NF25: ^a Make AC courses shorter so it's easier to attend	3.16	1057	2.87	1097	2.72	1129	2.91	1.17
NF27: ^a Reduce conflict btw unit sched & AC sch tng dates	3.45	1037	3.11	1087	3.16	1128	3.24	1.04
NF28: ^a Open more AC sch classes so it's easier to get in	3.09	954	2.79	1000	2.59	1030	2.81	1.13

Note. The items in this table are Likert scales.

^aThis item is rephrased to parallel other items in this table.

course were available to help you train for your duty assignment, video cassettes would probably be effective." (The one item that had a stronger degree of agreement, stated that AT was an effective means of training.) This finding underscores the feasibility both of home study and of video cassettes as methods for training. This is an extremely important finding since home study courses do not detract from time available for unit training, and video cassettes are a relatively inexpensive medium to use.

Suggested improvements which were well received by all three Ranks included:

1. NE28: Home study with video cassette.
2. NE31: More time training with an active army unit.
3. NB32: More of the right equipment.
4. NE33: More MOS task training.
5. NB33: Better facilities for training.
6. NB36: More simulators and training devices.
7. NE34: More frequent use of MILES.
8. NE115: Better organized training references.
9. NE38: A full-time training committee to assist with MOS qualification training.
10. NE69: More access to computers and simulators.
11. NE39: A full-time training committee to assist with skill retention training.
12. NE71: Better training materials.
13. NE70: More rewards for good performance.

Two of the items listed above showed a difference by Rank. While junior enlisted soldiers ($\bar{M}$ = 2.11) and NCOs ($\bar{M}$ = 2.04) solidly agreed that it would be a good idea if unit soldiers trained with an AC unit (NE31), officers ($\bar{M}$ = 1.76) were even more enthusiastic supporters of the idea. Junior enlisted soldiers ($\bar{M}$ = 2.00) agreed more than did officers ($\bar{M}$ = 2.33) that it would be a good idea if MILES were used more for training in their units (NE34).

Several proposed improvements were presented to NCOs and officers only. These items are contained in the "Items asked of NCOs and officers only" section of Table 33. The item with which they agreed the most was NF37, "I would like to learn how to be a better trainer." The favorability with which this statement was received is outstanding ($\bar{M}$ = 1.797), given that its mean is one of the most favorable in the survey and given that most NCOs and officers had already had a number of years of experience in training. This indicates, as does research in

the field of education, that simple experience in training does not necessarily provide a trainer with the skills needed to do the job. The highly favorable response to item NF37 is a call for improvements in the programs now used to teach NCOs and officers the skills of training per se.

The next four items in order of favorability of means showed NCO and officer acceptance of technology as aids in training. NE91 called for the use of personal computers at the armory or training center. NE96 and NE92 called for wider use of simulators by trainees, trainers, and training managers alike. Study at home for pay in addition to weekend drills (NE88) was also well received by NCOs and officers as a suggestion to enhance training.

Proposed improvements which received milder agreement (means ranging from 2.25 to 3.00) are listed in Table 33 under two sections: "Items asked of all ranks" and "Items asked of NCOs and officers only." Rather than relist all of these here, the reader is directed to the table. One of the items which received milder agreement showed a difference by Rank which is of research interest. Item NE53 asked if soldiers would be able to go on full time active duty on a seasonal basis (2 or 3 months out of every year) if they could specify both the time of year and the location. The overall mean for this item was 3.01, a neutral response. However, junior enlisted soldiers ($M = 2.62$) were much more able to go on seasonal active duty than were officers ($M = 3.38$). The degree of agreement between the two Ranks is different by three quarters of a scale point. This is one of the largest differences in the entire survey effort. The mean for NCOs on this item was 3.09, approximately midway between the responses of junior enlisted soldiers and those of officers.

It is also of research interest to note that a fairly substantial difference exists between the overall means of items NE88 (study at home for pay in addition to weekend drills) and NE89 (study at home for pay in place of weekend drills). The difference between these two means is eight tenths of a scale point in favor of home study in addition to weekend drills.

Proposed improvements for which soldiers either were neutral or tended to disagree were those which had means ranging from 3.00 to 4.20. All such items are at the end of the section of Table 33 subtitled "Items asked of all ranks." Those suggestions which were least well received are listed in order below starting with the least favorable received:

1. NE54: Seasonal active duty (2 or 3 months out of every year) in the RC when soldiers can specify neither time of year nor location.

2. NE52: Seasonal active duty (2 or 3 months out of every year) in the RC when soldiers can specify location but not time of year.

3. NF30: Easier way to meet prerequisites to attend AC school.

4. NE51: Seasonal active duty in the RC when soldiers can specify time of year but not location.

5. NE47 and NE48: Adaptable drill schedule.

6. NE31: Easier way to get orders in time to attend AC school.

7. NF43: Split Unit Training Assembly (SUTA) where parts of unit train on different weekends.

Five of the items in Table 33 produced ratio data. These items are found clustered near the end of the section of Table 33 subtitled "Items asked of all ranks." Item NE1 asked soldiers how many individual soldier training sessions, such as additional Training Assemblies (ATAs, 4 hours each) per year would be helpful in getting their units trained to readiness standards. Such ATAs would be in addition to regular drills. The average response to this item was 13.0 ATAs. Next, soldiers were asked how many extra unit training assemblies (UTAs, 4 hrs.) per year would be helpful in getting their units trained to readiness standard (NE2). The mean response was 8.0.

Item NE3 asked soldiers how many extra 16-hour drill periods per year would be helpful in getting their units trained to readiness standards. The mean response to this item was 3.5 MUTA-4s. Item NE4 asked soldiers how many extra AT days per year would be helpful in getting their units trained to readiness standards. The average response was 5.6 days. Items NE1 through NE4 do not measure willingness; instead they measure soldiers' perceptions of the effectiveness of spending various additional time increments in RC training.

Item NC1 asked soldiers how many paid hours per month they would be willing to work for the RC in addition to the normal 16-hour drill period. The mean response was 23.2 hours. However, the median response was 12.0 hours. This is because the responses of many soldiers indicated that they wished to work full time (or more) for the RC. When these responses were controlled for, the mean response was 13.0 hours and the median was 10.0 hours.

Thus it appears that in general, part-time soldiers in the RC are willing to spend 10-13 more hours each month working for the RC. But other items presented earlier in Table 33 provide important qualifiers on how soldiers would be willing to spend those extra hours. Items NE60 through NE65 taken as a group

show that there is an undecided or mixed degree of willingness to work more hours in the following time increments: three-week ATs (see also item EE35), extra ATs, more weekend drills, more MUTA-5s or MUTA-6s. A more favorable response was noted for extra paid time between weekend drills and home study with pay based on follow-up testing. The means for these two options are a half of a scale point more favorable than those for the earlier options. This is a substantial (as well as a statistically significant) difference.

Item NE5 in Table 12 asked soldiers of all ranks how often an extra AT period would help unit readiness. The mode response to this item was "1" which translated is "every year." This option was selected by 28.2% of the respondents; 24.0% said "never;" 24.5% said "every two years;" 17.1% said "every three years;" 6.2% said "every four to six years." Officers selected options which indicated that extra AT periods would be helpful less frequently than what junior enlisted soldiers and NCOs indicated (Kruskal-Wallis tests Chi-square = 19.1295, $p < .0001$). (Note that the smaller the response the more frequently ATs are called for; therefore, $N < 0$ would mean that NCOs selected smaller numbers than officers and those smaller numbers correspond to more frequent ATs). Soldiers in 2nd Army called for more frequent ATs than soldiers across all armies, and the latter called for more frequent ATs than soldiers in 4th Army (Kruskal-Wallis Chi-square = 21.91, $p < .0002$). Soldiers in the USAR called for more frequent ATs than did soldiers in the ARNG (Kruskal-Wallis Chi-square = 25.44, $p < .00001$). Again, the fact that soldiers said that extra ATs would help improve readiness (NE5) must be tempered by the fact that on the average soldiers slightly disagreed that they would be willing to attend an extra AT session each year (NE61).

Maintenance of individual skills. Soldiers were asked if each of seven possible training improvements would make it easier to maintain individual skills (NB31-37). Except for the suggestion to conduct less unit-level training, the proposals were generally agreed with as having promise. Following are the seven statements, listed in order of agreement:

1. More of the right equipment ($M = 1.99$).
2. Better physical facilities for training ($M = 2.07$).
3. More simulators/training devices available ($M = 2.15$).
4. Training better organized ($M = 2.48$).
5. Less training time wasted ($M = 2.49$).
6. More training materials ($M = 2.49$).
7. Less emphasis on unit level training ($M = 3.17$).

Full-time training committee. Respondents were asked to judge to what extent a full-time training committee of soldiers

would be helpful in providing unit assistance (NE 35-39) in five different areas. There was general agreement, on the average, that all five of the areas presented for evaluation could be facilitated by such a committee. Interestingly, the two areas dealing with help for individual soldiers were rated as the most appropriate for committee assistance. Following, in rank order, are the five areas rated:

1. MOS qualification assistance ($\bar{M}$ = 2.15).
2. Skill retention ($\bar{M}$ = 2.18).
3. MILES installation on vehicles ($\bar{M}$ = 2.25).
4. ARTEP control and umpiring ($\bar{M}$ = 2.26).
5. Range set up ($\bar{M}$ = 2.52).

Seasonal full-time active duty with RC. In an effort to assess the willingness of RC soldiers to go on full-time active duty with the RC on a seasonal basis four questions were asked (NE51-54). In all four instances, on the average, soldiers expressed negative opinions about such duty. However, E1-E4 were generally less adverse than were officers and NCOs and, in one case, agreed. Table 35, seasonal full-time duty, shows the details of this analyses.

Table 35

Means by Rank for Seasonal Full-time Active Duty

I would be able to go on full-time duty with the RC on a seasonal basis if I could specify:	All	E1-E4	NCO	Officer
Time of year but not location.	3.39	3.21	3.44	3.56
Location but not time of year.	3.91	3.69	3.88	4.18
Both time of year and location.	3.02	2.62	3.09	3.38
Neither time of year nor location.	4.15	4.06	4.09	4.32

Working more hours for the RC. Soldiers were asked to indicate their willingness to work more hours for the RC (NE60-65) in a variety of circumstances. There was mild agreement with two of the circumstances: paid home study and paid time between weekend drills (not in formal drill settings). Following, in order of soldier willingness to participate, are the six sets of circumstances.

1. Home study with pay based on follow-up testing ($\bar{M}$ = 2.30).
2. Extra paid time between weekend drills ($\bar{M}$ = 2.37).
3. More MUTA-5s or MUTA-6s ($\bar{M}$ = 2.97).
4. A longer (3 or more weeks) AT each year ($\bar{M}$ = 3.01).
5. An extra At each year ($\bar{M}$ = 3.12).
6. More weekend drills ($\bar{M}$ = 3.24).

AC school training. Throughout the survey, responses to various questions expressed favor towards the use of AC schools to gain and maintain individual skills. To assess perceptions of the availability of such schooling to the individual RC soldier, respondents were asked to evaluate seven statements regarding difficulty with getting required training from AC schools (NF25-31). There was general agreement with four of the statements. In three cases, junior enlisted soldiers indicated no difficulty, as opposed to NCOs and officers. This difference may be due to the higher incidence of nonprior service personnel attending basic and AIT. Differences by Rank are noted in Table 34. Following, in order of difficulty caused, are each of the seven items:

1. Funds are not available ($\bar{M}$ = 2.43).
2. Course dates don't usually match my schedule ($\bar{M}$ = 2.71).
3. Classes have more applicants than there is room for ($\bar{M}$ = 2.82).
4. Courses are too long ($\bar{M}$ = 2.91).
5. Course dates conflict with unit activities ($\bar{M}$ = 3.24).
6. I can't get orders on time ($\bar{M}$ = 3.27).
7. I have not met the prerequisites ($\bar{M}$ = 3.79).

Use of simulators and computers. Soldiers seemed to feel that computers and simulators were useful tools for gaining and maintaining required individual and unit skills. However, the general perception was that these devices are not generally available for training. Seven statements were presented to assess these assumptions (NE90-96). Results seem to verify that (a) simulators and computers are not available, (b) they would be used if available, and (c) that they would be helpful if available. Following are the seven statements, listed in order of agreement.

1. If a computer were available for me to use at my armory, I would use it during drills ($\bar{M}$ = 1.88).
2. Simulators need to be used more for training ($\bar{M}$ = 1.95).

3. Simulators could help me improve my own skills ($\bar{M}$ = 2.04).
4. Simulators need to be operational more of the time ($\bar{M}$ = 2.36).
5. If a computer were available for me to use at my armory, I would use it between drills ($\bar{M}$ = 2.41).
6. Simulators are available to me during drills ($\bar{M}$ = 3.35).
7. Simulators are available to me between drills ($\bar{M}$ = 3.75).

Correlations Among Major Dimensions

Analyses were performed to test for correlations among major dimensions of variables. This was done primarily in order to discover if a relationship existed between Quality of training and Satisfaction, Performance Ability, and Retention.

Factor analyses using Varimax rotation were performed on the responses of all soldiers in both components in order to develop meaningful scales to test correlations between the major categories of items. Five of the categories used to organize the analyses reported earlier were also used in the development of these scales. These categories or dimensions were: Training Descriptions, Quality of Training, Satisfaction, Performance Ability, and reactions to Training Improvements. A separate factor analysis was run for each of these categories. That is, all of the items which rendered ratio or quasi-interval data within a category were included together in a separate matrix. Thus five factor analyses were performed, one for each of the categories of items.

One additional category was organized from items from various other categories. This dimension was labeled "Retention." Retention included items on how long soldiers had remained with the RC, how long they intended to remain with the RC, and items regarding factors which may have made them want to stay in or leave the RC. A factor analysis was also run on this collection of items. This brought the number of factor analyses to a total of six.

Each of the six factor analyses rendered multiple factors which were interpretable. For example, the "satisfaction" category contains 44 quasi-interval items. These were analyzed together in one of the six factor analyses. Several interpretable factors relating to Satisfaction emerged. These factors could be thought of as subdimensions of Satisfaction. These subdimensions were given description labels such as, "I'm satisfied with the sense of importance I get from being in the RC" or "I'm satisfied with the harmony among the soldiers in my

unit." Such labels were formulated by identifying the common theme of those items which were strongly associated (mathematically, according to the way soldiers responded) with the given subdimension.

After determining empirically what the subdimensions of a category were, it was necessary to calculate each soldier's individual score on each of the subdimensions of each of the categories. Such scale scores were created by adding together a soldier's raw scores for the items which comprise a subdimension. For example, one of the factors which emerged from the satisfaction category had to do with satisfaction with pay. Four items (ND70, ND63, ND81, and ND71) loaded heavily on this factor. The answers of a given soldier to these four items were added together to produce that soldier's score on a subdimension labeled, "I'm satisfied with the pay benefits I receive in the RC."

The resultant scales or subdimensions within each dimension were correlated with the scales from every other dimension. The results of this correlational analysis are reported in Table 36.

The correlation of six dimensions among one another would have produced fifteen subdivisions in Table 36. However, only ten subdivisions exist in the table. This is because none of the scales within some dimensions showed any substantial correlations with the scales within another dimension. No correlations were found between subdimensions of Training Descriptions and subdimensions of Retention, Training Descriptions and Performance, Training Descriptions and Improvements, Training Improvements and Performance, or Training Improvements and Satisfaction. All of the other pairs of dimensions contained subdimensions which were significantly and substantially correlated with the other dimensions.

Because of the sizable n s in the sample, statistical significance was ubiquitous. In fact, several correlations of only .09 were significant at the .0001 level, and correlations of .03 were significant at the .05 level. Therefore, a criterion for deciding which correlations were substantial enough to merit reporting had to be devised. The criterion selected was that the r^2 for any given correlation would have to be equal to or greater than .10. Therefore, only correlations with an absolute value of .316 or greater are reported in Table 36. This means that 10% or more of the variance in one scale could be accounted for by variation in another scale.

Words which are typically used to describe correlations in several ranges are as follows: "weak" for correlations of .20 to .30; "mild" for correlations of .30 to .40; "moderate" for

Table 36

Pearson Correlations Between Derived Scale Scores for All Soldiers

r	Scale A		Scale B	
	Retention scales (A) with performance scales (B)			
.40	I don't want to leave the RC because of problems within the RC.	Percentage of soldiers in my unit who are ready.		
.35	I don't want to leave the RC because of problems within the RC.	My unit can perform tasks well.		
Satisfaction scales (A) with performance scales (B)				
.46	I am satisfied with the quality of training I have received in my current unit.	My unit can perform tasks well.		
.44	I'm satisfied with the harmony among the soldiers in my unit.	Percentage of soldiers in my unit who are ready.		
.41	I'm satisfied with the harmony among the soldiers in my unit.	My unit can perform tasks well.		
.38	I am satisfied with the quality of training I have received in my current unit.	I am well-trained in my duty position.		
.37	I am satisfied with the quality of training I have received in my current unit.	Percentage of soldiers in my unit who are ready.		
.37	I am satisfied with the quality of training I have received in my current unit.	It is easy for me to maintain the individual skills required by my duty assignment.		

(table continues)

(B)

.48	Training time is worthwhile.	Percentage of soldiers in my unit who are ready.
.46	Training time is not wasted.	Percentage of soldiers in my unit who are ready.
.43	Training time is worthwhile.	My unit can perform tasks well.
.43	The training needs of the soldiers in my unit are adequately met during IDT.	My unit can perform tasks well.
.42	In the past year, poor quality of training has not made me feel like leaving the RC.	My unit can perform tasks well.
.41	NCOs do a good job of training.	My unit can perform tasks well.
.41	The quality of ARTEP training is good.	My unit can perform tasks well.
.40	In the past year, poor quality of training has not made me feel like leaving the RC.	Percentage of soldiers in my unit who are ready.
.38	Training time is not wasted.	My unit can perform tasks well.
-.36	NCOs do a good job of training.	I am well-trained in my duty position.
.35	The quality of ARETP training is good.	Percentage of soldiers in my unit who are ready.
.35	The training needs of the soldiers in my unit are adequately met during IDT.	Percentage of soldiers in my unit who are ready.

(table continues)

Scale B

Scale A

r	Scale A	Scale B
.34	The quality of ARNG schools is good.	My unit can perform tasks well.
.33	In the past year, too much wasted training time has not made me feel like leaving the RC.	My unit can perform tasks well.
.33	In the past year, too much wasted training time has not made me feel like leaving the RC.	Percentage of soldiers in my unit who are ready.

Retention scales (A) with satisfaction scales (B)

.76	I don't want to leave the RC because of problems within the RC.	I'm satisfied with the harmony among the soldiers in my unit.
.54	I don't want to leave the RC because of problems within the RC.	I am satisfied with the quality of training I have received in my current assignment.
.48	I don't want to leave the RC because of problems within the RC.	I am satisfied with being in the ARNG or USAR.
.47	I don't want to leave the RC because of problems within the RC.	I'm satisfied with the RC's compatibility with my outside interests.
.46	I don't want to leave the RC because of problems within the RC.	I am satisfied with my assignment in the ARNG or USAR.
.42	I don't want to leave the RC because of problems within the RC.	I'm satisfied with the pay benefits I receive in the RC.
.38	I don't want to leave the RC because of problems within the RC.	I'm satisfied with the sense of importance I get from being in the RC.
.32	I don't want to leave the RC because of conflicts with outside interests.	I am satisfied with being in the ARNG or USAR.

(table continues)

r	Scale A	Scale B
	Training scales (A) with satisfaction scales (B)	
.34	My unit uses audio-visual equipment, training aids, and TEC tapes.	I am satisfied with the quality of training I have received in my current assignment.
.32	My unit uses audio-visual equipment, training aids, and TEC tapes.	I'm satisfied with the harmony among the soldiers in my unit.
	Quality of Training scales (A) with satisfaction scales (B)	
.62	Training time is worthwhile.	I'm satisfied with the harmony among the soldiers in my unit.
.58	In the past year, poor quality of training has not made me feel like leaving the RC.	I'm satisfied with the harmony among the soldiers in my unit.
.55	In the past year, poor quality of training has not made me feel like leaving the RC.	I am satisfied with the quality of training I have received in my current assignment.
.55	Training time is not wasted.	I'm satisfied with the harmony among the soldiers in my unit.
.53	In the past year, too much wasted training time has not made me feel like leaving the RC.	I'm satisfied with the harmony among the soldiers in my unit.
.52	Training time is worthwhile.	I am satisfied with the quality of training I have received in my current assignment.
.47	In the past year, too much wasted training time has not made me feel like leaving the RC.	I am satisfied with the quality of training I have received in my current assignment.

(table continues)

Scale A

Scale B

r

	Scale A	Scale B
.46	The training needs of the soldiers in my unit are adequately met during IDT.	I am satisfied with the quality of training I have received in my current assignment.
.45	The quality of ARTEP training is good.	I am satisfied with the quality of training I have received in my current assignment.
.43	Training time is not wasted.	I am satisfied with the quality of training I have received in my current assignment.
.42	The quality of ARTEP training is good.	I am satisfied with the harmony among the soldiers in my unit.
.40	We have enough support materials.	I'm satisfied with the harmony among the soldiers in my unit.
.40	NCOs do a good job of training.	I am satisfied with the quality of training I have received in my current assignment.
.40	The training needs of the soldiers in my unit are adequately met during IDT.	I'm satisfied with the harmony among the soldiers in my unit.
.40	In the past year, poor quality of training has not made me feel like leaving the RC.	I am satisfied with being in the ARNG or USAR.
.38	NCOs do a good job of training.	I'm satisfied with the sense of importance I get from being in the RC.
.38	The RC has some good alternatives for individual training.	I'm satisfied with the sense of importance I get from being in the RC.
.38	In the past year, poor quality of training has not made me feel like leaving the RC.	I'm satisfied with the RC's compatibility with my outside interests.

(table continues)

Scale A

Scale B

r	Scale A	Scale B
.37	The support materials we have are helpful.	I'm satisfied with the sense of importance I get from being in the RC.
.37	Training time is worthwhile.	I'm satisfied with the RC's compatibility with my outside interests.
.37	Training time is worthwhile.	I am satisfied with being in the ARNG or USAR.
.35	In the past year, poor quality of training has not made me feel like leaving the RC.	I am satisfied with my assignment in the ARNG or USAR.
.35	In the past year, too much wasted training time has not made me feel like leaving the RC.	I am satisfied with being in the ARNG or USAR.
.35	In the past year, too much wasted training time has not made me feel like leaving the RC.	I'm satisfied with the RC's compatibility with my outside interests.
.35	NCOs do a good job of training.	I'm satisfied with the harmony among the soldiers in my unit.
.34	Training time is worthwhile.	I am satisfied with my assignment in the ARNG or USAR.
.32	The quality of ARNG schools is good.	I am satisfied with the quality of training I have received in my current assignment.
.32	The quality of ARTEP training is good.	I am satisfied with being in the ARNG or USAR.
.30	The quality of ARTEP training is good.	I am satisfied with my assignment in the ARNG or USAR.

(table continues)

r	Scale A	Scale B
	Retention scales (A) with training improvement scales (B)	
-.36	I don't want to leave the RC because of problems within the RC.	Improve training generally.
-.35	I don't want to leave the RC because of problems within the RC.	Improve a variety of things.
	Quality of Training scales (A) with training improvement scales (B)	
-.57	The quality of facilities is good.	Improve training generally.
-.47	Training time is worthwhile.	Improve a variety of things.
-.46	Training time is worthwhile.	Improve training generally.
-.44	Training time is not wasted.	Improve training generally.
-.44	Training time is not wasted.	Improve a variety of things.
-.42	The quality of facilities is good.	Reduce paperwork.
-.38	In the past year, too much wasted training time has not made me feel like leaving the RC.	Improve a variety of things.
-.37	The quality of facilities is good.	Improve a variety of things.
-.36	In the past year, poor quality of training has not made me feel like leaving the RC.	Improve a variety of things.
-.36	In the past year, too much wasted training time has not made me feel like leaving the RC.	Improve training generally.
-.36	Training time is worthwhile.	Reduce paperwork.
-.34	Training time is not wasted.	Reduce paperwork.

(table continues)

Scale A

Scale B

r

.33 The RC has some good alternatives for individual training.
 -.33 The quality of evaluations and inspections is good.
 -.32 The training needs of the soldiers in my unit are adequately met during IDT.
 -.32 In the past year, poor quality of training has not made me feel like leaving the RC.

More simulators and computers would increase readiness.
 Reduce paperwork.
 Improve a variety of things.
 Improve training generally.

Quality of Training scales (A) with retention scales (B)

.62 Training time is not wasted.
 .39 Training in my unit is not too repetitive.
 .38 The quality of ARTEP training is good.
 .38 The quality of facilities is good.
 .38 In the past year, poor quality of training has not made me feel like leaving the RC.
 .37 Training time is worthwhile.
 .36 The training needs of the soldiers in my unit are adequately met during IDT.

I don't want to leave the RC because of problems within the RC.
 I don't want to leave the RC because of problems within the RC.
 I don't want to leave the RC because of problems within the RC.
 I don't want to leave the RC because of problems within the RC.
 I don't want to leave the RC because of conflicts with outside interests.
 I don't want to leave the RC because of conflicts with outside interests.
 I don't want to leave the RC because of problems within the RC.

(table continues)

Scale A		Scale B
r	NCOs do a good job of training.	I don't want to leave the RC because of problems within the RC.
	Training description scales (A) with quality of training scales (B)	
-.34	The amount of time spent in non-training activities.	How much of the time you spend receiving training really helps to build or maintain your skills?
.34	My unit uses audio-visual equipment, training aids, and TEC tapes.	We have enough support materials.
.32	My unit uses audio-visual equipment, training aids, and TEC tapes.	In the past year, poor quality of training has not made me feel like leaving the RC.

Note. Within each section of the table r 's are listed in order of magnitude. Only correlations with an absolute value of .316 (when $r = .316$, $r^2 = .10$) or greater are included. All correlations reported in this table were significant at the .0001 level.

correlations of .40 to .50; "strong" for correlations of .50 to .60; and "very strong" for correlations of over .60. Therefore, the correlations reported in Table 36 can be classified as "mild" to "very strong."

The findings reported in Table 36 are compressed substantially in Table 37. This table gives the strongest two correlations between the subdimensions of any one category and the subdimensions of each of the other categories. Based on the data in Table 37, Table 38 summarizes the strength of the relationships among the major dimensions. Those relationships are described verbally in the next few paragraphs.

None of the scales within the Training Descriptions dimension were strongly correlated with scales from any other dimension. However, mild correlations were identified between Training Descriptions scales and scales from the Satisfaction dimension and from the Quality of Training dimension.

Scales from the Quality of Training dimension were most highly correlated with the scales in the Satisfaction dimension. A few strong correlations were noted here. Strong and moderate correlations were also noted for the scales within the Retention and the Performance Ability dimensions. Mild correlations were found between Quality of Training scales and scales from Training Descriptions.

Scales within the Satisfaction dimension were highly correlated with scales from the Retention dimension. They were moderately correlated with scales from the Performance Ability dimension and the Quality of Training dimension. Scales from the Satisfaction dimension were mildly correlated with scales from the Training Description dimension.

Scales from the Retention dimension were most strongly correlated with scales from the Satisfaction dimension. Strong and very strong correlations were noted here. A correlation of .62 and several mild correlations were found between Retention scales and Quality of Training scales. Retention scales were mildly correlated with Performance Ability and Training Improvement scales.

Training Improvement scales were most strongly correlated with scales from the Quality of Training dimension. Strong and moderate correlations are noted here. Mild correlations were also found between Training Improvement scales and Retention scales.

No strong correlations were found between Performance Ability scales and scales of any other dimension. However, Performance Ability scales were moderately correlated with

Table 37

Highest Correlations Found Among the Subdimensions of Six Categories of Items

Item Category	Item Category				
	Retention	Performance Ability	Training Descrip.	Satisfn.	Quality of Training
Performance Ability	.40 .35	- -	- -	- -	- -
Training Descriptions	xx xx	xx xx	- -	- -	- -
Satisfaction	.76 .54	.46 .44	.34 .32	- -	- -
Quality of Training	.62 .39	.48 .46	-.34 .34	.62 .58	- -
Training Improvements	.36 .35	xx xx	xx xx	xx xx	-.57 -.47

Note. "xx" signifies that while a statistically significant correlation existed, it was too weak to be of practical significance. All correlations given were significant at least at the $p < .0001$ level.

Table 38
Strengths of Correlations Found Among Six Dimensions of Items

Dimension	Dimension				Quality of Training
	Retention	Performance Ability	Training Descrip.	Satslftn.	
Performance Ability	M	-	-	-	-
Training Descriptions	N	N	-	-	-
Satisfaction	H	M	L	-	-
Quality of Training	H	M	L	H	-
Training Improvements	L	N	N	N	H

Note. H = High correlation, M = Medium correlation, L = Low correlation, and N = No substantial correlation.

Retention scales, Satisfaction scales, and Quality of Training scales.

It is interesting to note that what was being done in terms of training (Training Descriptions) was not nearly as important in terms of impact on satisfaction or retention as was the quality of what was being done. The widely held premise that satisfaction leads to retention received strong support from the correlational analyses. (As always, causation direction cannot be inferred from correlation; however, a lack of correlation would have been evidence that no causation could exist.) Likewise it is interesting to note that performance ability is related to both satisfaction and quality of training. Again, causality cannot be directly inferred. But a basis is provided to justify further tests of the hypotheses that high quality training leads to good performance and high satisfaction. It is also probable that when soldiers feel that their ability to perform is good, they are more satisfied with their participation in the RC. Thus, quality of training may have both a direct impact on satisfaction and retention, as well as an indirect impact on them by first affecting performance ability. Other studies which focus experimentally on the quality of particular aspects of training and the quality of particular aspects of performance will need to be conducted.

Conclusions and Recommendations

General

Conclusions.

- .1. Overall, there were few differences in responses between components or geographical locations.
2. Some differences in responses did occur between Ranks and types of Units.

Recommendations.

1. Policies which emphasize centralization and consolidation of administrative and training guidance and assistance to RC units and individuals should be continued.
2. There should be further research and investigation into the implications of the differences between Ranks and types of Units, especially in the areas of training development and planning.

Satisfaction

Conclusions.

1. Soldiers in the RC are generally satisfied with being in the RC. All Ranks tended to agree with statements, which indicated satisfaction with the RC, such as those dealing with educational benefits and fair discipline.
2. Overall satisfaction with the RC tended to increase with Rank. Officers were somewhat more satisfied than NCOs and NCOs were more satisfied than junior enlisted.
3. The most positive reason for staying in the RC was friends in the unit. Friendship with other unit members would seem to be a significant factor in soldier satisfaction with the RC.
4. Significant retention factors are unit friends, doing important things, leadership opportunities, and retirement benefits.
5. Significant reasons for leaving the RC are, in order, slow promotion, lack of recognition, boring work, low morale, low pay, and plans to move.
6. Officers have a more positive perception of unit morale than do junior enlisted soldiers and NCOs.
7. Stagnation, i.e., lack of upward promotion progression, is a major cause of soldier dissatisfaction with the RC.
8. Fewer junior enlisted soldiers receive pay from employers during AT than do NCOs and officers.
9. Overall, less than 1/2 of all respondents receive employer pay during AT.
10. Significantly more employers in the 1st Army area paid employees for AT than employers did in the other CONUSA's.

Recommendations.

1. The reasons for differences in perception by Rank on many items dealing with satisfaction with the RC should be investigated further.
2. Implement policies and programs which capitalize on the friendship factor through emphasis on family and social activities as well as attendance at basic training/AIT and school by group.
3. Contribute to retention by improving morale and reducing boredom, especially among junior enlisted soldiers, through better organized, conducted, and meaningful training.
4. Decrease soldier dissatisfaction with the RC due to promotion problems by developing programs that provide soldiers

with increased responsibility and pay and that are not dependant on promotion to a higher rank.

5. Initiate programs designed to increase employer support for AT attendance by enlisted soldiers. If necessary, subsidize loss of civilian pay for AT attendance for junior enlisted soldiers.

Training Descriptions

Conclusions.

1. Junior enlisted soldiers perceived that Active Army assistance was not as available to their units as did NCOs and officers.

2. Of the time spent on mission-related training, about 1/4 is wasted. About 1/2 of a typical 16-hour drill period is spent on nonmission-related training and wasted time.

3. Wasted training time is caused primarily by other requirements which interfere with training as well as by lack of proper facilities, equipment, and funding.

4. Attempting to train on more tasks than can be learned in the time available may contribute to wasted training time.

5. Changes to training schedules and excessive paperwork were perceived to have a minimum adverse impact on the quality of training.

6. Soldiers receive about 1/2 of their training from junior leaders and, generally, have a positive attitude toward unit leadership. NCOs and officers are more positive regarding unit leadership than are junior enlisted soldiers.

7. MILES is used infrequently even within combat arms units. MILES is used even less among other types of units. There is a general lack of knowledge on how to use MILES.

Recommendations.

1. Continue to emphasize individual training in the context of unit training.

2. Improve upon current training methods by improving junior leader proficiency and providing junior leaders with the assets and time needed to train subordinates.

3. Continue the distribution of MILES and widen its issue to all types of units.

4. Where MILES is available, mandate its use and require the reporting of such use.

5. Provide instruction on MILES maintenance, installation, and operation throughout the RC and establish a system which rewards units for training with MILES.

Training Improvement

Conclusions.

1. Of the time which is used for training, 42% is spent on individual training. Perceptions were that more time is needed for MOS and common task training.

2. Many proposed improvements to training were well received by RC soldiers. There was a general openness to new and better ways of training.

3. Home study, more training with AC units, more simulators and training devices, full time training committees to assist with individual and unit training, and more effective use of MILES were viewed as highly beneficial for improving training.

4. Overall, 25% of the respondents indicated owning a personal computer. The ownership rate was highest among officers and among USAR soldiers.

5. Using computers and simulators to practice MOS skills and improve individual skills in general was favored. Use between drills was preferred over use during drills.

6. Soldiers were highly positive about the effectiveness of video cassettes and other technology for use in a home study course. Responses to this were among the most positive in the survey.

7. The use of technology for training was perceived to be very low. This is in stark contrast to the strong and frequent recommendations in the RC literature for greater use of technology in training.

8. There was consistent agreement among all respondents that having individual soldiers train with an AC unit is beneficial.

9. Junior enlisted soldiers were amenable to full-time active duty with the RC if allowed to select the time and place. Other time and location options were viewed negatively by all Ranks.

10. Officers were more willing to work extra hours for the RC in the form of a 3-week AT than were other Ranks.

11. All Ranks would be willing to work more hours for the RC if the time given was paid, in the form of home study, and done in addition to regular drill periods.

12. The most favorable response to suggestions for improving training was not more time, but time better spent.

13. In general, soldiers indicated they were willing to work 10 to 13 more paid hours for the RC each month.

14. Split unit training assemblies and adaptable drill schedules were not generally favored for improving individual and unit readiness, and drill attendance.

15. Methods of training most used for MOS qualification were, in order, SOJT, AC school, correspondence, unit school, RF school, NG school, and civilian school.

16. Schools which do a good job of training soldiers are, in order of preference, AC, ARNG, and RF.

17. AC schools were most favored for good instructors, course content, and facilities. AC schools were least favored for easy-to-meet schedules, enough classroom openings, and enough funding to allow attendance.

18. RF schools were most favored for easy to meet schedules, classroom openings, and funding.

19. Overall, AC schools were preferred by junior enlisted soldiers and NCOs for reclassification training. SOJT was the second choice.

20. Officers preferred AC schools as a sole source for retraining after changing branch. If retraining is required from more than one source then at least half the training from AC schools was preferred. RF schools were the next most preferred for branch retraining.

21. All ranks were strongly positive about the value of AC school training and SOJT for the learning and maintenance of individual skills.

22. The greatest deterrence to the maintenance of individual skills required by duty assignment were inadequate physical facilities, not enough of the right kind of equipment, and too few simulators and training devices.

23. The greatest obstacles to the training of subordinates were, in order, lack of simulators and training devices, equipment shortages, and too little time to plan, prepare, and conduct training.

24. Additional individual and unit training time in the form of ATAs, UTAs, MUTAs, and ATs was perceived to be helpful in getting units trained to readiness standards. However, soldiers were not willing to give extra time in these ways. Flexible, nondrill time was preferred.

25. Training committees made up of full-time soldiers were perceived to be helpful for unit readiness primarily by

supporting MOS training and individual skill maintenance and secondarily by supporting ranges, ARTEPS, and MILES installation, maintenance and instruction.

Recommendations.

1. Capitalize on the degree of computer literacy and personal computer ownership among RC soldiers by providing more computers and simulators to the RC for use by individual soldiers.

2. Create programs which allow soldiers to participate, between drills, in technology-based home study programs using computer-based instruction (CBI), video cassettes, and simulations.

3. Support the general use of technology in training by funding policies which mandate the use of proven technologies such as computer-assisted instruction, interactive videodisc, remote CPX's, and asynchronous computer conferencing.

4. Fund research programs to establish the training benefits of other technologies.

5. Continue and expand current programs which allow RC soldiers to train with AC units.

6. Create and publicize programs aimed at increasing junior enlisted soldier seasonal full-time active duty (2-3 months per year) with the RC. Provide for soldier selection of time and location of such duty.

7. Cater to those conditions under which RC soldiers would be willing to work more paid hours, between drill each month, for the RC.

8. Increase awards/recognition for excellent individual and unit performance.

9. Increase AC school availability for RC soldiers by expanding course offerings, increasing class sizes, and providing additional funding for RC attendance.

10. Improve RF and ARNG school facilities, instructor proficiency and quality, and course content to equal or surpass that of AC schools.

11. Increase individual training opportunities through new programs which are tailored to meet RC needs in the RC environment and which provide the RC soldier with a variety of MOS qualification and sustainment training options.

12. Improve quality control over SOJT and retain it as an integral part of training programs designed to attain and maintain MOS qualification.

13. Reduce obstacles to training by providing an adequate supply of simulators and training devices, equipment, and time to plan, prepare, and conduct training.

14. Assist in the improvement and maintenance of individual skills by providing the best physical facilities possible, enough of the right kind of equipment, and more

simulators and training devices that are applicable to the tasks to be trained.

15. Organize full-time training committees at RC installations to help with MOS qualification and skill retention.

16. Split unit training assemblies and adaptable drill schedules should not be further emphasized.

Quality of Training

Conclusions.

1. Publications and reference material are adequate to support training. Most helpful are Soldier Training Publications (STP), Soldier's Manuals (SM), Field Manuals (FM), and Technical Manuals (TM).

2. ARTEP training is realistic, interesting, and tailored to wartime missions.

3. The most effective means for training soldiers was perceived to be, in order, AT, AC schools, SOJT and overseas deployment training (ODT), individual training, and unit training.

4. Annual General Inspections (AGI) and command inspections were viewed as training detractors.

5. NCO success in training was judged to have been helped most by previous training in leadership, how to train, and counselling.

6. Soldiers were positive about the overall Quality of Training as well as the Satisfaction and Performance Ability of soldiers. In general, the area of Quality of Training was rated more favorably than Satisfaction and Satisfaction was rated more favorably than Performance Ability.

Recommendations.

1. The top priority for extra paid time should be for training planners.

2. AGI's and command inspections should be conducted at times when they do not detract from training.

3. Current NCO courses in leadership, how to train, and counselling techniques should be improved and expanded.

Performance

Conclusions.

1. RC soldiers have a high degree of confidence in their ability to perform the tasks for which they are trained.

2. NCOs think that they have the ability to do more and accept more responsibility than they are given. Officers and junior enlisted soldiers agree.

3. Officers rated their own ability to perform more highly than did NCOs.

4. Soldiers estimate that they can perform to standard roughly 3/4 of the individual, common, MOS, and ARTEP tasks essential to their units' missions. They report that they yearly perform about 62% of their total duty MOS tasks to Soldiers Manual standards and that they take an SQT once every year on the average.

5. Soldiers believe that about 3/4 of their fellow soldiers could perform well if mobilized.

Recommendations.

1. Provide NCOs with more responsibility, additional opportunities to participate in training planning, and time to train subordinates.

2. Continue to emphasize the Individual Training and Evaluation Program (ITEP) as an integral part of overall programs designed to increase junior leader proficiency.

Involvement

Conclusions.

1. The average time spent traveling to drill, one way, ranged from 40 minutes (NCOs) to one hour and seven minutes (officers).

2. Soldiers indicate willingness to travel about 40 minutes longer to drill, one way, on the average, than they do now.

3. Preparing for the next drill takes an average of eight hours. Both drill and outside time is used. Some of the outside time is paid.

4. Paid hours for drill preparation is greater in the ARNG (2.5 hours) than in the USAR (1.3 hours).

5. Officers use more unpaid time (5 hours) than NCOs (3 hours).

Recommendations.

1. In view of the willingness of soldiers to travel longer distances and spend more time to get to their drill sites, consideration should be given to some consolidation of small units into larger organizations.

2. Equalize paid time outside of drill between the ARNG and USAR.

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APPENDIX A
SURVEY INSTRUMENTS

1987
National Survey
of
Reserve Component
Inactive Duty Training

Enlisted Soldiers (E1 - E4)

Read This First!

The data requested in this survey are being collected under authority 10 USC, Section 4503 for research purposes only. The intent is to evaluate factors relating to training effectiveness. Any identifiers are to be used for administrative and statistical control purposes only. Full confidentiality of responses will be maintained in the processing of these data. Your participation in the survey is voluntary. Failure to respond to any questions will not result in any penalty. However, your participation is encouraged so that the data will be complete and representative.

Read This Next!

Instructions

Please read the instructions carefully for each section before answering the questions.

Mark your answers in this booklet.

Be frank with your answers. We want *your* opinions and perceptions. They will be kept strictly confidential and will not be used for purposes other than those for which the survey is intended.

Please answer every question carefully. If you do not know the answer to a question or it does not apply to your situation, then mark the "don't know" or "not applicable" option provided, rather than leaving the question blank. Use these options only when they strictly apply.

Look over the terms listed below in the glossary before filling out the survey.

If you work full-time for the ARNG or USAR, please answer *all* questions from the perspective of your role as a *part-time* soldier.

Glossary

- AC:** *Active Component.* Includes all full-time, Active Duty military forces of the U.S. federal government.
- ARNG:** *Army National Guard.*
- ARTEP:** *Army Training and Evaluation Program.* A list of collective tasks that a unit must accomplish to perform its mission.
- AT:** *Annual Training.*
- IDT:** *Inactive Duty Training.* Referred to informally as "weekend drills."
- MILES:** *Multiple Integrated Laser Engagement System.* Simulates weapons firing using laser beams and sensors to determine who or what has been "hit."
- MOS:** *Military Occupational Specialty.* Job specialty of an enlisted soldier (examples: cook, mechanic, clerk).
- MUTA:** *Multiple Unit Training Assembly.* More than one consecutive four-hour drill period.
- RF School:** *Reserve Forces School, formerly called "USAR School."*
- USAR:** *United States Army Reserve.*

1987

National Survey of Reserve Component
Inactive Duty Training

SECTION A: About Yourself



Instructions: Whenever you see "fill-in-the-blank" questions like the ones that follow, write your answer in the blank to the left of each question. Do not leave any of the blanks empty. If the correct answer is "none" or "zero," then please write 0 in the blank. If you *don't know* the answer, write *DK*; if the question is *not applicable*, write *NA*.

How many *years* have you served in each of the following:

- ___ 1. the Army National Guard (ARNG)?
- ___ 2. the United States Army Reserve (USAR)?
- ___ 3. other Reserve Component organizations (including the Individual Ready Reserve or reserve units in the Air Force, Navy, Marines, or Coast Guard)?

How many *years* have you been in . . .

- ___ 4. your current unit?
- ___ 5. your current duty MOS? [If you work full-time for the ARNG or USAR, answer in terms of your *part-time* MOS.]

While a soldier in the ARNG or USAR, how many times have you changed your MOS . . .

- ___ 6. voluntarily?
- ___ 7. involuntarily?
- ___ 8. What is your age?
- ___ 9. What is your pay grade (E- 2)?
- ___ 10. What is your duty MOS? (For example, 12B20 or 71L10. If you work full-time for the ARNG or USAR, answer in terms of your *part-time* MOS)

-
- ___ 11. What is the title of your duty position? (tank commander, squad leader, clerk, etc.)

How many years of experience in the Active Component (AC) have you had in each branch of the service?

- ___ 12. Army
- ___ 13. Navy
- ___ 14. Air Force
- ___ 15. Coast Guard
- ___ 16. Marines



Instructions: Whenever you see "multiple choice" questions like the ones that follow, circle the number to the left of the one answer you choose.

- 17. What is your gender?
 - 1. female
 - 2. male

18. If you are employed full time by the ARNG or USAR, what is your status?

1. not employed full time by the ARNG or USAR
2. technician
3. AGR (Active Guard/Reserve)
4. state active duty
5. other: _____

19. I am currently in the:

1. Army National Guard (ARNG)
2. US Army Reserve (USAR)

20. How many people live in the largest city or town within 25 miles of where you live?

1. Less than 1000
2. 1,000-10,000
3. 10,000-50,000
4. 50,000-250,000
5. more than 250,000
6. don't know

21. What is your current highest level of civilian education?

1. less than high school
2. some high school but no diploma or GED
3. high school completed with diploma or GED
4. up to two years of college but no degree
5. associate degree
6. three to four years of college but no degree
7. bachelors degree
8. a year or more of graduate credit, but no graduate degree
9. masters degree
10. doctorate degree
11. professional degree such as MD, DDS, or LLB

NOTE: Throughout this survey, "your unit" refers to the smallest group of soldiers you train with on a regular basis.

22. The smallest group of soldiers I train with on a regular basis is a:

1. squad/section/crew
2. detachment
3. platoon
4. company/troop/battery
5. battalion/squadron or higher level command

23. How many soldiers are in your unit?

don't know
not applicable



Instructions: Whenever you see "yes-no" questions like the ones that follow, answer them by circling "yes" or "no" to the left of each numbered line. If you don't know the answer to a question or it does not apply to your situation, circle "dk" or "na" to the left of the question in the shaded column.

dk na	yes no	24. Are you a combat veteran?
dk na	yes no	25. Does your employer pay you while you are at Annual Training (AT)?
dk na	yes no	26. Are you qualified in any MOS?
dk na	yes no	27. Are you MOS qualified at the correct skill level (five-digit MOS, such as 19E20) for your duty assignment?
dk na	yes no	28. Is the work you do in your duty MOS similar to what you do in your full-time, civilian (or military) job.
dk na	yes no	29. Do you own a personal computer?
dk na	yes no	30. If yes, is it IBM PC compatible?
Are you employed as a civilian ...		
dk na	yes no	31. full time?
dk na	yes no	32. part time?

Are you a student . . .

dk na yes no 33. full time?

dk na yes no 34. part time?

SECTION B: About the Training Environment

- ___ 1. What percentage of the tasks for your duty MOS have you performed to Soldier's Manual standard in the past year [if you work full-time for the ARNG or USAR, answer in terms of your *part-time* MOS]?
- ___ 2. During the average 16-hour drill period (MUTA-4), how many soldiers are you responsible for training?
- ___ 3. How many soldiers do you *personally* train during the average 16-hour drill period (MUTA-4)?
- ___ 4. How many months has it been since you have taken a Skill Qualification Test (SQT) in your duty MOS? (If never, write a zero in the blank.)

When you last became qualified for an MOS, which methods of training were most used? Place a 1 by the method which was used most, a 2 by the second most used (if applicable), a 3 by the the third most used, and so forth.

- ___ 5. Active Component (AC) school
- ___ 6. Supervised On-the-Job training (SOJT)
- ___ 7. Civilian school
- ___ 8. ARNG (state) school
- ___ 9. RF school (formerly called USAR school)
- ___ 10. Unit school
- ___ 11. Correspondence Course Program
12. Who *personally conducts most* of the training in your unit? (Circle only one.)
- | | |
|----------------------|----------------------|
| 1. commander | 6. squad leader |
| 2. executive officer | 7. crew chief |
| 3. platoon leader | 8. section leader |
| 4. first sergeant | 9. vehicle commander |
| 5. platoon sergeant | 10. other: _____ |
13. What level of training is emphasized by your next higher headquarters? (Circle only one.)
1. individual/MOS
 2. squad/crew/section
 3. platoon/detachment
 4. company/troop/battery
 5. battalion/squadron

dk na yes no 14. Have you ever trained with an active Army unit while in the ARNG or USAR (excluding active duty while attending schools)?

dk na yes no 15. Is a full-time training officer/NCO assigned to the headquarters which commands your unit?

dk na yes no 16. Have you personally ever used the Multiple Integrated Laser Engagement System (MILES) during training?

dk na yes no 17. Does your unit have access to a local training area within 2 hours of your armory or training center?

dk na yes no 18. If not, does the lack of a training area close by hurt training in your unit? (If your answer to question 17 was "yes," circle "na.")



Instructions: Whenever you see "agree-disagree" questions like the ones that follow, indicate how strongly you agree or disagree with each of the numbered statements by circling one of the abbreviations to the left of the item number. Use the following key for the abbreviations:

sa = strongly agree	dk = don't know
a = agree	na = does not apply to my situation
m = medium	
d = disagree	
sd = strongly disagree	

don't know	not applicable	strongly agree	agree	medium	disagree	strongly disagree
dk	na	sa	a	m	d	sd

19. The dates, locations, or kind of training scheduled for my unit often get changed from how they are originally scheduled.
20. My unit trains with the same kind of equipment that it would use during wartime.
21. The NCO(s) in my unit requires that soldiers perform tasks to Soldier's Manual standards.
22. The way my unit uses MILES helps attain mission capabilities.
23. My unit leader(s) insists that subordinates maintain high standards of task performance.
24. Unit readiness would be achieved quicker if my unit could wait until its *individuals* were adequately skilled before having to engage in *unit-level* training.
25. Having more training materials (such as books, manuals, etc.) would make it easier for me to maintain the individual skills that are required by my duty assignment.
26. Having more of the right equipment (such as weapons, vehicles, typewriters, etc.) would make it easier for me to maintain the individual skills that are required by my duty assignment.
27. Having better physical facilities (such as firing ranges, armories, training centers, etc.) for training would make it easier for me to maintain the individual skills that are required by my duty assignment.
28. If less training time were wasted it would be easier for me to maintain the individual skills that are required by my duty assignment.
29. If training were better organized it would be easier for me to maintain the individual skills that are required by my duty assignment.
30. Having more simulators/training devices available would make it easier for me to maintain the individual skills that are required by my duty assignment.
31. Less emphasis on *unit-level* training would make it easier for me to maintain the individual skills that are required by my duty assignment.



Instructions: Whenever you see a group of "agree-disagree" phrases which belong to a bold-faced introduction like the ones below, a separate answer is needed for each numbered phrase in the group, not just for one of them.

In my unit, ARTEP training is:

dk	na	sa	a	m	d	sd	32. tailored to the needs and abilities of the soldiers in my unit.
dk	na	sa	a	m	d	sd	33. realistic.
dk	na	sa	a	m	d	sd	34. interesting.
dk	na	sa	a	m	d	sd	35. tailored to meet wartime mission requirements.

Good training supervision requires that leaders set objectives, provide resources, coach subordinates, and measure results.

dk	na	sa	a	m	d	sd	36. In my unit, <i>individual</i> training is supervised well.
dk	na	sa	a	m	d	sd	37. In my unit, <i>unit</i> training is supervised well.

My unit has *enough* of the following to support training:

dk	na	sa	a	m	d	sd	38. Soldier Training Publications/Soldier's Manuals.
dk	na	sa	a	m	d	sd	39. Field Manuals.
dk	na	sa	a	m	d	sd	40. Technical Manuals.
dk	na	sa	a	m	d	sd	41. Training Extension Course (TEC) tapes for the Bessler Cue-See.
dk	na	sa	a	m	d	sd	42. Army Regulations.
dk	na	sa	a	m	d	sd	43. National Guard Regulations.
dk	na	sa	a	m	d	sd	44. Job Books.
dk	na	sa	a	m	d	sd	45. ARTEP's or equivalent unit tactical training guidelines.
dk	na	sa	a	m	d	sd	46. Training Circulars.
dk	na	sa	a	m	d	sd	47. Field Circulars.

My first line supervisor does the following well:

dk	na	sa	a	m	d	sd	48. Helps subordinates with Soldier's Manual tasks on which they are weak.
dk	na	sa	a	m	d	sd	49. Corrects individual soldier weaknesses
dk	na	sa	a	m	d	sd	50. Uses pauses/breaks in unit training to help subordinates improve their individual skills.



Instructions: Whenever you see "frequency" questions like the ones below, indicate how often each numbered thing happens by circling one letter to the left of the item number. If you don't know the answer to a question, or it does not apply to your situation, circle "dk" or "na" to the left of the item.

don't know
not applicable

often
sometimes
rarely
never

o = often	dk = don't know
s = sometimes	na = does not apply to my situation
r = rarely	
n = never	

How often is the Multiple Integrated Laser Engagement System (MILES) used in your unit to train soldiers at each of the following levels?

dk	na	o	s	r	n	51. individual.
dk	na	o	s	r	n	52. crew/team.
dk	na	o	s	r	n	53. squad/section.
dk	na	o	s	r	n	54. platoon/detachment.
dk	na	o	s	r	n	55. company/troop/battery.

Which of the following are used by your unit for training?

dk	na	o	s	r	n	56. mini-ranges at the armory/training center or local training area (LTA).
dk	na	o	s	r	n	57. training aids (e.g., mock-ups, models, charts, simulation devices)
dk	na	o	s	r	n	58. audio-visual equipment
dk	na	o	s	r	n	59. Training Extension Course (TEC) tapes for the Bessler Cue-See.

SECTION C: About Use of Time

1. How many paid *hours per month* would you be willing to work for the ARNG or USAR in addition to the normal 16-hour drill period (MUTA-4)?

___ 2. What percentage of your drill training time is spent on individual-level (versus unit-level) training?



Instructions: Whenever you see "hours & minutes" questions like the ones that follow, fill in the blank for hours and the blank for minutes for each item. For example, two hours would be written "2 hrs and 0 min." One and a half hours would be written "1 hrs. and 30 min."

___ hrs. and ___ min.

3. How many hours and minutes do you travel one way to attend drills at your unit's armory or reserve center?

___ hrs. and ___ min.

4. How many hours and minutes would you be willing to travel one way to attend drills at your unit's armory or reserve center?

Before answering the next set of questions, do the following:

- A. Read questions 5 through 9 thoroughly, think about your answers but do not write them down yet.
- B. Notice that questions 5, 6, 7, 8, and 9 should form a total picture of how you personally spend the 16 hours of a regular weekend drill. Try to answer questions 5, 6, 7, 8, and 9 so that there is no overlap among them.

Receiving training.

___ hrs. and ___ min.

5. On an average 16-hour weekend drill period (MUTA-4), how much of your time is spent receiving training which is directly supervised by NCOs or officers?

___ hrs. and ___ min.

a. How much of the time you wrote down for question 5 do you spend waiting for other people or events?

___ hrs. and ___ min.

b. How much of the time you wrote down for question 5 do you think is really helping to build or maintain your skills?

Administrative tasks.

___ hrs. and ___ min.

6. On an average 16-hour weekend drill period (MUTA-4), how much of your time is spent doing administrative tasks which are not in your duty MOS?

___ hrs. and ___ min.

a. How much of the time you wrote down for question 6 do you spend waiting for other people or events?

MOS work assignments.

___ hrs. and ___ min.

7. On an average 16-hour weekend drill period (MUTA-4), how much of your time is spent in work which is part of your duty MOS but which is no longer necessary for you to repeat in order for you to build or maintain your skills (it is simply work which needs doing)?

___ hrs. and ___ min.

a. How much of the time you wrote down for question 7 do you spend waiting for other people or events?

Extra work assignments.

___ hrs. and ___ min.

8. On an average 16-hour weekend drill period (MUTA-4), how much of your time is spent doing work assignments which are not part of your duty MOS?

___ hrs. and ___ min.

a. How much of the time you wrote down for question 8 do you spend waiting for other people or events?

Other time use.

___ hrs. and ___ min.

9. In addition to the time you estimated for the above items, in an average 16-hour weekend drill period (MUTA-4), how much of your time is spent doing things other than training, work assignments, and administrative tasks (such as travel, breaks, meals, etc.)?

___ hrs. and ___ min.

a. How much of the time you wrote down for question 9 do you spend just doing nothing?

Training time is wasted in my unit because:

- dk na sa a m d sd 10. topics trained are not important to the unit mission.
- dk na sa a m d sd 11. other requirements interfere with training.
- dk na sa a m d sd 12. training is not well organized.
- dk na sa a m d sd 13. equipment often breaks down.
- dk na sa a m d sd 14. training facilities/equipment/materials are not available.
- dk na sa a m d sd 15. the training given is over the soldiers' heads.
- dk na sa a m d sd 16. soldiers are not motivated to try very hard.
17. other: _____

SECTION D: Your Personal Feelings and Assessment

- _____ 1. What percentage of the critical tasks required for your duty assignment can you perform to standard?

Suppose you could stay in the ARNG or USAR as long as you wish or could leave it as soon as you wish. How many *more* years would you stay in . . .

- _____ 2. if your present duty assignment remained the same?
- _____ 3. if you could change you present duty assignment?

What percentage of the following do you think know their jobs well enough now to perform well if your unit and its next higher headquarters were mobilized?

- _____ 4. enlisted soldiers (E1s to E4s).
- _____ 5. NCOs (E5s to E9s).
- _____ 6. officers.

If you had to change your MOS and receive *all* of your retraining through a *single* means, which would you most prefer? Rank the options below from 1 to 8 with 1 being the most preferred.

- _____ 7. Active Component school
- _____ 8. RF school (formerly called USAR school)
- _____ 9. ARNG (State) school
- _____ 10. Unit school
- _____ 11. Civilian school
- _____ 12. Home study with pay based on follow-up testing (possible option in the future)
- _____ 13. Correspondence Course Program
- _____ 14. Supervised On-the-Job Training (SOJT)

If you had to change your MOS and had the choice of receiving retraining through *more than one* means, what percentage of this retraining would you like to receive from each of the following (should add up to 100%)?

- _____ 15. Active Component school
- _____ 16. RF school (formerly called USAR school)
- _____ 17. ARNG (State) school
- _____ 18. Unit school
- _____ 19. Civilian school
- _____ 20. Home study with pay based on follow-up testing (possible option in the future)
- _____ 21. Correspondence Course Program
- _____ 22. Supervised On-the-Job Training (SOJT)

23. What level of training do *you* think should be emphasized by your next higher headquarters? (Circle only one.)
1. individual/MOS
 2. squad/crew/section
 3. platoon/detachment
 4. company/troop/battery
 5. battalion/squadron

- dk na sa a m d sd 24. My unit's leaders know their jobs.
- dk na sa a m d sd 25. Adequate recognition and awards are given to soldiers in my unit who perform well.
- dk na sa a m d sd 26. Too many awards are given to soldiers in my unit.
- dk na sa a m d sd 27. Changes in my unit's training schedule hurt the quality of the training.
- dk na sa a m d sd 28. The morale in my unit is high.
- dk na sa a m d sd 29. I joined the ARNG or USAR in order to learn a skill.
- dk na sa a m d sd 30. ARNG schools do a good job of training soldiers.
- dk na sa a m d sd 31. RF schools do a good job of training soldiers.
- dk na sa a m d sd 32. Active Component schools do a good job of training ARNG or USAR soldiers .
- dk na sa a m d sd 33. I have a good working relationship with my unit leader(s).
- dk na sa a m d sd 34. In my unit, soldiers are promoted when they should be.
- dk na sa a m d sd 35. Training in my unit is *too* repetitive.
- dk na sa a m d sd 36. Active Army assistance from Readiness Group personnel, Advisors, and Mobile Training Teams is *available* to my unit.
- dk na sa a m d sd 37. Active Army assistance from Readiness Group personnel, Advisors, and Mobile Training Teams is *helpful* to my unit.
- dk na sa a m d sd 38. It is easy for me to maintain the individual skills required by my duty assignment.
- dk na sa a m d sd 39. The NCOs in my unit look out for the welfare of their soldiers.
- dk na sa a m d sd 40. I have confidence in my unit leader(s).
- dk na sa a m d sd 41. Promotions are handled fairly in my unit.
- dk na sa a m d sd 42. Discipline is handled fairly in my unit.
- dk na sa a m d sd 43. Soldiers in my unit employ and fire their crew-served weapons to standard.
- dk na sa a m d sd 44. My unit is able to conduct sustained operations by continuously operating in the field for 72 hours or more.
- dk na sa a m d sd 45. Soldiers in my unit know how to operate MILES.
- dk na sa a m d sd 46. Soldiers in my unit know how to perform operator maintenance on MILES.
- dk na sa a m d sd 47. The training needs of the soldiers in my unit are adequately met during IDT.
- dk na sa a m d sd 48. My unit leader(s) treats all enlisted soldiers in my unit fairly and justly.
- dk na sa a m d sd 49. My unit leader(s) is receptive to suggestions made by subordinates.
- dk na sa a m d sd 50. I am well prepared to perform my duty assignment in the ARNG or USAR.

The NCO(s) (E5 to E9) in my unit . . .

- dk na sa a m d sd 51. has good training skills.
- dk na sa a m d sd 52. is able to in perform the skills he/she is responsible to train others on.

I am satisfied with the way the ARNG or USAR enables me to . . .

- dk na sa a m d sd 53. learn a skill.
- dk na sa a m d sd 54. defend my country.
- dk na sa a m d sd 55. earn a retirement.
- dk na sa a m d sd 56. get education benefits.

I am satisfied with the way the ARNG or USAR enables me to . . .

- dk na sa a m d sd 57. do something interesting or have a change of pace.
dk na sa a m d sd 58. maintain the rank/responsibility I earned on Active Duty.

I am satisfied with:

- dk na sa a m d sd 59. being in the ARNG or USAR. [If you work full-time for the ARNG or USAR, answer questions 59 to 62 in terms of your *part-time* MOS.]
dk na sa a m d sd 60. my pay in the ARNG or USAR.
dk na sa a m d sd 61. my assignment in the ARNG or USAR.
dk na sa a m d sd 62. the quality of training I have received in my current assignment.

Over the past year, the following have made me feel like staying in the ARNG or USAR:

- dk na sa a m d sd 63. the chance to help protect my country.
dk na sa a m d sd 64. good morale in my unit.
dk na sa a m d sd 65. the friends I have in my unit.
dk na sa a m d sd 66. change of pace from my civilian job.
dk na sa a m d sd 67. the pay I receive.
dk na sa a m d sd 68. retirement benefits in the military.
dk na sa a m d sd 69. the military atmosphere.
dk na sa a m d sd 70. opportunities to be responsible or to lead.
dk na sa a m d sd 71. the sense of doing something worthwhile and important.
dk na sa a m d sd 72. my status in the military.
dk na sa a m d sd 73. my status in the community.
74. other: _____

In the past year, the following have made me feel like leaving the ARNG or USAR:

- dk na sa a m d sd 75. family concerns.
dk na sa a m d sd 76. my civilian job.
dk na sa a m d sd 77. plans to move.
dk na sa a m d sd 78. low pay in the ARNG or USAR.
dk na sa a m d sd 79. low morale in my unit.
dk na sa a m d sd 80. pressure to do more work in my duty assignment than should be expected.
dk na sa a m d sd 81. difficulty in keeping up with all the knowledge and skills I'm expected to have.
dk na sa a m d sd 82. not getting along with some of the soldiers in my unit.
dk na sa a m d sd 83. not advancing in rank as fast as I wanted to.
dk na sa a m d sd 84. boring work.
dk na sa a m d sd 85. not enough recognition for what I do.
dk na sa a m d sd 86. too much wasted training time.
dk na sa a m d sd 87. poor quality of training.
dk na sa a m d sd 88. inability to accomplish all I would like to do *in* the ARNG or USAR.
dk na sa a m d sd 89. inability to accomplish all I would like to do *outside* the ARNG or USAR because of the time military service takes up.
90. other: _____

Soldiers in my unit are good at performing:

- dk na sa a m d sd 91. Common tasks from the Soldier's Manual.
dk na sa a m d sd 92. MOS-specific tasks from the Soldier's Manual.
dk na sa a m d sd 93. ARTEP tasks (or equivalent) which are essential to my unit's mission.

I have difficulty obtaining required training from Active Component schools because . . .

- dk na sa a m d sd 94. courses are too long.
dk na sa a m d sd 95. course dates usually don't match my schedule.
dk na sa a m d sd 96. course dates conflict with unit activities.
dk na sa a m d sd 97. classes have more applicants than there is room for.
dk na sa a m d sd 98. funds are often not available.
dk na sa a m d sd 99. I have not met the prerequisites.
dk na sa a m d sd 100. I can't get orders in time.

SECTION E: Your Recommendations and Reactions to Some Training Options

- ___ 1. In addition to regular drills how many *individual soldier* training sessions, such as Additional Training Assemblies (ATA's) per year (4 hrs. each) would be helpful in getting your unit trained to readiness standards?
- ___ 2. How many additional separate *unit* training assemblies (4 hrs. each) per year would be helpful in getting your unit trained to readiness standards?
- ___ 3. How many additional 16-hour drill periods (MUTA-4) per year would be helpful in getting your unit trained to readiness standards?
- ___ 4. How many additional days of AT per year would be helpful in getting your unit trained to readiness standards?
5. How often would an additional AT period be helpful in getting your unit trained to readiness standards?
1. every year
 2. every other year
 3. every three years
 4. every four to six years
 5. never

ARNG (state) schools have . . . (Check here [] if you have ever attended.)

- dk na sa a m d sd 6. good instructors.
dk na sa a m d sd 7. good course content.
dk na sa a m d sd 8. good facilities.
dk na sa a m d sd 9. good equipment.
dk na sa a m d sd 10. course scheduling which is easy for part-time soldiers to meet
dk na sa a m d sd 11. enough classroom openings for soldiers.
dk na sa a m d sd 12. enough funding to send soldiers to attend.

Active Component schools have ... (Check here [] if you have ever attended.)

dk	na	sa	a	m	d	sd	13.	good instructors.
dk	na	sa	a	m	d	sd	14.	good course content.
dk	na	sa	a	m	d	sd	15.	good facilities.
dk	na	sa	a	m	d	sd	16.	good equipment.
dk	na	sa	a	m	d	sd	17.	course scheduling which is easy for part-time soldiers to meet
dk	na	sa	a	m	d	sd	18.	enough classroom openings for soldiers.
dk	na	sa	a	m	d	sd	19.	enough funding to send soldiers to attend.

RF schools (formerly USAR schools) have ... (Check here [] if you have ever attended.)

dk	na	sa	a	m	d	sd	20.	good instructors.
dk	na	sa	a	m	d	sd	21.	good course content.
dk	na	sa	a	m	d	sd	22.	good facilities.
dk	na	sa	a	m	d	sd	23.	good equipment.
dk	na	sa	a	m	d	sd	24.	course scheduling which is easy for part-time soldiers to meet
dk	na	sa	a	m	d	sd	25.	enough classroom openings for soldiers.
dk	na	sa	a	m	d	sd	26.	enough funding to send soldiers to attend.

If a home study course were available to help you train for your duty assignment, the following means of instruction would probably be effective:

dk	na	sa	a	m	d	sd	27.	audio cassette.
dk	na	sa	a	m	d	sd	28.	video cassette.
dk	na	sa	a	m	d	sd	29.	personal computer.
dk	na	sa	a	m	d	sd	30.	correspondence.

It would be a good idea if ...

dk	na	sa	a	m	d	sd	31.	soldiers in my unit spent time training with an active army unit.
dk	na	sa	a	m	d	sd	32.	soldiers in my unit had more time to train on individual common tasks.
dk	na	sa	a	m	d	sd	33.	soldiers in my unit had more time to train on individual, MOS-specific tasks.
dk	na	sa	a	m	d	sd	34.	MILES were used more for training my unit.
dk	na	sa	a	m	d	sd	35.	each year an additional seven-day AT period were conducted sometime other than when the regular fourteen-day AT is scheduled.

It would be helpful if a full-time training committee of soldiers were available to help my unit with the following:

dk	na	sa	a	m	d	sd	36.	range set up.
dk	na	sa	a	m	d	sd	37.	MILES installation on vehicles.
dk	na	sa	a	m	d	sd	38.	ARTEP control and umpiring.
dk	na	sa	a	m	d	sd	39.	MOS qualification
dk	na	sa	a	m	d	sd	40.	skill retention.
dk	na	yes	no				41.	Such a committee is already available to my unit.

A Split Unit Training Assembly (SUTA) is where different parts (crews, squads, platoons, etc.) of a larger unit train on separate weekends and the training conducted is tailored to meet their specific needs.

- dk na sa a m d sd 42. A SUTA drill schedule would more effectively bring about the readiness of *individual soldiers* than the schedule currently used by the headquarters which commands my unit.
- dk na sa a m d sd 43. A SUTA drill schedule would more effectively bring about the readiness of my *unit* as a whole than the schedule currently used by my unit.
- dk na sa a m d sd 44. A SUTA drill schedule would make it *easier* for me to attend drills.
- dk na sa a m d sd 45. A SUTA drill schedule would make it *harder* for me to attend drills.
- dk na yes no 46. My next higher headquarters already uses a SUTA drill schedule.

An "adaptable drill schedule" is where units or parts of units meet for various lengths of time (two-, four-, six-, or eight-hour sessions) on various days of the week (weekday evenings, Saturdays and Sundays).

- dk na sa a m d sd 47. An adaptable drill schedule would more effectively bring about the readiness of *individual soldiers* than the schedule currently used by my unit.
- dk na sa a m d sd 48. An adaptable drill schedule would more effectively bring about the readiness of my *unit* as a whole than the schedule currently used by my unit.
- dk na sa a m d sd 49. An adaptable drill schedule would make it *easier* for me to attend drills.
- dk na sa a m d sd 50. An adaptable drill schedule would make it *harder* for me to attend drills.
- dk na yes no 51. My unit already follows an adaptable drill schedule.

I would be able to go on full-time active duty with the ARNG or USAR on a seasonal basis (2 or 3 months out of every year) . . .

- dk na sa a m d sd 52. if I could specify the time of year, but not the location.
- dk na sa a m d sd 53. if I could specify the location, but not the time of year.
- dk na sa a m d sd 54. if I could specify both the time of year *and* the location.
- dk na sa a m d sd 55. if I could neither specify the time nor the location.

"Job aids," such as diagrams or checklists which are readily available, are supposed to enable a person to do a task without having to memorize all the steps.

- dk na sa a m d sd 56. Having more job aids would be helpful to me in my duty assignment.
- dk na sa a m d sd 57. I actually use the job aids I have for my work in the ARNG or USAR.
- dk na sa a m d sd 58. Job aids are useful.

I would be willing to work more hours for the ARNG or USAR in the following ways:

- dk na sa a m d sd 59. a longer Annual Training (AT) each year (3 or more weeks).
- dk na sa a m d sd 60. an extra Annual Training (AT) session per year.
- dk na sa a m d sd 61. more weekend drills.
- dk na sa a m d sd 62. more MUTA-5s or MUTA-6s.
- dk na sa a m d sd 63. extra paid time between weekend drills.
- dk na sa a m d sd 64. paid home study with follow-up testing (may exist in the future).
65. other: _____

Hip pocket/opportunity training is individual skill training that occurs during breaks and pauses in unit training. In my unit, hip pocket training ...

- dk na sa a m d sd 66. should be conducted more frequently.
 dk na sa a m d sd 67. needs to be improved.

If materials and opportunity were provided for me to study my duty assignment at home for pay based on passing follow-up tests ...

- dk na sa a m d sd 68. I would participate if it were *in addition* to my regular weekend drill.
 dk na sa a m d sd 69. I would participate if it were *in place of* my regular weekend drill.

Simulators are devices (such as MILES) which artificially create an opportunity to practice skills for a situation which is otherwise unavailable or dangerous. Simulators:

- dk na sa a m d sd 70. could help me improve my own skills.
 dk na sa a m d sd 71. are available to me between drills.
 dk na sa a m d sd 72. are available to me during drills.
 dk na sa a m d sd 73. need to be operational more of the time.
 dk na sa a m d sd 74. need to be used more for training.

If there were a personal computer at my armory or training center to help me learn or practice my MOS skills, I would be willing to use this computer ...

- dk na sa a m d sd 75. between drills.
 dk na sa a m d sd 76. during drills.

The following are helpful when available in sufficient quantity:

- dk na sa a m d sd 77. Soldier Training Publications/Soldier's Manuals.
 dk na sa a m d sd 78. Field Manuals.
 dk na sa a m d sd 79. Technical Manuals.
 dk na sa a m d sd 80. Training Extension Course (TEC) lessons for the Bessler Cue-See.
 dk na sa a m d sd 81. Army Regulations.
 dk na sa a m d sd 82. National Guard Regulations.
 dk na sa a m d sd 83. Job Books.
 dk na sa a m d sd 84. ARTEPs or equivalent unit tactical training guidelines.
 dk na sa a m d sd 85. Training Circulars.
 dk na sa a m d sd 86. Field Circulars.

Training would be more effective if ...

- dk na sa a m d sd 87. training references were consolidated.
 dk na sa a m d sd 88. training references were reduced.
 dk na sa a m d sd 89. training references were easier to read.
 dk na sa a m d sd 90. training references made it easier for me to find what I need.
 dk na sa a m d sd 91. training references had more pictures.
 dk na sa a m d sd 92. soldiers had fewer individual tasks to train.
 dk na sa a m d sd 93. my unit had fewer unit tasks to train.

What is the date on which you completed this survey?

(day) (mo) (yr)

Unit Information

TO BE ANSWERED BY THE COMMANDING OFFICER OR REPRESENTATIVE

1. What level of unit do you command?
 1. detachment
 2. platoon
 3. company/troop/battery
 4. battalion/squadron or higher level command
2. Which type of unit do you command?
 1. combat
 2. combat support
 3. combat service support
3. Has a full-time training officer/NCO been assigned to your unit for at least nine months of the past year?
 1. yes
 2. no
 3. don't know

What is the authorized strength of your unit?

- _____ 4. officers and warrant officers.
_____ 5. enlisted soldiers (E1's to E9's)

What is the assigned strength of your unit?

- _____ 6. officers and warrant officers.
_____ 7. enlisted soldiers (E1's to E9's)

_____ 8. What percentage of the soldiers in your unit have been replaced in the past year?

9. In which state/territory of the United States is your unit's armory or reserve center located?

10. What is the date on which you provided this information?

(day) (mo) (yr)

1987
National Survey
of
Reserve Component
Inactive Duty Training

Noncommissioned Officers (E5 - E9)

Read This First!

The data requested in this survey are being collected under authority 10 USC, Section 4503 for research purposes only. The intent is to evaluate factors relating to training effectiveness. Any identifiers are to be used for administrative and statistical control purposes only. Full confidentiality of responses will be maintained in the processing of these data. Your participation in the survey is voluntary. Failure to respond to any questions will not result in any penalty. However, your participation is encouraged so that the data will be complete and representative.

Read This Next!

Instructions

Please read the instructions carefully for each section before answering the questions.

Mark your answers in this booklet.

Be frank with your answers. We want *your* opinions and perceptions. They will be kept strictly confidential and will not be used for purposes other than those for which the survey is intended.

Please answer every question carefully. If you do not know the answer to a question or it does not apply to your situation, then mark the "don't know" or "not applicable" option provided, rather than leaving the question blank. Use these options only when they strictly apply.

Look over the terms listed below in the glossary before filling out the survey.

If you work full-time for the ARNG or USAR, please answer *all* questions from the perspective of your role as a *part-time* soldier.

Glossary

- AC:** *Active Component.* Includes all full-time, Active Duty military forces of the U.S. federal government.
- ARNG:** *Army National Guard.*
- ARTEP:** *Army Training and Evaluation Program.* A list of collective tasks that a unit must accomplish to perform its mission.
- AT:** *Annual Training.*
- IDT:** *Inactive Duty Training.* Referred to informally as "weekend drills."
- MILES:** *Multiple Integrated Laser Engagement System.* Simulates weapons firing using laser beams and sensors to determine who or what has been "hit."
- MOS:** *Military Occupational Specialty.* Job specialty of an enlisted soldier (examples: cook, mechanic, clerk).
- MUTA:** *Multiple Unit Training Assembly.* More than one consecutive four-hour drill period.
- RF School:** *Reserve Forces School, formerly called "USAR School."*
- USAR:** *United States Army Reserve.*

1987

National Survey of Reserve Component
Inactive Duty Training

SECTION A: About Yourself



Instructions: Whenever you see "fill-in-the-blank" questions like the ones that follow, write your answer in the blank to the left of each question. Do not leave any of the blanks empty. If the correct answer is "none" or "zero," then please write 0 in the blank. If you *don't know* the answer, write *DK*; if the question is *not applicable*, write *NA*.

How many *years* have you served in each of the following:

- ___ 1. the Army National Guard (ARNG)?
- ___ 2. the United States Army Reserve (USAR)?
- ___ 3. other Reserve Component organizations (including the Individual Ready Reserve or reserve units in the Air Force, Navy, Marines, or Coast Guard)?

How many *years* have you been in . . .

- ___ 4. your current unit?
- ___ 5. your current duty MOS? [If you work full time for the ARNG or USAR, answer in terms of your *part-time* MOS.]

While a soldier in the ARNG or USAR, how many times have you changed your MOS . . .

- ___ 6. voluntarily?
- ___ 7. involuntarily?
- ___ 8. What is your age?
- ___ 9. What is your pay grade (E- ?)?
- ___ 10. What is your duty MOS? (For example, 12B20 or 71L10. If you work full time for the ARNG or USAR, answer in terms of your *part-time* MOS)

-
- ___ 11. What is the title of your duty position? (tank commander, squad leader, clerk, etc.)

How many years of experience in the Active Component (AC) have you had in each branch of the service?

- ___ 12. Army
- ___ 13. Navy
- ___ 14. Air Force
- ___ 15. Coast Guard
- ___ 16. Marines

- ___ 17. What is your civilian occupation?
- _____



Instructions: Whenever you see "multiple choice" questions like the ones that follow, circle the number to the left of the answer you choose. Unless otherwise instructed, do not circle more than one answer per question.

18. What is your gender?
 1. female
 2. male
19. If you are employed full time by the ARNG or USAR, what is your status?
 1. not employed full time by the ARNG or USAR
 2. technician
 3. AGR (Active Guard/Reserve)
 4. state active duty
 5. other: _____
20. I am currently in the:
 1. Army National Guard (ARNG)
 2. US Army Reserve (USAR)
21. How many people live in the largest city or town within 25 miles of where you live?
 1. Less than 1000
 2. 1,000-10,000
 3. 10,000-50,000
 4. 50,000-250,000
 5. more than 250,000
 6. don't know
22. What is your current highest level of civilian education?
 1. less than high school
 2. some high school but no diploma or GED
 3. high school completed with diploma or GED
 4. up to two years of college but no degree
 5. associate degree
 6. three to four years of college but no degree
 7. bachelors degree
 8. a year or more of graduate credit, but no graduate degree
 9. masters degree
 10. doctorate degree
 11. professional degree such as MD, DDS, or LLB

NOTE: Throughout this survey, "your unit" refers to the smallest group of soldiers you train with on a regular basis.

23. The smallest group of soldiers I train with on a regular basis is a:
 1. squad/section/crew
 2. detachment
 3. platoon
 4. company/uroop/battery
 5. battalion/squadron or higher level command

____ 24. How many soldiers are in *your unit*?



Instructions: Whenever you see "yes-no" questions like the ones that follow, answer them by circling "yes" or "no" to the left of each numbered line. If you don't know the answer to a question or it does not apply to your situation, circle "dk" or "na" to the left of the question in the shaded column.

don't know
not applicable

dk na	yes no	25. Are you a combat veteran?
dk na	yes no	26. Does your employer pay you while you are at Annual Training (AT)?
dk na	yes no	27. Are you qualified in any MOS?
dk na	yes no	28. Are you MOS qualified at the correct skill level (<i>five</i> -digit MOS, such as 19E20) for your duty assignment?

- dk na yes no 29. Is the work you do in your duty MOS similar to what you do in your full-time, civilian (or military) job.
- dk na yes no 30. Do you own a personal computer?
- dk na yes no 31. If yes, is it IBM PC compatible?
- Are you employed as a civilian ...
- dk na yes no 32. full time?
- dk na yes no 33. part time?
- Are you a student ...
- dk na yes no 34. full time?
- dk na yes no 35. part time?

SECTION B: About the Training Environment

- ___ 1. What percentage of the tasks for your duty MOS have you performed to Soldier's Manual standard in the past year? [If you work full time for the ARNG or USAR, answer in terms of your *part-time* MOS.]
- ___ 2. What percentage of your unit's training do *you* plan?
- ___ 3. During the average 16-hour drill period (MUTA-4), how many soldiers are you responsible for training?
- ___ 4. How many soldiers do you *personally* train during the average 16-hour drill period (MUTA-4)?
- ___ 5. How many months has it been since you have taken a Skill Qualification Test (SQT) in your duty MOS? (If never, write a zero in the blank.)

When you last became qualified for an MOS, which methods of training were most used? Place a 1 by the method which was used most, a 2 by the second most used (if applicable), a 3 by the the third most used, and so forth.

- ___ 6. Active Component (AC) school
- ___ 7. Supervised On-the-Job training (SOJT)
- ___ 8. Civilian school
- ___ 9. ARNG (state) school
- ___ 10. RF school (formerly called USAR school)
- ___ 11. Unit school
- ___ 12. Correspondence courses
13. Who personally *conducts most* of the training in your unit? (Circle only one.)
- | | |
|----------------------|----------------------|
| 1. commander | 6. squad leader |
| 2. executive officer | 7. crew chief |
| 3. platoon leader | 8. section leader |
| 4. first sergeant | 9. vehicle commander |
| 5. platoon sergeant | 10. other: _____ |
14. What level of training is emphasized by your next higher headquarters? (Circle only one.)
1. individual/MOS
 2. squad/crew/section
 3. platoon/detachment
 4. company/troop/battery
 5. battalion/squadron

dk na	yes no	15. During a 16-hour drill period (MUTA-4), would you feel comfortable conducting individual/squad/section training while all the officers were elsewhere for training?
dk na	yes no	16. Does this happen now?
dk na	yes no	17. Have you ever trained with an active Army unit while in the ARNG or USAR (excluding active duty while attending schools)?
dk na	yes no	18. Is a full-time training officer/NCO assigned to the headquarters which commands your unit?
dk na	yes no	19. Have you personally ever used the Multiple Integrated Laser Engagement System (MILES) during training?
dk na	yes no	20. Does your unit have access to a local training area within 2 hours of your armory or training center?
dk na	yes no	21. If not, does the lack of a training area close by hurt training in your unit? (If your answer to question 20 was "yes," circle "na.")
dk na	yes no	22. Have you completed the appropriate Noncommissioned Officer Education System (NCOES) Leadership Course requirements for your grade?



Instructions: Whenever you see "agree-disagree" questions like the ones that follow, indicate how strongly you agree or disagree with each of the numbered statements by circling one of the abbreviations to the left of the item number. Use the following key for the abbreviations:

don't know
not applicable

strongly agree

agree

medium

disagree

strongly disagree

sa = strongly agree
a = agree
m = medium
d = disagree
sd = strongly disagree

dk = don't know
na = does not apply to my situation

dk na	sa a m d sd	23. The dates, locations, or kind of training scheduled for my unit often get changed from how they are originally scheduled.
dk na	sa a m d sd	24. Training priorities change too often to meet quarterly planning requirements.
dk na	sa a m d sd	25. My unit trains with the same kind of equipment that it would use during wartime.
dk na	sa a m d sd	26. The NCO(s) in my unit requires that soldiers perform tasks to Soldier's Manual standards.
dk na	sa a m d sd	27. The way my unit uses MILES helps attain mission capability.
dk na	sa a m d sd	28. My unit leader(s) insist that subordinates maintain high standards of task performance.
dk na	sa a m d sd	29. The principles of Army Training Management (FM-25 series) are used to develop and manage the training program of my unit.
dk na	sa a m d sd	30. Unit readiness would be achieved quicker if my unit could wait until its <i>individuals</i> were adequately skilled before having to engage in <i>unit</i> -level training.
dk na	sa a m d sd	31. Having more training materials (such as books, manuals, etc.) would make it easier for me to maintain the individual skills that are required by my duty assignment.
dk na	sa a m d sd	32. Having more of the right equipment (such as weapons, vehicles, typewriters, etc.) would make it easier for me to maintain the individual skills that are required by my duty assignment.
dk na	sa a m d sd	33. Having better physical facilities (such as firing ranges, armories, training centers, etc.) for training would make it easier for me to maintain the individual skills that are required by my duty assignment.
dk na	sa a m d sd	34. If less training time were wasted it would be easier for me to maintain the individual skills that are required by my duty assignment.

- dk na sa a m d sd 35. If training were better organized it would be easier for me to maintain the individual skills that are required by my duty assignment.
- dk na sa a m d sd 36. Having more simulators/training devices available would make it easier for me to maintain the individual skills that are required by my duty assignment.
- dk na sa a m d sd 37. Less emphasis on *unit*-level training would make it easier for me to maintain the individual skills that are required by my duty assignment.



Instructions: Whenever you see a group of "agree-disagree" phrases which belong to a bold-faced introduction like the ones below, a separate answer is needed for each numbered phrase in the group, not just for one of them.

In my unit, ARTEP training is:

- dk na sa a m d sd 38. tailored to the needs and abilities of the soldiers.
- dk na sa a m d sd 39. realistic.
- dk na sa a m d sd 40. interesting.
- dk na sa a m d sd 41. tailored to meet wartime mission requirements.

Good training supervision requires that leaders set objectives, provide resources, coach subordinates, and measure results.

- dk na sa a m d sd 42. In my unit, *individual* training is supervised well.
- dk na sa a m d sd 43. In my unit, *unit* training is supervised well.

My unit has *enough* of the following to support training:

- dk na sa a m d sd 44. Soldier Training Publications/Soldier's Manuals.
- dk na sa a m d sd 45. Field Manuals.
- dk na sa a m d sd 46. Technical Manuals.
- dk na sa a m d sd 47. Training Extension Course (TEC) tapes for the Bessler Cue-See.
- dk na sa a m d sd 48. Army Regulations.
- dk na sa a m d sd 49. National Guard Regulations.
- dk na sa a m d sd 50. Job Books.
- dk na sa a m d sd 51. ARTEPs or equivalent unit tactical training guidelines.
- dk na sa a m d sd 52. Training Circulars.
- dk na sa a m d sd 53. Field Circulars.

I do the following well:

- dk na sa a m d sd 54. Help subordinates with Soldier's Manual tasks on which they are weak.
- dk na sa a m d sd 55. Correct individual soldier weaknesses.
- dk na sa a m d sd 56. Use pauses/breaks in unit training to help subordinates improve their individual skills.



Instructions: Whenever you see "frequency" questions like the ones below, indicate how often each numbered thing happens by circling one letter to the left of the item number. If you don't know the answer to a question, or it does not apply to your situation, circle "dk" or "na" to the left of the item.

o = often	dk = don't know
s = sometimes	na = does not apply to my situation
r = rarely	
n = never	

don't know not applicable	often sometimes rarely never

How often is the Multiple Integrated Laser Engagement System (MILES) used in your unit to train soldiers at each of the following levels?

dk na	o s r n	57. individual.
dk na	o s r n	58. crew/team.
dk na	o s r n	59. squad/section.
dk na	o s r n	60. platoon/detachment.
dk na	o s r n	61. company/troop/battery.
dk na	o s r n	62. battalion/squadron.

Which of the following are used by your unit for training?

dk na	o s r n	63. mini-ranges at the armory/training center or local training area (LTA).
dk na	o s r n	64. training aids (e.g., mock-ups, models, charts, simulation devices)
dk na	o s r n	65. audio-visual equipment
dk na	o s r n	66. Training Extension Course (TEC) tapes for the Bessler Cue-See.

SECTION C: About Use of Time

1. How many paid *hours per month* would you be willing to work for the ARNG or USAR in addition to the normal 16-hour drill period (MUTA-4)?
2. What percentage of your drill training time is spent on individual-level (versus unit-level) training?



Instructions: Whenever you see "hours & minutes" questions like the ones that follow, fill in the blank for hours and the blank for minutes for each item. For example, two hours would be written "2 hrs and 0 min." One and a half hours would be written "1 hrs and 30 min."

____ hrs. and ____ min.	3. How many hours do you travel one way to attend drills at your unit's armory or reserve center?
____ hrs. and ____ min.	4. How many hours would you be willing to travel one way to attend drills at your unit's armory or reserve center?
____ hrs. and ____ min.	5. How many hours per 16-hour drill period (MUTA-4) do you spend evaluating the performance of subordinates?

How many hours do you usually spend planning and preparing training for the next drill?

____ hrs. and ____ min.	6. hours during the previous drill.
____ hrs. and ____ min.	7. unpaid hours outside of drill.
____ hrs. and ____ min.	8. paid hours outside of drill.

Before answering the next set of questions, do the following:

1. Read questions 9 through 16 thoroughly, think about your answers but do not write them down yet.
2. Notice that questions 9, 10, 11, 12, 13, and 14 should form a total picture of how you personally spend the 16 hours of a regular weekend drill. Try to answer questions 9, 10, 11, 12, 13, and 14 so that there is no overlap among them.

Training others.

- ____ hrs. and ____ min. 9. On an average 16-hour weekend drill period (MUTA-4), how much of your time is spent
- ____ hrs. and ____ min. a. How much of the time you wrote down for question 9 do you spend waiting for other people or events?
- ____ hrs. and ____ min. b. How much of the time you wrote down for question 9 do you think is really helping other soldiers to build or maintain their skills?
- ____ hrs. and ____ min. c. How much of the time you wrote down for question 9 do you think is really helping to build or maintain your leadership skills?

Receiving training.

- ____ hrs. and ____ min. 10. On an average 16-hour weekend drill period (MUTA-4), how much of your time is spent receiving training which is directly supervised by NCOs or officers?
- ____ hrs. and ____ min. a. How much of the time you wrote down for question 10 do you spend waiting for other people or events?
- ____ hrs. and ____ min. b. How much of the time you wrote down for question 10 do you think is really helping to build or maintain your skills?

Administrative tasks.

- ____ hrs. and ____ min. 11. On an average 16-hour weekend drill period (MUTA-4), how much of your time is spent doing administrative tasks which are not in your duty MOS?
- ____ hrs. and ____ min. a. How much of the time you wrote down for question 11 do you spend waiting for other people or events?

MOS work assignments.

- ____ hrs. and ____ min. 12. On an average 16-hour weekend drill period (MUTA-4), how much of your time is spent in work which is part of your duty MOS but which is no longer necessary for you to repeat in order for you to build or maintain your skills (it is simply work which needs doing)?
- ____ hrs. and ____ min. a. How much of the time you wrote down for question 12 do you spend waiting for other people or events?

Extra work assignments.

- ____ hrs. and ____ min. 13. On an average 16-hour weekend drill period (MUTA-4), how much of your time is spent doing work assignments which are not part of your duty MOS?
- ____ hrs. and ____ min. a. How much of the time you wrote down for question 13 do you spend waiting for other people or events?

Other time use.

- ____ hrs. and ____ min. 14. In addition to the time you estimated for the above items, in an average 16-hour weekend drill period (MUTA-4), how much of your time is spent doing things other than training, work assignments, and administrative tasks (such as travel, breaks, meals, etc.)?
- ____ hrs. and ____ min. a. How much of the time you wrote down for question 14 do you spend just doing nothing?

dk na sa a m d sd 15. My unit trains on more tasks than can be trained to standard within the time available.

The following events (and preparation for them) detract from the efficient training of my unit:

dk na sa a m d sd 16. Annual Training (AT) evaluations

dk na sa a m d sd 17. Inactive Duty Training (IDT) evaluations

dk na sa a m d sd 18. command visits/inspections

dk na sa a m d sd 19. annual general inspections

dk na sa a m d sd 20. maintenance inspections

dk na sa a m d sd 21. physical exams

dk na sa a m d sd 22. physical fitness testing

23. other: _____

Training time is wasted in my unit because:

dk na sa a m d sd 24. topics trained are not important to the unit mission.

dk na sa a m d sd 25. other requirements interfere with training.

dk na sa a m d sd 26. training is not well organized.

dk na sa a m d sd 27. equipment often breaks down.

dk na sa a m d sd 28. training facilities/equipment/materials are not available.

dk na sa a m d sd 29. the training given is over the soldiers' heads.

dk na sa a m d sd 30. soldiers are not motivated to try very hard.

31. other: _____

SECTION D: Your Personal Feelings and Assessment

___ 1. What percentage of the critical tasks required for your duty assignment can you perform to standard?

Suppose you could stay in the ARNG or USAR as long as you wish or could leave it as soon as you wish. How many *more* years would you stay in . . .

___ 2. if your present duty assignment remained the same?

___ 3. if you could change your present duty assignment?

What percentage of the following do you think know their jobs well enough now to perform well if your unit and its next higher headquarters were mobilized?

___ 4. enlisted soldiers (E1s to E4s).

___ 5. NCOs (E5s to E9s).

___ 6. officers.

If you had to change your MOS and receive *all* of your retraining through a *single* means, which would you most prefer? Rank the options below from 1 to 8 with 1 being the most preferred.

___ 15. Active Component school

___ 16. RF school (formerly called USAR school)

___ 17. ARNG (State) school

___ 18. Unit school

___ 19. Civilian school

___ 17. Home study with pay based on follow-up testing (possible option in the future)

___ 21. Correspondence Course Program

___ 22. Supervised On-the-Job Training (SOJT)

If you had to change your MOS and had the choice of receiving retraining through *more than one* means, what percentage of this retraining would you like to receive from each of the following? (Your answers should add up to 100%.)

- ☐ 15. Active Component school
- ☐ 16. RF school (formerly called USAR school)
- ☐ 17. ARNG (State) school
- ☐ 18. Unit school
- ☐ 19. Civilian school
- ☐ 17. Home study with pay based on follow-up testing (possible option in the future)
- ☐ 21. Correspondence Course Program
- ☐ 22. Supervised On-the-Job Training (SOJT)

What percentage of the NCOs (E5s to E9s) in your unit . . .

- ☐ 23. do you consider to have good training skills.
- ☐ 24. are able to perform the skills they are responsible to train others on.

25. What level of training do *you* think should be emphasized by your next higher headquarters? (Circle only one.)

- 1. individual/MOS
- 2. squad/crew/section
- 3. platoon/detachment
- 4. company/troop/battery
- 5. battalion/squadron

- dk na sa a m d sd 26. My unit's leaders know their jobs.
- dk na sa a m d sd 27. Adequate recognition and awards are given to soldiers in my unit who perform well.
- dk na sa a m d sd 28. Too many awards are given to soldiers in my unit.
- dk na sa a m d sd 29. Changes in my unit's training schedule hurt the quality of the training.
- dk na sa a m d sd 30. The morale in my unit is high.
- dk na sa a m d sd 31. I joined the ARNG or USAR in order to learn a skill.
- dk na sa a m d sd 32. ARNG schools do a good job of training soldiers.
- dk na sa a m d sd 33. RF schools do a good job of training soldiers.
- dk na sa a m d sd 34. Active Component schools do a good job of training ARNG or USAR soldiers.
- dk na sa a m d sd 35. I have a good working relationship with my unit leader(s).
- dk na sa a m d sd 36. In my unit, soldiers are promoted when they should be.
- dk na sa a m d sd 37. Training in my unit is *too* repetitive.
- dk na sa a m d sd 38. Active Army assistance from Readiness Group personnel, Advisors, and Mobile Training Teams is *available* to my unit.
- dk na sa a m d sd 39. Active Army assistance from Readiness Group personnel, Advisors, and Mobile Training Teams is *helpful* to my unit.
- dk na sa a m d sd 40. It is easy for me to maintain the individual skills required by my duty assignment.
- dk na sa a m d sd 41. The NCOs in my unit look out for the welfare of their soldiers.
- dk na sa a m d sd 42. I have confidence in my unit's leader(s).
- dk na sa a m d sd 43. Promotions are handled fairly in my unit.
- dk na sa a m d sd 44. Discipline is handled fairly in my unit.
- dk na sa a m d sd 45. Soldiers in my unit employ and fire their crew-served weapons to standard.
- dk na sa a m d sd 46. My unit is able to conduct sustained operations by continuously operating in the field for 72 hours or more.
- dk na sa a m d sd 47. Soldiers in my unit know how to operate MILES.

- dk na sa a m d sd 48. Soldiers in my unit know how to perform operator maintenance on MILES.
- dk na sa a m d sd 49. The training needs of the soldiers in my unit are adequately met during IDT.
- dk na sa a m d sd 50. My unit leader(s) treats all enlisted soldiers in my unit fairly and justly.
- dk na sa a m d sd 51. My unit leader(s) is receptive to suggestions made by subordinates.
- dk na sa a m d sd 52. I am well prepared to perform my duty assignment.
- dk na sa a m d sd 53. In my unit too much training responsibility is delegated to NCOs.
- dk na sa a m d sd 54. The overall performance of my unit during ARTEP training or its equivalent has been good.
- dk na sa a m d sd 55. I have had good success in bringing my subordinates to required levels of readiness.

I am satisfied with the way the ARNG or USAR enables me to . . .

- dk na sa a m d sd 56. learn a skill.
- dk na sa a m d sd 57. defend my country.
- dk na sa a m d sd 58. earn a retirement.
- dk na sa a m d sd 59. get education benefits.
- dk na sa a m d sd 60. do something interesting or have a change of pace.
- dk na sa a m d sd 61. maintain the rank/responsibility I earned on Active Duty.

I am satisfied with:

- dk na sa a m d sd 62. being in the ARNG or USAR. [If you work full time for the ARNG or USAR, answer questions 62 to 65 in terms of your part-time MOS.]
- dk na sa a m d sd 63. my pay in the ARNG or USAR.
- dk na sa a m d sd 64. my assignment in the ARNG or USAR.
- dk na sa a m d sd 65. the quality of training I have received in my current assignment.

Over the past year, the following have made me feel like staying in the ARNG or USAR:

- dk na sa a m d sd 66. the chance to help protect my country.
- dk na sa a m d sd 67. good morale in my unit.
- dk na sa a m d sd 68. the friends I have in my unit.
- dk na sa a m d sd 69. change of pace from my civilian job.
- dk na sa a m d sd 70. the pay I receive.
- dk na sa a m d sd 71. retirement benefits in the military.
- dk na sa a m d sd 72. the military atmosphere.
- dk na sa a m d sd 73. opportunities to be responsible or to lead.
- dk na sa a m d sd 74. the sense of doing something worthwhile and important.
- dk na sa a m d sd 75. my status in the military.
- dk na sa a m d sd 76. my status in the community.
77. other: _____

In the past year, the following have made me feel like leaving the ARNG or USAR:

- dk na sa a m d sd 78. family concerns.
- dk na sa a m d sd 79. my civilian job.
- dk na sa a m d sd 80. plans to move.
- dk na sa a m d sd 81. low pay in the ARNG or USAR.
- dk na sa a m d sd 82. low morale in my unit.
- dk na sa a m d sd 83. pressure to do more work in my duty assignment than should be expected.
- dk na sa a m d sd 84. difficulty in keeping up with all the knowledge and skills I'm expected to have.
- dk na sa a m d sd 85. not getting along with some of the soldiers in my unit.
- dk na sa a m d sd 86. not advancing in rank as fast as I wanted to.
- dk na sa a m d sd 87. boring work.
- dk na sa a m d sd 88. not enough recognition for what I do.
- dk na sa a m d sd 89. too much wasted training time.
- dk na sa a m d sd 90. poor quality of training.
- dk na sa a m d sd 91. inability to accomplish all I would like to do *in* the ARNG or USAR.
- dk na sa a m d sd 92. inability to accomplish all I would like to do *outside* the ARNG or USAR because of the time military service takes up.
93. other: _____

Soldiers in my unit are good at performing:

- dk na sa a m d sd 94. Common tasks from the Soldier's Manual.
- dk na sa a m d sd 95. MOS-specific tasks from the Soldier's Manual.
- dk na sa a m d sd 96. ARTEP tasks (or equivalent) which are essential to my unit's mission.

SECTION E: Your Recommendations and Reactions to Some Training Options

- _____ 1. In addition to regular drills how many *individual soldier* training sessions, such as Additional Training Assemblies (ATA's) per year (4 hrs. each) would be helpful in getting your unit trained to readiness standards?
- _____ 2. How many additional separate *unit* training assemblies (4 hrs. each) per year would be helpful in getting your unit trained to readiness standards?
- _____ 3. How many additional 16-hour drill periods (MUTA-4) per year would be helpful in getting your unit trained to readiness standards?
- _____ 4. How many additional days of AT per year would be helpful in getting your unit trained to readiness standards?
5. How often would an additional AT period be helpful in getting your unit trained to readiness standards?
1. every year
 2. every other year
 3. every three years
 4. every four to six years
 5. never

ARNG (state) schools have . . . (Check here [] if you have ever attended.)

dk na	sa a m d sd	6. good instructors.
dk na	sa a m d sd	7. good course content.
dk na	sa a m d sd	8. good facilities.
dk na	sa a m d sd	9. good equipment.
dk na	sa a m d sd	10. course scheduling which is easy for part-time soldiers to meet
dk na	sa a m d sd	11. enough classroom openings for soldiers.
dk na	sa a m d sd	12. enough funding to send soldiers to attend.

Active Component schools have . . . (Check here [] if you have ever attended.)

dk na	sa a m d sd	13. good instructors.
dk na	sa a m d sd	14. good course content.
dk na	sa a m d sd	15. good facilities.
dk na	sa a m d sd	16. good equipment.
dk na	sa a m d sd	17. course scheduling which is easy for part-time soldiers to meet
dk na	sa a m d sd	18. enough classroom openings for soldiers.
dk na	sa a m d sd	19. enough funding to send soldiers to attend.

RF schools (formerly USAR schools) have . . . (Check here [] if you have ever attended.)

dk na	sa a m d sd	20. good instructors.
dk na	sa a m d sd	21. good course content.
dk na	sa a m d sd	22. good facilities.
dk na	sa a m d sd	23. good equipment.
dk na	sa a m d sd	24. course scheduling which is easy for part-time soldiers to meet
dk na	sa a m d sd	25. enough classroom openings for soldiers.
dk na	sa a m d sd	26. enough funding to send soldiers to attend.

If a home study course were available to help you train for your duty assignment, the following means of instruction would probably be effective:

dk na	sa a m d sd	27. audio cassette.
dk na	sa a m d sd	28. video cassette.
dk na	sa a m d sd	29. personal computer.
dk na	sa a m d sd	30. correspondence.

It would be a good idea if . . .

dk na	sa a m d sd	31. soldiers in my unit spent time training with an active army unit.
dk na	sa a m d sd	32. soldiers in my unit had more time to train on individual common tasks.
dk na	sa a m d sd	33. soldiers in my unit had more time to train on individual, MOS-specific tasks.
dk na	sa a m d sd	34. MILES were used more for training my unit.

It would be helpful if a full-time training committee of soldiers were available to help my unit with the following:

- dk na sa a m d sd 35. range set up.
- dk na sa a m d sd 36. MILES installation on vehicles.
- dk na sa a m d sd 37. AKTEP control and umpiring.
- dk na sa a m d sd 38. MOS qualification
- dk na sa a m d sd 39. skill retention.
- dk na yes no 40. Such a committee is already available to my unit.

A Split Unit Training Assembly (SUTA) is where different parts (crews, squads, platoons, etc.) of a larger unit train on separate weekends and the training conducted is tailored to meet their specific needs.

- dk na sa a m d sd 41. A SUTA drill schedule would more effectively bring about the readiness of *individual soldiers* than the schedule currently used by the headquarters which commands my unit.
- dk na sa a m d sd 42. A SUTA drill schedule would more effectively bring about the readiness of my *unit* as a whole than the schedule currently used by my unit.
- dk na sa a m d sd 43. A SUTA drill schedule would make it *easier* for me to attend drills.
- dk na sa a m d sd 44. A SUTA drill schedule would make it *harder* for me to attend drills.
- dk na yes no 45. My next higher headquarters already uses a SUTA drill schedule.

An "adaptable drill schedule" is where units or parts of units meet for various lengths of time (two-, four-, six-, or eight-hour sessions) on various days of the week (weekday evenings, Saturdays and Sundays).

- dk na sa a m d sd 46. An adaptable drill schedule would more effectively bring about the readiness of *individual soldiers* than the schedule currently used by my unit.
- dk na sa a m d sd 47. An adaptable drill schedule would more effectively bring about the readiness of my *unit* as a whole than the schedule currently used by my unit.
- dk na sa a m d sd 48. An adaptable drill schedule would make it *easier* for me to attend drills.
- dk na sa a m d sd 49. An adaptable drill schedule would make it *harder* for me to attend drills.
- dk na yes no 50. My unit already follows an adaptable drill schedule.

I would be able to go on full-time active duty with the ARNG or USAR on a seasonal basis (2 or 3 months out of every year) . . .

- dk na sa a m d sd 51. if I could specify the time of year, but not the location.
- dk na sa a m d sd 52. if I could specify the location, but not the time of year.
- dk na sa a m d sd 53. if I could specify both the time of year *and* the location.
- dk na sa a m d sd 54. if I could neither specify the time nor the location.

"Job aids," such as diagrams or checklists which are readily available, are supposed to help a person to do a task without having to memorize all the steps.

- dk na sa a m d sd 55. Having more job aids would be helpful to me in my duty assignment.
- dk na sa a m d sd 56. I actually use the job aids I have for my work in the ARNG or USAR.
- dk na sa a m d sd 57. Job aids are useful.

Hip pocket/opportunity training is individual skill training that occurs during breaks and pauses in unit training. In my unit, hip pocket training . . .

dk na sa a m d sd 58. should be conducted more frequently.

dk na sa a m d sd 59. needs to be improved.

I would be willing to work more hours for the ARNG or USAR in the following ways:

dk na sa a m d sd 60. a longer Annual Training (AT) each year (3 or more weeks).

dk na sa a m d sd 61. an extra Annual Training (AT) session per year.

dk na sa a m d sd 62. more weekend drills.

dk na sa a m d sd 63. more MUTA-5s or MUTA-6s.

dk na sa a m d sd 64. extra paid time between weekend drills.

dk na sa a m d sd 65. home study with pay based on follow-up testing (possible option in the future).

66. other: _____

The following would really improve the training of my unit:

dk na sa a m d sd 67. better use of training time.

dk na sa a m d sd 68. better training preparation.

dk na sa a m d sd 69. more access to computers/simulators.

dk na sa a m d sd 70. more rewards for good performance.

dk na sa a m d sd 71. better training materials.

dk na sa a m d sd 72. better training of soldiers in common/ MOS skills before unit training.

dk na sa a m d sd 73. better hip pocket/opportunity training.

74. other: _____

I consider the following to be effective means for training individual soldiers:

dk na sa a m d sd 75. Supervised On-the Job Training (SOJT)

dk na sa a m d sd 76. Inactive Duty Training (IDT)

dk na sa a m d sd 77. Annual Training (AT)

dk na sa a m d sd 78. Active Component schools

dk na sa a m d sd 79. RF schools

dk na sa a m d sd 80. Mobilization Exercises (MOBEXs)

dk na sa a m d sd 81. Individual training

dk na sa a m d sd 82. Unit training

dk na sa a m d sd 83. Joint Readiness Exercises (JRXs)

dk na sa a m d sd 84. Joint Training Exercises (JTXs)

dk na sa a m d sd 85. Unit exercises

dk na sa a m d sd 86. Overseas Deployment Training (ODT)

87. other: _____

If materials and opportunity were provided for me to study my duty assignment at home for pay based on passing follow-up tests . . .

dk na sa a m d sd 88. I would participate if it were *in addition to* my regular weekend drill.

dk na sa a m d sd 89. I would participate if it were *in place of* my regular weekend drill.

If there were a personal computer at my armory or training center to help me learn or practice my MOS skills, I would be willing to use this computer . . .

dk na sa a m d sd 90. between drills.

dk na sa a m d sd 91. during drills.

Simulators are devices (such as MJLES) which artificially create an opportunity to practice skills for a situation which is otherwise unavailable or dangerous. Simulators:

dk na sa a m d sd 92. could help me improve my own skills.

dk na sa a m d sd 93. are available to me between drills.

dk na sa a m d sd 94. are available to me during drills.

dk na sa a m d sd 95. need to be operational more of the time.

dk na sa a m d sd 96. need to be used more for training.

If Supervised On-the-Job Training (SOJT) were eliminated as a method of MOS reclassification training, I think . . .

dk na sa a m d sd 97. it would take longer for soldiers to become MOS qualified.

dk na sa a m d sd 98. the quality of the training would improve.

dk na sa a m d sd 99. personnel retention would decrease.

dk na sa a m d sd 100. the overall quality of individual training would improve.

dk na sa a m d sd 101. the overall quality of unit training would improve.

The following are helpful when available in sufficient quantity:

dk na sa a m d sd 102. Soldier Training Publications/Soldier's Manuals.

dk na sa a m d sd 103. Field Manuals.

dk na sa a m d sd 104. Technical Manuals.

dk na sa a m d sd 105. Training Extension Course (TEC) lessons for the Bessler Cue-Sec.

dk na sa a m d sd 106. Army Regulations.

dk na sa a m d sd 107. National Guard Regulations.

dk na sa a m d sd 108. Job Books.

dk na sa a m d sd 109. ARTEPs or equivalent unit tactical training guidelines.

dk na sa a m d sd 110. Training Circulars.

dk na sa a m d sd 111. Field Circulars.

Training would be more effective if . . .

- dk na sa a m d sd 112. training references were consolidated.
dk na sa a m d sd 113. training references were reduced.
dk na sa a m d sd 114. training references were easier to read.
dk na sa a m d sd 115. training references made it easier for me to find what I need.
dk na sa a m d sd 116. training references had more pictures.
dk na sa a m d sd 117. soldiers had fewer individual tasks to train.
dk na sa a m d sd 118. my unit had fewer unit tasks to train.

SECTION F: Things that Affect My Success as a Trainer

The following are important contributors to my success in personally training subordinates (circle "na" if you do not personally train subordinates):

- dk na sa a m d sd 1. suggestions from others who have filled my position.
dk na sa a m d sd 2. previous training in leadership and counseling techniques.
dk na sa a m d sd 3. previous training on "How to Train."
dk na sa a m d sd 4. guidance from higher headquarters.
dk na sa a m d sd 5. reference books.
dk na sa a m d sd 6. personnel that help me set up for the training.
dk na sa a m d sd 7. personnel that help me conduct the training.
dk na sa a m d sd 8. computers.
dk na sa a m d sd 9. simulators.
dk na sa a m d sd 10. hip pocket training materials.
dk na sa a m d sd 11. trainers' manuals.
12. other: _____

The following are serious obstacles to my success in training subordinates (circle "na" if you do not actually train subordinates):

- dk na sa a m d sd 13. not enough time to plan and prepare.
dk na sa a m d sd 14. not enough time to conduct training.
dk na sa a m d sd 15. lack of training materials (books, manuals, etc.).
dk na sa a m d sd 16. lack of simulators/training devices.
dk na sa a m d sd 17. shortages of the right equipment (weapons, vehicles, typewriters, etc.).
dk na sa a m d sd 18. lack of a local training area.
dk na sa a m d sd 19. lack of other physical facilities (firing ranges, armories, training centers, etc.).
dk na sa a m d sd 20. insufficient classroom space.
dk na sa a m d sd 21. not enough people to help me conduct training.
dk na sa a m d sd 22. soldier turnover.
dk na sa a m d sd 23. unit reorganization.
24. other: _____

I have difficulty obtaining required training from Active Component schools because . . .

dk	na	sa	a	m	d	sd	25.	courses are too long.
dk	na	sa	a	m	d	sd	26.	course dates usually don't match my schedule.
dk	na	sa	a	m	d	sd	27.	course dates conflict with unit activities.
dk	na	sa	a	m	d	sd	28.	classes have more applicants than there is room for.
dk	na	sa	a	m	d	sd	29.	funds are often not available.
dk	na	sa	a	m	d	sd	30.	I have not met the prerequisites.
dk	na	sa	a	m	d	sd	31.	I can't get orders in time.

In my unit, training is hampered by paperwork required for:

dk	na	sa	a	m	d	sd	32.	training.
dk	na	sa	a	m	d	sd	33.	personnel.
dk	na	sa	a	m	d	sd	34.	supply.
dk	na	sa	a	m	d	sd	35.	maintenance.
dk	na	sa	a	m	d	sd	36.	I have good training skills
dk	na	sa	a	m	d	sd	37.	I would like to learn how to be a better trainer.
dk	na	sa	a	m	d	sd	38.	I can perform the skills that I am responsible to teach others.
dk	na	sa	a	m	d	sd	39.	I receive conflicting training guidance from various higher headquarters.
dk	na	sa	a	m	d	sd	40.	My unit lacks realistic opportunities to use our equipment or skills.

What is the date on which you completed this survey?

(day) (mo) (yr)

Unit Information

TO BE ANSWERED BY THE COMMANDING OFFICER OR REPRESENTATIVE

1. What level of unit do you command?
 1. detachment
 2. platoon
 3. company/troop/battery
 4. battalion/squadron or higher level command
2. Which type of unit do you command?
 1. combat
 2. combat support
 3. combat service support
3. Has a full-time training officer/NCO been assigned to your unit for at least nine months of the past year?
 1. yes
 2. no
 3. don't know

What is the authorized strength of your unit?

- ____ 4. officers and warrant officers.
____ 5. enlisted soldiers (E1's to E9's)

What is the assigned strength of your unit?

- ____ 6. officers and warrant officers.
____ 7. enlisted soldiers (E1's to E9's)

____ 8. What percentage of the soldiers in your unit have been replaced in the past year?

9. In which state/territory of the United States is your unit's armory or reserve center located?

10. What is the date on which you provided this information?

____ (day) ____ (mo) ____ (yr)

1987
National Survey
of
**Reserve Component
Inactive Duty Training**

Officers and Warrant Officers

Read This First!

The data requested in this survey are being collected under authority 10 USC, Section 4503 for research purposes only. The intent is to evaluate factors relating to training effectiveness. Any identifiers are to be used for administrative and statistical control purposes only. Full confidentiality of responses will be maintained in the processing of these data. Your participation in the survey is voluntary. Failure to respond to any questions will not result in any penalty. However, your participation is encouraged so that the data will be complete and representative.

Read This Next!

Instructions

Please read the instructions carefully for each section before answering the questions.

Mark your answers in this booklet.

Be frank with your answers. We want *your* opinions and perceptions. Your answers will be kept strictly confidential and will not be used for purposes other than those for which the survey is intended.

Please answer every question carefully. If you do not know the answer to a question or it does not apply to your situation, then mark the "don't know" or "not applicable" option provided, rather than leaving the question blank. Use these options only when they strictly apply.

Look over the terms listed in the glossary before filling out the survey.

If you work full-time for the ARNG or USAR, please answer *all* questions from the perspective of your role as a *part-time* soldier.

Glossary

- AC:** *Active Component.* Includes all full-time, Active Duty military forces of the U.S. federal government.
- ARNG:** *Army National Guard.*
- ARTEP:** *Army Training and Evaluation Program.* A list of collective tasks that a unit must accomplish to perform its mission.
- AT:** *Annual Training.*
- DSSI:** *Duty Specialty Skill Identifier.* The branch specialty of an officer (examples: armor, infantry, quartermaster).
- IDT:** *Inactive Duty Training.* Referred to informally as "weekend drills."
- MILES:** *Multiple Integrated Laser Engagement System.* Simulates weapons firing using laser beams and sensors to determine who or what has been "hit."
- MOS:** *Military Occupational Specialty.* Job specialty of an enlisted soldier (examples: cook, mechanic, clerk).
- MUTA:** *Multiple Unit Training Assembly.* More than one consecutive four-hour drill period.
- RF School:** *Reserve Forces School, formerly called "USAR School."*
- USAR:** *United States Army Reserve.*

1987

National Survey of Reserve Component
Inactive Duty Training

SECTION A: About Yourself



Instructions: Whenever you see "fill-in-the-blank" questions like the ones that follow, write your answer in the blank to the left of each question. Do not leave any of the blanks empty. If the correct answer is "none" or "zero," then please write 0 in the blank. If you *don't know* the answer, write *DK*; if the question is *not applicable*, write *NA*.

How many *years* have you served in each of the following:

- ___ 1. the Army National Guard (ARNG)?
- ___ 2. the United States Army Reserve (USAR)?
- ___ 3. other Reserve Component organizations (including the Individual Ready Reserve or reserve units in the Air Force, Navy, Marines, or Coast Guard)?

How many *years* have you been in . . .

- ___ 4. your current unit?
- ___ 5. your current duty assignment? [If you work full time for the ARNG or USAR, answer in terms of your *part-time* position.]
- ___ 6. What is your age?
- ___ 7. What is your pay grade (for example, O-5 or W-2)?
- ___ 8. What is your current Duty Specialty Skill Identifier (DSSI)? This should be a 3-digit number, such as "21J."
[If you work full-time for the ARNG or USAR, answer in terms of your *part-time* position.]

How many years on active duty have you had in each branch of the service (other than schools)?

- ___ 9. Army
- ___ 10. Navy
- ___ 11. Air Force
- ___ 12. Coast Guard
- ___ 13. Marines

14. What is your civilian occupation?



Instructions: Whenever you see "multiple choice" questions like the ones that follow, circle the number to the left of the one answer you choose.

15. What is your primary duty assignment?

- 1. Platoon Leader
- 2. Staff Officer
- 3. Executive Officer
- 4. Commander (company/battery/troop or higher)
- 5. Other: _____

16. What is your gender?
 1. female
 2. male
17. If you are employed full time by the ARNG or USAR, what is your status?
 1. not employed full time by the ARNG or USAR
 2. technician
 3. AGR (Active Guard/Reserve)
 4. state active duty
 5. other: _____
18. I am currently in the:
 1. Army National Guard (ARNG)
 2. US Army Reserve (USAR)
19. How many people live in the largest city or town within 25 miles of where you live?
 1. Less than 1000
 2. 1,000-10,000
 3. 10,000-50,000
 4. 50,000-250,000
 5. more than 250,000
 6. don't know
20. What is your current highest level of civilian education?
 1. less than high school
 2. some high school but no diploma or GED
 3. high school completed with diploma or GED
 4. up to two years of college but no degree
 5. associate degree
 6. three to four years of college but no degree
 7. bachelors degree
 8. a year or more of graduate credit, but no graduate degree
 9. masters degree
 10. doctorate degree
 11. professional degree such as MD, DDS, or LLB

NOTE: Throughout this survey, "your unit" refers to the group of soldiers you are responsible to train.

21. The group of soldiers I am responsible to train on a regular basis is a:
 1. squad/section/crew
 2. detachment
 3. platoon
 4. company/troop/battery
 5. battalion/squadron or higher level command

22. How many soldiers are in *your unit*?



Instructions: Whenever you see "yes-no" questions like the ones that follow, answer them by circling "yes" or "no" to the left of each numbered line. If you don't know the answer to a question or it does not apply to your situation, circle "dk" or "na" to the left of the question in the shaded column.

don't know
not applicable

dk na	yes no	23. Are you a combat veteran?
dk na	yes no	24. Does your employer pay you while you are at Annual Training (AT)?
dk na	yes no	25. Are you branch qualified?
dk na	yes no	26. Is the work you do in your duty assignment similar to what you do in your full-time, civilian (or military) job.
dk na	yes no	27. Do you own a personal computer?
dk na	yes no	28. If yes, is it IBM PC compatible?

Are you employed as a civilian . . .

dk na yes no 29. full time?

dk na yes no 30. part time?

Are you a student . . .

dk na yes no 31. full time?

dk na yes no 32. part time?

SECTION B: About the Training Environment

___ 1. What percentage of your unit's training do *you* plan?

___ 2. What percentage of your unit's training do *you* conduct?

___ 3. During the average 16-hour drill period (MUTA-4), how many soldiers are you responsible for training?

When you became qualified for your current branch, which methods of training were most used? Place a 1 by the method which was used most, a 2 by the second most used (if applicable), a 3 by the the third most used, and so forth.

___ 4. Active Component (AC) service school

___ 5. Civilian school

___ 6. RF school (formerly called USAR school)

___ 7. Correspondence Course program

8. What level of training is emphasized by your next higher headquarters? (Circle only one.)

1. individual/MOS

2. squad/crew/section

3. platoon/detachment

4. company/troop/battery

5. battalion/squadron

dk na yes no 9. During a 16-hour drill period (MUTA-4), would you feel comfortable having your NCOs conduct individual/squad/section training while all the officers were elsewhere for training?

dk na yes no 10. Does this happen now?

dk na yes no 11. Have you ever trained with an active Army unit while in the ARNG or USAR (excluding active duty while attending schools)?

dk na yes no 12. Have you personally ever used the Multiple Integrated Laser Engagement System (MILES) during training?

dk na yes no 13. Does your unit have access to a local training area within 2 hours (one way) of your armory or training center?

dk na yes no 14. If not, does the lack of a training area close by hurt training in your unit? (If your answer to question 13 was "yes," circle "na.")



Instructions: Whenever you see "agree-disagree" questions like the ones that follow, indicate how strongly you agree or disagree with each of the numbered statements by circling one of the abbreviations to the left of the item number. Use the following key for the abbreviations:

sa = strongly agree
a = agree
m = medium
d = disagree
sd = strongly disagree

dk = don't know
na = does not apply to my situation

don't know
not applicable
strongly agree
agree
medium
disagree
strongly disagree

dk na	sa a m d sd	15. The dates, locations, or kind of training scheduled for my unit often get changed from how they are originally scheduled.
dk na	sa a m d sd	16. Training priorities change too often to meet quarterly planning requirements.
dk na	sa a m d sd	17. My unit trains with the same kind of equipment that it would use during wartime.
dk na	sa a m d sd	18. The NCO(s) in my unit requires that soldiers perform tasks to Soldier's Manual standards.
dk na	sa a m d sd	19. The way my unit uses MILES helps attain mission capability.
dk na	sa a m d sd	20. My unit leader(s) insists that subordinates maintain high standards of task performance.
dk na	sa a m d sd	21. The principles of Army Training Management (FM25-Series) are used to develop and manage the training program of my unit.
dk na	sa a m d sd	22. Unit readiness would be achieved quicker if my unit could wait until its <i>individuals</i> were adequately skilled before having to engage in <i>unit-level</i> training.
dk na	sa a m d sd	23. Having more training materials (such as books, manuals, etc.) would make it easier for me to maintain the individual skills that are required by my duty assignment.
dk na	sa a m d sd	24. Having more of the right equipment (such as weapons, vehicles, typewriters, etc.) would make it easier for me to maintain the individual skills that are required by my duty assignment.
dk na	sa a m d sd	25. Having better physical facilities (such as firing ranges, armories, training centers, etc.) for training would make it easier for me to maintain the individual skills that are required by my duty assignment.
dk na	sa a m d sd	26. If less training time were wasted it would be easier for me to maintain the individual skills that are required by my duty assignment.
dk na	sa a m d sd	27. If training were better organized it would be easier for me to maintain the individual skills that are required by my duty assignment.
dk na	sa a m d sd	28. Having more simulators/training devices available would make it easier for me to maintain the individual skills that are required by my duty assignment.
dk na	sa a m d sd	29. Less emphasis on <i>unit-level</i> training would make it easier for me to maintain the individual skills that are required by my duty assignment.



Instructions: Whenever you see a group of "agree-disagree" phrases which belong to a bold-faced introduction like the ones below, a separate answer is needed for each numbered phrase in the group, not just for one of them.

In my unit, ARTEP training is:

dk na	sa a m d sd	30. tailored to the needs and abilities of the soldiers.
dk na	sa a m d sd	31. realistic.
dk na	sa a m d sd	32. interesting.
dk na	sa a m d sd	33. tailored to meet wartime mission requirements.

Good training supervision requires that leaders set objectives, provide resources, coach subordinates, and measure results.

dk na sa a m d sd 34. In my unit, *individual* training is supervised well.

dk na sa a m d sd 35. In my unit, *unit* training is supervised well.

My unit has *enough* of the following to support training:

dk na sa a m d sd 36. Soldier Training Publications/Soldier's Manuals.

dk na sa a m d sd 37. Field Manuals.

dk na sa a m d sd 38. Technical Manuals.

dk na sa a m d sd 39. Training Extension Course (TEC) tapes for the Bessler Cue-See.

dk na sa a m d sd 40. Army Regulations.

dk na sa a m d sd 41. National Guard Regulations.

dk na sa a m d sd 42. Job Books.

dk na sa a m d sd 43. ARTEPs or equivalent unit tactical training guidelines.

dk na sa a m d sd 44. Training Circulars.

dk na sa a m d sd 45. Field Circulars.

My NCOs do the following well:

dk na sa a m d sd 46. Help subordinates with Soldier's Manual tasks on which they are weak.

dk na sa a m d sd 47. Correct individual soldier weaknesses

dk na sa a m d sd 48. Use pauses/breaks in unit training to help subordinates improve their individual skills.



Instructions: Whenever you see "frequency" questions like the ones below, indicate how often each numbered thing happens by circling one letter to the left of the item number. If you don't know the answer to a question, or it does not apply to your situation, circle "dk" or "na" to the left of the item.

o = often	dk = don't know
s = sometimes	na = does not apply to my situation
r = rarely	
n = never	

don't know
not applicable

often
sometimes
rarely
never

How often is the Multiple Integrated Laser Engagement System (MILES) used in your unit to train soldiers at each of the following levels?

dk na o s r n 49. individual.

dk na o s r n 50. crew/team.

dk na o s r n 51. squad/section.

dk na o s r n 52. platoon/detachment.

dk na o s r n 53. company/troop/battery.

dk na o s r n 54. battalion/squadron.

Which of the following are used by your unit for training?

- dk na o s r n 55. mini-ranges at the armory/training center or local training area (LTA).
 dk na o s r n 56. training aids (e.g., mock-ups, models, charts, simulation devices)
 dk na o s r n 57. audio-visual equipment
 dk na o s r n 58. Training Extension Course (TEC) tapes for the Bessler Cue-See.

SECTION C: About Use of Time

- ___ 1. How many paid *hours per month* would you be willing to work for the ARNG or USAR in addition to the normal 16-hour drill period (MUTA-4)?
- ___ 2. What percentage of your drill training time is spent on individual-level (versus unit-level) training?



Instructions: Whenever you see "hours & minutes" questions like the ones that follow, fill in the blank for hours and the blank for minutes for each item. For example, two hours would be written "2 hrs and 0 min." One and a half hours would be written "1 hrs and 30 min."

- ___ hrs. and ___ min. 3. How many hours and minutes do you travel one way to attend drills at your unit's armory or reserve center?
- ___ hrs. and ___ min. 4. How many hours and minutes would you be willing to travel one way to attend drills at your unit's armory or reserve center?
- ___ hrs. and ___ min. 5. How much time per 16-hour drill period (MUTA-4) do you spend evaluating the performance of subordinates?

How many hours do you usually spend planning and preparing training for the next drill?

- ___ hrs. and ___ min. 6. hours during the previous drill.
 ___ hrs. and ___ min. 7. unpaid hours outside of drill.
 ___ hrs. and ___ min. 8. paid hours outside of drill.

- dk na sa a m d sd 9. My unit trains on more tasks than can be trained to standard within the time available.

The following events (and preparation for them) detract from the efficient training of my unit:

- dk na sa a m d sd 10. Annual Training (AT) evaluations
 dk na sa a m d sd 11. Inactive Duty Training (IDT) evaluations
 dk na sa a m d sd 12. command visits/inspections
 dk na sa a m d sd 13. annual general inspections
 dk na sa a m d sd 14. maintenance inspections
 dk na sa a m d sd 15. physical exams
 dk na sa a m d sd 16. physical fitness testing
 17. other: _____

Training time is wasted in my unit because:

- ☐ dk ☐ na sa a m d sd 18. topics trained are not important to the unit mission.
- ☐ dk ☐ na sa a m d sd 19. other requirements interfere with training.
- ☐ dk ☐ na sa a m d sd 20. training is not well organized.
- ☐ dk ☐ na sa a m d sd 21. equipment often breaks down.
- ☐ dk ☐ na sa a m d sd 22. training facilities/equipment/materials are not available.
- ☐ dk ☐ na sa a m d sd 23. the training given is over the soldiers' heads.
- ☐ dk ☐ na sa a m d sd 24. soldiers are not motivated to try very hard.
25. other: _____

SECTION D: Your Personal Feelings and Assessment

- ____ 1. What percentage of the critical tasks required for your duty assignment can you perform to standard?

Suppose you could stay in the ARNG or USAR as long as you wish or could leave it as soon as you wish. How many *more* years would you stay in . . .

- ____ 2. if your present duty assignment remained the same?
- ____ 3. if you could change you present duty assignment?

What percentage of the following do you think know their jobs well enough now to perform well if your unit were mobilized?

- ____ 4. enlisted soldiers (E1s to E4s).
- ____ 5. NCOs (E5s to E9s).
- ____ 6. officers.

What percentage of the NCOs (E5s to E9s) in your unit . . .

- ____ 7. do you consider to have good training skills.
- ____ 8. are able to perform the skills they are responsible to train others on.

If you had to change your branch and receive *all* of your retraining through a *single* means, which would you most prefer? Rank the options below from 1 to 5 with 1 being the most preferred.

- ____ 9. Active Component service school
- ____ 10. RF school (formerly called USAR school)
- ____ 11. Civilian school
- ____ 12. Home study with pay based on follow-up testing (possible option in the future)
- ____ 13. Correspondence Course program

If you had to change your branch and had the choice of receiving retraining through *more than one* means, what percentage of this retraining would you like to receive from each of the following? (Your answers should add up to 100%.)

- ____ 14. Active Component service school
- ____ 15. RF school (formerly called USAR school)
- ____ 16. Civilian school
- ____ 17. Home study with pay based on follow-up testing (possible option in the future)
- ____ 18. Correspondence Course program

19. What level of training do *you* think should be emphasized by your next higher headquarters? (Circle only one.)
1. individual/MOS
 2. squad/crew/section
 3. platoon/detachment
 4. company/troop/battery
 5. battalion/squadron

- dk na sa a m d sd 20. My unit's leaders know their jobs.
- dk na sa a m d sd 21. Adequate recognition and awards are given to soldiers in my unit who perform well.
- dk na sa a m d sd 22. Too many awards are given to soldiers in my unit.
- dk na sa a m d sd 23. Changes in my unit's training schedule hurt the quality of the training.
- dk na sa a m d sd 24. The morale in my unit is high.
- dk na sa a m d sd 25. I joined the ARNG or USAR in order to learn a skill.
- dk na sa a m d sd 26. ARNG schools do a good job of training soldiers.
- dk na sa a m d sd 27. RF schools do a good job of training soldiers.
- dk na sa a m d sd 28. Active Component service schools do a good job of training ARNG or USAR soldiers.
- dk na sa a m d sd 29. I have a good working relationship with my unit leader(s).
- dk na sa a m d sd 30. In my unit, soldiers are promoted when they should be.
- dk na sa a m d sd 31. Active Army assistance from Readiness Group personnel, Advisors, and Mobile Training Teams is *available* to my unit.
- dk na sa a m d sd 32. Active Army assistance from Readiness Group personnel, Advisors, and Mobile Training Teams is *helpful* to my unit.
- dk na sa a m d sd 33. It is easy for me to maintain the individual skills required by my duty assignment.
- dk na sa a m d sd 34. The NCOs in my unit look out for the welfare of their soldiers.
- dk na sa a m d sd 35. I have confidence in my unit's leader(s).
- dk na sa a m d sd 36. Promotions are handled fairly in my unit.
- dk na sa a m d sd 37. Discipline is handled fairly in my unit.
- dk na sa a m d sd 38. Soldiers in my unit employ and fire their crew-served weapons to standard.
- dk na sa a m d sd 39. My unit is able to conduct sustained operations by continuously operating in the field for 72 hours or more.
- dk na sa a m d sd 40. Soldiers in my unit know how to operate MILES.
- dk na sa a m d sd 41. Soldiers in my unit know how to perform operator maintenance on MILES.
- dk na sa a m d sd 42. The training needs of the soldiers in my unit are adequately met during IDT.
- dk na sa a m d sd 43. My unit leader(s) treats all enlisted soldiers in my unit fairly and justly.
- dk na sa a m d sd 44. My unit leader(s) is receptive to suggestions made by subordinates.
- dk na sa a m d sd 45. I am well prepared to perform my duty assignment.
- dk na sa a m d sd 46. In my unit too much training responsibility is delegated to NCOs.
- dk na sa a m d sd 47. The overall performance of my unit during ARTEP training or its equivalent has been good.

I am satisfied with the way the ARNG or USAR enables me to . . .

- dk na sa a m d sd 48. learn a skill.
- dk na sa a m d sd 49. defend my country.
- dk na sa a m d sd 50. earn a retirement.
- dk na sa a m d sd 51. get education benefits.
- dk na sa a m d sd 52. do something interesting or have a change of pace.
- dk na sa a m d sd 53. maintain the rank/responsibility I earned on Active Duty.

Over the past year, the following have made me feel like staying in the ARNG or USAR:

- dk na sa a m d sd 54. the chance to help protect my country.
- dk na sa a m d sd 55. good morale in my unit.
- dk na sa a m d sd 56. the friends I have in my unit.
- dk na sa a m d sd 57. change of pace from my civilian job.
- dk na sa a m d sd 58. the pay I receive.
- dk na sa a m d sd 59. retirement benefits in the military.
- dk na sa a m d sd 60. the military atmosphere.
- dk na sa a m d sd 61. opportunities to be responsible or to lead.
- dk na sa a m d sd 62. the sense of doing something worthwhile and important.
- dk na sa a m d sd 63. my status in the military.
- dk na sa a m d sd 64. my status in the community.
- 65. other: _____

I am satisfied with:

- dk na sa a m d sd 66. being in the ARNG or USAR. [If you work full time for the ARNG or USAR, answer questions 66 to 69 in terms of your part-time position.]
- dk na sa a m d sd 67. my pay in the ARNG or USAR.
- dk na sa a m d sd 68. my assignment in the ARNG or USAR.
- dk na sa a m d sd 69. the quality of training in my current duty assignment.

In the past year, the following have made me feel like leaving the ARNG or USAR:

- dk na sa a m d sd 70. family concerns.
- dk na sa a m d sd 71. my civilian job.
- dk na sa a m d sd 72. plans to move.
- dk na sa a m d sd 73. low pay in the ARNG or USAR.
- dk na sa a m d sd 74. low morale in my unit.
- dk na sa a m d sd 75. pressure to do more work in my duty assignment than should be expected.
- dk na sa a m d sd 76. difficulty in keeping up with all the knowledge and skills I'm expected to have.
- dk na sa a m d sd 77. not getting along with some of the soldiers in my unit.
- dk na sa a m d sd 78. not advancing in rank as fast as I wanted to.
- dk na sa a m d sd 79. boring work.
- dk na sa a m d sd 80. not enough recognition for what I do.
- dk na sa a m d sd 81. too much wasted training time.
- dk na sa a m d sd 82. poor quality of training.
- dk na sa a m d sd 83. inability to accomplish all I would like to do *in* the ARNG or USAR.
- dk na sa a m d sd 84. inability to accomplish all I would like to do *outside* the ARNG or USAR because of the time military service takes up.
- 85. other: _____

Soldiers in my unit are good at performing:

- dk na sa a m d sd** 86. Common tasks from the Soldier's Manual.
- dk na sa a m d sd** 87. MOS-specific tasks from the Soldier's Manual.
- dk na sa a m d sd** 88. ARTEP tasks (or equivalent) which are essential to my unit's mission.

SECTION E: Your Recommendations and Reactions to Some Training Options

- ___ 1. In addition to regular drills how many *individual soldier* training sessions, such as Additional Training Assemblies (ATAs) per year (4 hrs. each) would be helpful in getting your unit trained to readiness standards?
- ___ 2. How many additional separate *unit* training assemblies (4 hrs. each) per year would be helpful in getting your unit trained to readiness standards?
- ___ 3. How many additional 16-hour drill periods (MUTA-4) per year would be helpful in getting your unit trained to readiness standards?
- ___ 4. How many additional days of AT per year would be helpful in getting your unit trained to readiness standards?
5. How often would an *additional* AT period be helpful in getting your unit trained to readiness standards?
1. every year
 2. every other year
 3. every three years
 4. every four to six years
 5. never

ARNG (state) schools have ... (Check here [] if you have ever attended.)

- dk na sa a m d sd** 6. good instructors.
- dk na sa a m d sd** 7. good course content.
- dk na sa a m d sd** 8. good facilities.
- dk na sa a m d sd** 9. good equipment.
- dk na sa a m d sd** 10. course scheduling which is easy for part-time soldiers to meet
- dk na sa a m d sd** 11. enough classroom openings for soldiers.
- dk na sa a m d sd** 12. enough funding to send soldiers to attend.

Active Component schools have ... (Check here [] if you have ever attended.)

- dk na sa a m d sd** 13. good instructors.
- dk na sa a m d sd** 14. good course content.
- dk na sa a m d sd** 15. good facilities.
- dk na sa a m d sd** 16. good equipment.
- dk na sa a m d sd** 17. course scheduling which is easy for part-time soldiers to meet
- dk na sa a m d sd** 18. enough classroom openings for soldiers.
- dk na sa a m d sd** 19. enough funding to send soldiers to attend.

RF schools (formerly USAR schools) have . . . (Check here [] if you have ever attended.)

- dk na sa a m d sd 20. good instructors.
dk na sa a m d sd 21. good course content.
dk na sa a m d sd 22. good facilities.
dk na sa a m d sd 23. good equipment.
dk na sa a m d sd 24. course scheduling which is easy for part-time soldiers to meet
dk na sa a m d sd 25. enough classroom openings for soldiers.
dk na sa a m d sd 26. enough funding to send soldiers to attend.

If a home study course were available to help you train for your duty assignment, the following means of instruction would probably be effective:

- dk na sa a m d sd 27. audio cassette.
dk na sa a m d sd 28. video cassette.
dk na sa a m d sd 29. personal computer.
dk na sa a m d sd 30. correspondence.

It would be a good idea if . . .

- dk na sa a m d sd 31. soldiers in my unit spent time training with an active army unit.
dk na sa a m d sd 32. soldiers in my unit had more time to train on individual common tasks.
dk na sa a m d sd 33. soldiers in my unit had more time to train on individual, MOS-specific tasks.
dk na sa a m d sd 34. MILES were used more for training my unit.

It would be helpful if a full-time training committee of soldiers were available to help my unit with the following:

- dk na sa a m d sd 35. range set up.
dk na sa a m d sd 36. MILES installation on vehicles.
dk na sa a m d sd 37. ARTEP control and umpiring.
dk na sa a m d sd 38. MOS qualification
dk na sa a m d sd 39. skill retention.
dk na yes no 40. Such a committee is already available to my unit.

A Split Unit Training Assembly (SUTA) is where different parts (crews, squads, platoons, etc.) of a larger unit train on separate weekends and the training conducted is tailored to meet their specific needs.

- dk na sa a m d sd 41. A SUTA drill schedule would more effectively bring about the readiness of *individual soldiers* than the schedule currently used by the headquarters which commands my unit.
dk na sa a m d sd 42. A SUTA drill schedule would more effectively bring about the readiness of my *unit* as a whole than the schedule currently used by my unit.
dk na sa a m d sd 43. A SUTA drill schedule would make it *easier* for me to attend drills.
dk na sa a m d sd 44. A SUTA drill schedule would make it *harder* for me to attend drills.
dk na yes no 45. My next higher headquarters already uses a SUTA drill schedule.

An "adaptable drill schedule" is where units or parts of units meet for various lengths of time (two-, four-, six-, or eight-hour sessions) on various days of the week (weekday evenings, Saturdays and Sundays).

- dk na sa a m d sd 46. An adaptable drill schedule would more effectively bring about the readiness of *individual soldiers* than the schedule currently used by my unit.
- dk na sa a m d sd 47. An adaptable drill schedule would more effectively bring about the readiness of my *unit* as a whole than the schedule currently used by my unit.
- dk na sa a m d sd 48. An adaptable drill schedule would make it *easier* for me to attend drills.
- dk na sa a m d sd 49. An adaptable drill schedule would make it *harder* for me to attend drills.
- dk na yes no 50. My unit already follows an adaptable drill schedule.

I would be able to go on full-time active duty with the ARNG or USAR on a seasonal basis (2 or 3 months out of every year) . . .

- dk na sa a m d sd 51. if I could specify the time of year, but not the location.
- dk na sa a m d sd 52. if I could specify the location, but not the time of year.
- dk na sa a m d sd 53. if I could specify both the time of year *and* the location.
- dk na sa a m d sd 54. if I could neither specify the time nor the location.

"Job aids," such as diagrams or checklists which are readily available, are supposed to help a person do a task without having to memorize all the steps.

- dk na sa a m d sd 55. Having more job aids would be helpful to me in my duty assignment.
- dk na sa a m d sd 56. I actually use the job aids I have for my work in the ARNG or USAR.
- dk na sa a m d sd 57. Job aids are useful.

Hip pocket/opportunity training is individual skill training that occurs during breaks and pauses in unit training. In my unit, hip pocket training . . .

- dk na sa a m d sd 58. should be conducted more frequently.
- dk na sa a m d sd 59. needs to be improved.

I would be willing to work more hours for the ARNG or USAR in the following ways:

- dk na sa a m d sd 60. a longer Annual Training (AT) each year (3 or more weeks).
- dk na sa a m d sd 61. an extra Annual Training (AT) session per year.
- dk na sa a m d sd 62. more weekend drills.
- dk na sa a m d sd 62. more MUTA-5s or MUTA-6s.
- dk na sa a m d sd 63. extra paid time between weekend drills.
- dk na sa a m d sd 64. home study with pay based on follow-up testing (possible option in the future).
65. other: _____

If materials and opportunity were provided for me to study my duty assignment at home for pay based on passing follow-up tests . . .

- dk na sa a m d sd 66. I would participate if it were *in addition to* my regular weekend drill.
- dk na sa a m d sd 67. I would participate if it were *in place of* my regular weekend drill.

The following would really improve the training of my unit:

- dk na sa a m d sd 68. better use of training time.
dk na sa a m d sd 69. better training preparation.
dk na sa a m d sd 70. more access to computers/simulators.
dk na sa a m d sd 71. more rewards for good performance.
dk na sa a m d sd 72. better training materials.
dk na sa a m d sd 73. better training of soldiers in common/ MOS skills before unit training.
dk na sa a m d sd 74. better hip pocket/opportunity training.
75. other _____.

Simulators are devices (such as MILES) which artificially create an opportunity to practice skills for a situation which is otherwise unavailable or dangerous. Simulators:

- dk na sa a m d sd 76. could help me improve my own skills.
dk na sa a m d sd 77. are available to me between drills.
dk na sa a m d sd 78. are available to me during drills.
dk na sa a m d sd 79. need to be operational more of the time.
dk na sa a m d sd 80. need to be used more for training.

If there were a personal computer at my armory or training center to help me learn or practice the skills of my duty assignment, I would be willing to use this computer . . .

- dk na sa a m d sd 81. before drills.
dk na sa a m d sd 82. during drills.

I consider the following to be effective means for training individual soldiers:

- dk na sa a m d sd 83. Supervised On-the Job Training (SOJT)
dk na sa a m d sd 84. Inactive Duty Training (IDT)
dk na sa a m d sd 85. Annual Training (AT)
dk na sa a m d sd 86. Active Component schools
dk na sa a m d sd 87. RF schools
dk na sa a m d sd 88. Mobilization Exercises (MOBEXs)
dk na sa a m d sd 89. Individual training
dk na sa a m d sd 90. Unit training
dk na sa a m d sd 91. Joint Readiness Exercises (JRXs)
dk na sa a m d sd 92. Joint Training Exercises (JTXs)
dk na sa a m d sd 93. Unit exercises
dk na sa a m d sd 94. Overseas Deployment Training (ODT)
95. other: _____

If Supervised On-the-Job Training (SOJT) were eliminated as a method of MOS reclassification training, I think . . .

- dk na sa a m d sd 96. it would take longer for soldiers to become MOS qualified.
- dk na sa a m d sd 97. the quality of the training would improve.
- dk na sa a m d sd 98. personnel retention would decrease.
- dk na sa a m d sd 99. the overall quality of individual training would improve.
- dk na sa a m d sd 100. the overall quality of unit training would improve.

The following are helpful when available in sufficient quantity:

- dk na sa a m d sd 101. Soldier Training Publications/Soldier's Manuals.
- dk na sa a m d sd 102. Field Manuals.
- dk na sa a m d sd 103. Technical Manuals.
- dk na sa a m d sd 104. Training Extension Course (TEC) lessons for the Bessler Cue-See.
- dk na sa a m d sd 105. Army Regulations.
- dk na sa a m d sd 106. National Guard Regulations.
- dk na sa a m d sd 107. Job Books.
- dk na sa a m d sd 108. ARTEPs or equivalent unit tactical training guidelines.
- dk na sa a m d sd 109. Training Circulars.
- dk na sa a m d sd 110. Field Circulars.

Training would be more effective if . . .

- dk na sa a m d sd 111. training references were consolidated.
- dk na sa a m d sd 112. training references were reduced.
- dk na sa a m d sd 113. training references were easier to read.
- dk na sa a m d sd 114. training references made it easier for me to find what I need.
- dk na sa a m d sd 115. training references had more pictures.
- dk na sa a m d sd 116. soldiers had fewer individual tasks to train.
- dk na sa a m d sd 117. my unit had fewer unit tasks to train.

SECTION F: Things that Affect My Success as a Trainer

The following are serious obstacles to the successful training of soldiers in my unit:

dk na sa a m d sd	1. not enough time to plan and prepare.
dk na sa a m d sd	2. not enough time to conduct training.
dk na sa a m d sd	3. lack of training materials (books, manuals, etc.).
dk na sa a m d sd	4. lack of simulators/training devices.
dk na sa a m d sd	5. shortages of the right equipment (weapons, vehicles, typewriters, etc.).
dk na sa a m d sd	6. lack of a local training area.
dk na sa a m d sd	7. lack of other physical facilities (firing ranges, armories, training centers, etc.).
dk na sa a m d sd	8. insufficient classroom space.
dk na sa a m d sd	9. not enough people to help me conduct training.
dk na sa a m d sd	10. soldier turnover.
dk na sa a m d sd	11. unit reorganization.
	12. other: _____

I have difficulty obtaining required training from Active Component schools because . . .

dk na sa a m d sd	13. courses are too long.
dk na sa a m d sd	14. course dates usually don't match my schedule.
dk na sa a m d sd	15. course dates conflict with unit activities.
dk na sa a m d sd	16. classes have more applicants than there is room for.
dk na sa a m d sd	17. funds are often not available.
dk na sa a m d sd	18. I have not met the prerequisites.
dk na sa a m d sd	19. I can't get orders in time.

In my unit, training is hampered by paperwork required for:

dk na sa a m d sd	20. training.
dk na sa a m d sd	21. personnel.
dk na sa a m d sd	22. supply.
dk na sa a m d sd	23. maintenance.
dk na sa a m d sd	24. I have good training skills
dk na sa a m d sd	25. I would like to learn how to be a better trainer.
dk na sa a m d sd	26. I can perform the skills that I am responsible to teach others.
dk na sa a m d sd	27. I receive conflicting training guidance from various higher headquarters.
dk na sa a m d sd	28. My unit lacks realistic opportunities to use our equipment or skills.

(day) (mo) (yr) What is the date on which you completed this survey?

Unit Information

TO BE ANSWERED BY THE COMMANDING OFFICER OR REPRESENTATIVE

1. What level of unit do you command?
 1. detachment
 2. platoon
 3. company/troop/battery
 4. battalion/squadron or higher level command
2. Which type of unit do you command?
 1. combat
 2. combat support
 3. combat service support
3. Has a full-time training officer/NCO been assigned to your unit for at least nine months of the past year?
 1. yes
 2. no
 3. don't know

What is the authorized strength of your unit?

- _____ 4. officers and warrant officers.
_____ 5. enlisted soldiers (E1's to E9's)

What is the assigned strength of your unit?

- _____ 6. officers and warrant officers.
_____ 7. enlisted soldiers (E1's to E9's)

_____ 8. What percentage of the soldiers in your unit have been replaced in the past year?

9. In which state/territory of the United States is your unit's armory or reserve center located?

10. What is the date on which you provided this information?

(day) (mo) (yr)

APPENDIX B

Results for the Army National Guard (ARNG)

Reported herein are the detailed results for ARNG soldiers only. Analyses in this section tested for differences by Rank, Geography, and Unit type within the ARNG.

Demographics

The items addressed in this section are identical to those addressed in the demographics section of the main body of the report where all ARNG and United States Army Reserve (USAR) soldiers were included. The analyses in this section are restricted to ARNG soldiers only.

Those demographic items which are listed in Table B-1 all provided ratio data, thus making comparisons of means plausible. The means in Table B-1 are listed in order of magnitude starting with the smallest. Item NA12 in Table B-1 shows that the average soldier in the ARNG had served for one and a half years in the active component (AC) of the Army. In contrast, items NA15, NA16, NA13, and NA14 show that soldiers in the ARNG had very little experience in the AC of other services.

With regard to the reserve component (RC), ARNG soldiers had an average of 9.3 years of experience in the ARNG itself (NA1), .4 years of experience in the USAR (NA2), and .35 years of experience in other RC organizations (NA3). Years of experience in the ARNG, the USAR, and other RC organizations were significantly less for the junior enlisted soldiers than for NCOs and officers. Means broken down for the three Ranks on these items are shown in Table B-2.

Differences were found by Unit type in the number of years of experience soldiers had in the ARNG. Soldiers in combat arms and combat support units had a similar number of years of experience in the ARNG (means 8.3 and 8.9 respectively). Soldiers in Combat Service Support Units on the average had about two more years of experience than soldiers in other types of units ($\bar{M} = 10.96$).

The average soldier in the ARNG had spent nearly as many years ($\bar{M} = 8.13$ years) in his or her current unit (NA4) as he/she had spent in the ARNG itself ($\bar{M} = 9.27$ years). But less than a third of soldiers' tenure in the ARNG ($\bar{M} = 2.65$ years) was spent in their current duty assignment or MOS (NA5). NCOs had spent significantly more time in their current duty assignments than had junior enlisted soldiers or officers (see Table B-1 for breakdown means).

Table B-1
Grand Means and Differences by Rank (R), Geography (G), and Unit Type (U) for ARNG
Soldiers on Demographic Items

Item	Mean	n	Differences			
			R ^a	G	U ^b	Interactions ^c
Items asked of all ranks						
NA15: Years of experience in the AC-Coast Guard	.006	1983	-	-	-	-
NA16: Years of experience in the AC-Marines	.134	1983	-	-	-	-
NA13: Years of experience in the AC-Navy	.152	1983	-	-	-	-
NA14: Years of experience in the AC-Air Force	.173	1983	-	-	-	-
NA3: Years of experience in other RC organizations	.349	1978	E<N,O	-	-	RG
NA2: Years of experience in the USAR	.418	1981	E<O	-	-	-
NA12: Years of experience in the AC-Army	1.537	1980	E<N,O	-	-	-
NA5: Years of experience in your current duty MOS	2.647	1980	E,O<N	-	-	RU
NA4: Years of experience your current unit	8.134	1981	-	-	-	-
NA1: Years of experience in the ARNG	9.268	1978	E<N,O	-	C,CS<CSS	RU
(table continues)						

(table continues)

Item	Differences				
	Mean	n	R	G	U
NA8: What is your age?	33.473	1967	E<N,O	-	C<CS<CSS RU

Note. Unit of measure varies and are indicated in each item description. All differences reported are statistically significant at the .001 level and substantial (at least a quarter of a scale point, or 5%, or one-fourth of the sd).

^aRank: E = Junior enlisted soldiers (E1-E4s). N = NCOs (E5-E9s). O = Officers and warrant officers. ^bUnit type: C = Combat arms. CS = Combat support. CSS = Combat service support. ^cInteraction terms: RG = rank by geography. RU = rank by unit type. RC = rank by component. GU = geography by unit type. GC = geography by component.

Table B-2
Group Means on Demographic Items Which Showed a Substantial Difference by Rank in the ARNG

Item	E1-E4s		NCOs		Officers		Overall	
	Mean	n	Mean	n	Mean	n	Mean	sd
NA1: Years of experience in the ARNG	3.93	686	12.00	746	12.24	546	9.27	7.77
NA2: Years of experience in the USAR	.11	686	.47	748	.74	547	.42	1.69
NA3: Years of experience in other RC organizations	.16	686	.41	746	.50	546	.35	1.37
NA5: Years of experience in your current duty MOS	1.84	686	3.59	747	2.37	547	2.65	3.74
NA8: What is your age?	25.38	680	37.97	740	37.45	547	33.47	9.82
NA12: Years of experience in the AC-Army	.73	685	1.99	747	1.93	548	1.54	2.85

The average age (NA8) of sampled soldiers in the ARNG was 33.47 years. Age varied both by Rank and Unit type. Naturally, junior enlisted soldiers were younger than NCOs and officers (see Table B-1). Soldiers in combat arms units ($\bar{M}$ = 32.1) were about a year younger than soldiers in combat support units ($\bar{M}$ = 33.2) and about three years younger than soldiers in combat service support units ($\bar{M}$ = 35.7).

Nine yes-no questions were asked of all ranks regarding demographics. These are listed in Table B-3 which reports the percentage of respondents who answered yes to each item along with any differences by Rank, Geography, or Component. The items in Table B-3 are listed in the order of their occurrence in the survey instrument. The percentage of soldiers in the ARNG sample who said that they were combat veterans was 15.8% (NA25). As expected, fewer junior enlisted soldiers reported combat experience than did NCOs or officers. Only 5.4% of junior enlisted soldiers reported having combat experience, while 21.6% of the NCOs and 21.0% of the officers reported combat experience.

Item NA26 showed that fewer than half (42.7%) of the soldiers in the ARNG sample indicated that their employers paid them while they were at Annual Training (AT). Fewer junior enlisted soldiers than NCOs (21.3% versus 51.8% respectively) reported receiving pay from employers during AT. Fewer NCOs than officers (57.1%) reported receiving pay from employers during AT. This is possibly due to the fact that junior enlisted soldiers naturally would have been employed for a shorter period of time than NCOs and officers, simply because they were younger and closer to the beginning of their careers. This would imply that they would probably have had lower employment benefits than their NCO and officer associates. Analysis also revealed a significant difference which can be attributed to Geography. While 43% of the soldiers across all of the CONUSAs received remuneration from employers during AT, 8% more than that average received outside remuneration in 1st Army, and 6% less than the average received outside remuneration in 4th Army. The receiving of pay from civilian employers during AT also varied according to Unit type. Of soldiers in combat arms units only 36.7% said they were paid by employers during AT, while 41.7% of the soldiers in combat support units and 51.9% of the soldiers in combat service support units so indicated.

Soldiers in the ARNG sample were asked if the work they do in their military occupations (MOS or branch) is similar to the work they do in their full-time jobs (NA29). Nearly a third (30.6%) responded "yes." A significant difference by Rank existed in these responses. While only 16.8% of the junior enlisted soldiers responded "yes," 33.7% of the NCOs and 43.6% of the officers reported a similarity between their military

Table B-3

Percentage of ARNG Respondents Who Answered "Yes" to Dichotomous, Demographic Items and Differences in Those Percentages by Rank (R), Geography (G), and Unit Type (U).

Item	Differences ^a			
	%Yes	n	R ^b	G ^c U ^d
Items asked of all ranks				
NA25: Are you a combat veteran?	15.8	1963	E<N,O	- -
NA26: Does your employer pay you while you are AT?	42.7	1730	E<N,O	4<M<1 C,CS<CSS
NA29: Is your MOS similar to your full-time (civ/mil) job	30.6	1920	E<N<O	- C,CS<CSS
NA30: Do you own a personal computer?	22.2	1976	E,N<O	- -
NA31: If yes, is it IBM PC compatible?	22.7	897	E,N>O	- C,CS<CSS
NA32: Are you employed full time as a civilian	77.3	1834	E<N,O	4<M -
NA33: Are you employed part time as a civilian	18.1	1269	E>N,O	- -
NA34: Are you a full-time student?	11.2	1743	E>N,O	2<M<4 -
NA35: Are you a part-time student?	17.8	1633	E,N>O	4>M -

(table continues)

a A 5% difference in the percentage of soldiers giving this option a first choice rating was considered substantial enough to report. Differences of this magnitude were significant (Chi-square adjusted residual) at least at the .01 level. b Rank: E = Junior Enlisted soldiers (E1-E4s). N = NCOs (E5-E9s). O = Officers and warrant officers. c Geography: 1, 2, . . . = 1st Army, 2nd Army, ... M = Mean for all armies. d Unit type: C = Combat arms. CS = Combat support. CSS = Combat service support.

and their full-time work. This would seem to imply that officers tend to have management-related jobs in the civilian market. No differences were found by Geography for this item. However, substantial differences were found by Unit type. As would be expected because of the noncivilian character of soldier tasks in combat arms units, fewer (22.3%) soldiers in these types of units reported similarity between their civilian work and their ARNG work than did soldiers in combat support units (31.4%) and combat service support units (41.7%).

Twenty-two percent of the soldiers in the ARNG sample reported that they owned a personal computer (NA30). Substantial differences in this response existed among Ranks. While only 11.7% of the junior enlisted soldiers said they owned a personal computer, 18.6% of the NCOs did and 40.2% of the officers did. No substantial differences were found for Geography or Unit type. Twenty-three percent of those who said they owned a personal computer also said that it was IBM PC compatible (NA31). This was especially true for officers (39.8%) who owned a personal computer. Only 17.2% of the NCOs and 12.8% of the junior enlisted soldiers said their computers were IBM PC compatible.

Although 77.3% of the soldiers in the ARNG sample were employed full time as civilians (NA32), a substantially smaller proportion (69.9%) of the junior enlisted soldiers were employed full time than were NCOs (80.2%) or officers (82.7%). Conversely, more than twice as many (28%) junior enlisted soldiers were employed part time than were NCOs (10.8%) or officers (14.2%). While very few NCOs or officers (4.4% and 9.8% respectively) indicated that they were full-time students, 19.4% of the junior enlisted soldiers reported that they were full-time students. This makes for a total of 11.2% full-time students among the ARNG sample. The difference by Rank in full-time students reverses itself somewhat with regard to part-time students. Here over a quarter (28.4%) of the officers said they were part-time students, while only 14.9% and 12.3% of the NCOs and junior enlisted soldiers respectively said that they were part-time students.

Two nominal variables offering multiple-choice responses were included in the survey instrument. The first of these had to do with employment status in the ARNG. The majority (77.6%) of the soldiers in the ARNG sample were part-time participants (M-Day soldiers). 10.2% were full-time technicians; 9.6% had AGR status; .6% were on state active duty; and 1.9% were in some other employment status in the ARNG. Table B-4 shows how these employment statuses break down by Rank. A statistically significant and substantial difference is revealed there. Most of the differences reported in Table B-4 can be accounted for by the fact that a larger proportion of NCOs and officers had full-time positions in the RC than did junior enlisted soldiers.

Table B-4

Employment Status in the ARNG Crosstabulated by Rank

Employment status in RC	Junior enlisted soldiers			NCOs		Officers	
	% of soldiers ^a	Adjusted residual	% of soldiers ^b	Adjusted residual	% of soldiers ^c	Adjusted residual	
Part-time soldier	90.4%	11.4***	70.1%	-6.8***	70.9%	-4.9***	
Technician	1.9%	-6.8***	13.7%	4.4***	16.2%	6.1***	
AGR	4.1%	-4.9***	14.4%	6.1***	10.5%	0.9	
State active duty	0.9%	1.2	0.3%	-1.5	0.3%	0.3	
Other	2.7%	2.1*	1.5%	-1.3	1.3%	-0.8	

Note. Overall Chi-square (8, N = 2467) = 180.9, $p < .001$.^a = 1320. ^b = 1294. ^c = 1216.* $p < .05$. ** $p < .01$. *** $p < .001$.P.B-10
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Table B-5

Employment Status in the ARNG Crosstabulated by Unit Type

Employment status in RC	Combat arms		Combat support		Combat service support	
	% of soldiers ^a	Adjusted residual	% of soldiers ^b	Adjusted residual	% of soldiers ^c	Adjusted residual
Part-time soldier	82.1%	4.3**	79.2%	1.2	68.7%	-5.8**
Technician	6.2%	-5.1**	8.4%	-1.7*	18.0%	7.2**
AGR	9.8%	-0.7	10.1%	-0.2	11.2%	0.9
State active duty	0.5%	-0.9	0.8%	0.3	0.9%	0.6
Other	1.5%	0.2	1.6%	0.3	1.2%	-0.5

Note. Overall Chi-square (8, N = 1902) = 57.80, $p < .001$.^an = 809. ^bn = 514. ^cn = 579.* $p < .05$. ** $p < .001$.

Table B-6

Soldier Gender Crosstabulated by Unit Type in the ARNG

Gender	Combat arms		Combat support		Combat service support	
	% of soldiers ^a	Adjusted residual	% of soldiers ^b	Adjusted residual	% of soldiers ^c	Adjusted residual
Female	1.4%	-6.8*	6.5%	1.2	10.2%	6.1*
Male	98.6%	6.8*	93.5%	-1.2	89.8%	-6.1*

Note. Overall Chi-square (2, N = 1974) = 53.45, $p < .001$.

^an = 1382. ^bn = 1358. ^cn = 1279.

* $p < .001$.

Table B-7

Analysis of Multiple-Choice, Ordinal-Response Questions for Soldiers in the ARNG

Method	Mode	% at the mode	Differences			Unitb
			Ranka	Geog.		
Items asked of all ranks						
NA21: Population of home town	3	32.5	E,N<O**	-	C,CS<CSS**	
NA22: Highest level of civilian education	3	40.0	E<N<O**	-	C<CS,CSS**	
NA23: Smallest group of soldiers I train with	1	66.9	E<N*	-	-	
NA9: Pay grade	4	29.5	E<N**	-	C,CS<CSS**	
NB13: Who personally cndct most tng in unit?	8	30.6	E<N**	-	C<CS,CSS**	
NU1: Level of unit CO commands	3	67.5	E,N<O**	-	C>CS,CSS**	
NE5: How often would an extra AT prd hlp unt	1	26.5	E,N<O**	-	-	
ND25: What level of tng should be emphasized?	1	31.0	E,N<O**	-	C>CS,CSS**	
Item asked of officers only						
OA21: I am responsible for tng what size group?	1	41.6	-	-	C,CS>CSS**	

(table continues)

Note. Differences were analyzed for statistical significance using the Kruskal-Wallis test.

aRank: E = Enlisted Soldier (E1-E4s). N = NCOs (E5-E9s). O = Officers and warrant officers. bUnit: C = Combat Arms. CS = Combat Support. CSS = Combat Service Support.

*p < .01. **p < .001.

Soldiers in combat service support units tended to live in more densely populated areas than soldiers in combat arms or combat support units.

Item NA22 in Table B-7 asked soldiers for their highest level of civilian education. The mode response was "3," which translates to "high school completed with diploma or GED." This option was selected by 40.0% of the soldiers in the ARNG sample. Junior enlisted soldiers had received significantly less civilian education than NCOs, and NCOs significantly less than officers. Soldiers in combat arms and combat support units had received significantly less civilian education than soldiers in combat service support units.

Question NA23 in Table B-7 asked soldiers about the size of the smallest group of soldiers they trained with on a regular basis. The mode response was "1," which translates to "squad/section/crew." This response was selected by 66.9% of the respondents. Junior enlisted soldiers typically responded that they trained with smaller groups than NCOs. Soldiers in combat arms groups responded that they trained in smaller groups than did soldiers in combat support or combat service support units.

Item NA9 in Table B-7 is, for all intents and purposes, artifactual. It essentially consists of the last digits of soldiers' pay grades, e.g., "3" in E-3, "1" in O-1, "2" in W-2. Together with the E, O, or W preceeding it, this variable was used to classify soldiers according to Rank.

Item NU1 in Table B-7 asked about the level of unit commanded by the CO of the individual respondent. The mode response to this item was "3," which translates to "company/crew/battery." This option was selected by 67.5% of soldiers' commanders. The COs of combat arms units tended to respond with higher options than did the COs of soldiers in combat support or combat service support units.

Involvement

Items in the soldier "Involvement" category provide information on some of the demands made of soldiers in terms of travel and time committed to the ARNG, as well as their degree of involvement as trainers. The main cluster of these items is shown in Table B-8. Three items regarding Involvement were asked of all three Ranks. The first, NB3, asked how many individuals the particular soldier was responsible for training during an average MUTA-4. A total of 1,832 soldiers gave valid responses to this question. For that group the average number of trainees was 25.8.

Table B-8

Grand Means and Differences by Rank (R), Geography (G), and Unit Type (U) for ARNG Soldiers on Items Regarding Soldier Involvement

Item	Differences				
	Mean	n	R ^a	G	U ^b Interactions ^c
Items asked of all ranks					
NB3: During avg MUTA-4 how many pers are you resp to train	25.76	1832	-	-	RU
NC3: How many hrs do you travel one-way to attend drills	.77	1971	E,N<O	-	-
NC4: How many hrs per MUTA-4 willing to travel to drill	1.47	1951	E,N<O	-	-
Item asked of junior enlisted soldiers and NCOs only					
NB4: How many soldiers you personally train per avg MUTA-4	4.52	1328	E<N	-	GU
Items asked of NCOs and officers only					
NB2: What percentage of your unit's training do you plan?	28.58	1226	N<O	-	-
NC5: How many hrs per MUTA-4 spent eval perf. of subord	6.01	1267	N>O	-	C,CS>CSS
NC6: How many hrs spent at drill preparing for next drill	1.99	1249	-	-	-
NC7: How many unpaid hrs preparing for next drill	4.03	1233	N<O	-	-

(table continues)

Differences

Item	Mean	n	R	G	U	Interactions
NC8: How many paid hrs outside of drill prep for next drill	2.52	1225	-	-	-	-

Item asked of officers only

OB2: What percentage of your unit's training do YOU conduct?	20.39	522	-	-	-	-

Note. Unit of measure varies and are indicated in each item description. All differences reported are statistically significant at the .001 level and substantial (at least a quarter of a scale point, or 5%, or one-fourth of the sd).

^aRank: E = Junior enlisted soldiers (E1-E4s). N = NCOs (E5-E9s). O = Officers and warrant officers. ^bUnit type: C = Combat arms. CS = Combat support. CSS = Combat service support. ^cInteraction terms: RG = rank by geography. RU = rank by unit type. RC = rank by component. GU = geography by unit type. GC = geography by component.

Item NC3 was also asked of all three Ranks. It asked, "How many hours do you travel one way to attend drill at your unit's armory or reserve center?" The 1,971 soldiers who gave valid responses to this question indicated that they traveled .77 hours (46 min.) to attend drills. Table B-8 indicates that officers traveled significantly longer than did NCOs or junior enlisted soldiers to get to weekend drills. Table B-9 shows that the mean for officers was 1.11 hours, while the means for NCOs and junior enlisted soldiers were .60 and .68 hours respectively.

Soldiers were also asked how many hours they were willing to travel to drill (NC4). The overall response was nearly double that of the amount of time they already spent traveling. Table B-8 shows that the overall mean for willingness to travel was 1.47 hours. A statistically significant difference by Rank is indicated in Table B-8 and is spelled out in Table B-9. There it can be seen that junior enlisted soldiers and NCOs were willing to travel an average of 1.27 hours to attend weekend drill but officers were willing to travel 2.01 hours to attend weekend drill. Comparing these responses with those obtained for the three Ranks on Item NC3, officers were willing to travel 1.8 times the amount that they were already traveling; NCOs were willing to travel 2.1 times the amount they were already traveling; and junior enlisted soldiers were willing to travel 1.9 times the number of hours they were already traveling to attend weekend drill.

One Involvement item was asked of junior enlisted soldiers and NCOs only. NB4 asked, "How many soldiers do you personally train during the average 16-hour drill period (MUTA-4)?" This item is different from NB3 in that the emphasis is on personal delivery of training versus overwatch of training. Table B-8 shows that the average number of soldiers personally trained by junior enlisted soldiers and NCOs was 4.5. The average was significantly higher for NCOs than it was for junior enlisted soldiers, with means of 6.8 and 2.0 respectively (Table B-9).

The next set of items in Table B-8 were asked of NCOs and officers only. On the average officers and NCOs reported that they individually planned 28.6% of their units' training (NB2). The average was significantly greater for officers ($\bar{M}$ = 38.4) than for NCOs ($\bar{M}$ = 21.5). Officers and NCOs reported spending an average of 6.0 hours per MUTA-4 evaluating the performance of subordinates (NC5). This average was actually greater for NCOs ($\bar{M}$ = 7.63) than for officers ($\bar{M}$ = 3.81). Table B-8 shows that there was a statistically significant difference by Unit type in responses to Item NC5. While soldiers in combat arms and combat support units spent an average of 6.75 and 6.26 hours, respectively, evaluating the performance of subordinates, soldiers in combat service support units spent only 5.0 hours in this kind of activity (See Table B-10).

Table B-9

Group Means on Items Regarding Soldier Involvement Which Showed a Substantial Difference by Rank in the ARNG

Item	E1-E4s		NCOs		Officers		Overall	
	Mean	n	Mean	n	Mean	n	Mean	sd
NB2: What percent of your unit's training do you plan?	-	-	21.49	711	38.39	515	28.58	31.76
NB4: How many soldiers you personally train per avg MUTA-4	1.96	619	6.76	709	-	-	4.52	10.18
NC3: How many hrs do you travel one-way to attend drills	.68	684	.60	744	1.11	543	.77	.95
NC4: How many hrs per MUTA-4 willing to travel to drill	1.27	673	1.27	739	2.01	539	1.47	1.42
NC5: How many hrs per MUTA-4 spent eval perf. of subord	-	-	7.63	730	3.81	537	6.01	6.86
NC7: How many unpaid hrs preparing for next drill	-	-	2.62	704	5.93	529	4.04	6.30

Note. Units of measure vary and are indicated in each item description.

Table B-10

Group Means on Items Regarding Soldier Involvement Which Showed a Substantial Difference by Unit Type in the ARNG

Item	Combat		CS		CSS		Overall	
	Mean	n	Mean	n	Mean	n	Mean	sd
NC5: How many hrs per MUTA-4 spent eval perf. of subord	6.75	488	6.26	337	4.99	442	6.00	6.86

Note. Unit of measure is indicated in the item description.

Officers and NCOs reported spending an average of 2.0 hours of drill time preparing for the next drill (NC6). They said that they spend an average of 4.0 hours of unpaid time preparing for the next drill (NC7). They also reported spending an average of 2.5 paid hours outside of drill time in preparation for the next drill (NC8).

One Involvement item was asked of officers only. On this item (OB2), officers reported that on the average they personally conducted 20.4% of their units' training.

Another Involvement item asked of officers only provided nominal data. OA15 asked, "What is your primary duty assignment?" Of the 706 valid responses to this question, 13.6% were platoon leaders, 31.2% were staff officers, 6.8% were executive officers, 13.3% were commanders at the company/battery/troop or higher levels, and 33.1% were "other."

Training Descriptions

Items in the "Training Description" category provided information on how training was being conducted at the time data were being collected. Many of the items in this category provided ratio and quasi-interval data. Such items are listed in Table B-11. Full agreement (means ranging from 2.00 to 2.24) with descriptions of current training was found on the following items:

1. NB28: My unit leader(s) insist that subordinates maintain high standards of task performance.
2. NB65: Audio-visual equipment is used by my unit for training.
3. NB64: Training aids (e.g., mock-ups, models, charts, simulation devices) are used by my unit for training.
4. ND41: The NCOs in my unit look out for the welfare of their soldiers.
5. ND66: Over the past year, the chance to help protect my country has made me feel like staying in the ARNG.

Analysis of variance on Item NB65 revealed that officers ($\bar{M}$ = 1.94) perceived a greater degree of use of audio/visual equipment in training than did junior enlisted soldiers ($\bar{M}$ = 2.21). This difference was statistically significant and substantial (a difference of .25 or greater). Detailed figures for the three Ranks are provided in Table B-12 under Item NB65.

Analysis of variance on Item NB66 showed that NCOs ($\bar{M}$ = 2.08) perceived more frequent use of TEC tapes for the Bessler Cue-See than did junior enlisted soldiers ($\bar{M}$ = 2.42).

Table B-11

Grand Means and Differences by Rank (R), Geography (G), and Unit Type (U) for ARNG Soldiers on Items Regarding Descriptions of Current Training

Item	Mean	n	Differences				Interactions ^d
			R ^a	G ^b	U ^c		
Items asked of all ranks							
NB28:e Unit ldrs insist subord maintain high stand of perfor	2.038	1924	-	-	-	-	-
NB65:e Audio-visual equipment is used by my unt	2.058	1883	E>O	-	-	-	-
NB64:e Training aids used by my unit	2.065	1877	-	-	-	-	-
ND41:e NCOs in my unit look out for the welfare of soldiers	2.177	1961	-	-	-	-	-
NB66:e TEC tapes for the Bessler Cue-See are used by my unit	2.247	1782	E>N	-	-	-	-
ND38:e Active Army assistance is available to my unit	2.259	1616	E>N>O	-	-	-	RU
NB63:e Mini-ranges are used by my unit	2.369	1811	-	-	-	-	RU
NB25:e My unit trains with same equipment used in wartime	2.445	1891	-	-	-	-	-
NE56:e I use the job aids I have in my work in the ARNG/USAR	2.517	1831	-	-	-	-	-
NB23:e Tng schedule often gets changed from the original	3.081	1897	N<O	-	-	-	-
(table continues)							

(table continues)

Differences

Item	Mean	n	R	G	U	Interactions
NB60:f How often is MILES used in your unit to train plt/det	3.277	1417	-	-	C<CS,CSS	-
NB61:f How often is MILES used in unit to trn co/trp/btry	3.281	1386	-	-	C<CS,CSS	-
NB59:f How often is MILES used in your unit to train sqd/sec	3.282	1428	-	-	C<CS,CSS	-
NB58:f How often is MILES used in your unit to trn crew/team	3.297	1424	-	-	C<CS,CSS	-
NB57:f How often is MILES used in your unit to train individ	3.366	1439	-	-	C<CS,CSS	-
ND47:e Soldiers in my unit know how to operate MILES	3.367	1303	E<O	-	C<CS<CSS	-
NE94:e Simulators: are available to me during drills	3.387	1081	N<O	5<M	C<CSS	-
NE93:e Simulators: are available to me between drills	3.776	1065	-	5<M	-	-
NU6: Assigned strength for Off/WOs	22.144	1886	E,N<O	-	C,CS<CSS	RU
NU4: Authorized strength for Off/WOs	22.219	1901	E,N<O	-	C,CS<CSS	RU
NC2: What percent of your tng time is spent on indiv lvl tng	42.339	1836	-	-	-	-
NA24: How many soldiers are in your unit?	118.631	1687	E,N<O	-	-	RU
NU7: Assigned strength for E1 to E9	147.690	1881	E,N<O	-	-	RU

(table continues)

Differences

Item	Mean	n	R	G	U	Interactions
NUS: Authorized strength for E1 to E9	149.112	1894	E,N<O	-	-	RU
Items asked of enlisted soldiers and NCOs only						
NA7: Number of times you've changed MOS involuntarily	.322	1097	E<N	-	-	-
NC13a: Hrs waiting while doing non-MOS/nonadmin tasks	.773	1322	-	-	-	-
NC11a: Hrs waiting while doing non-MOS, admin tasks	.774	1330	-	-	-	-
NC12a: Hrs waiting while doing nonlearning MOS work	.992	1321	-	-	-	-
NC14a: How many hours spent in just doing nothing	1.015	1331	-	-	-	-
NA6: Number of times you've changed MOS voluntarily	1.025	1306	E<N	-	C,CS<CSS	RU
NC10a: Hrs waiting while receiving tng from Off/NCOs	1.259	1343	-	-	-	-
NC11: Hrs doing non-MOS admin tasks during avg 16 hr drill	2.347	1356	-	-	-	-
NC13: Hrs doing non-MOS/non-admin tasks in avg 16 hr drill	2.643	1358	-	-	-	-
NC14: Hrs in travel/breaks/ meals, etc during avg 16 hr drill	2.655	1351	-	-	-	-
NC12: Hrs in nonlearning MOS work during avg 16 hr drill	4.632	1347	-	-	-	-

(table continues)

Differences

Item	Mean	n	R	G	U	Interactions
NC10: Hrs receiving tng from Off/NCOs during avg 16 hr drill	5.990	1368	E>N	2>M>1,3	C>CSS	-
NB5: How many months since your last SQT in your duty MOS	6.888	1352	E<N	-	-	-

Items asked of NCOs and officers only

NB24:e Tng priorities change too often to meet quarterly req	3.200	1231	N<O	-	-	-
NB62: How often is MILES used in your unit to train bn/sqdn	3.364	843	N<O	-	C<CS,CSS	-

Items asked of NCOs only

NC9a: Hrs waiting while training others	1.274	677	-	-	-	-
NC9: Hrs training others during the avg 16-hr weekend drill	7.250	689	-	-	C>CS,CSS	-

Note. Items not footnoted rendered ratio data in the unit of measure implied in the item descriptions. All differences reported are statistically significant at the .001 level and substantial (at least a quarter of a scale point, or 5%, or one-fourth of the sd).

a Rank: E = Enlisted soldiers (E1-E4s). N = NCOs (E5-E9s). O = Officers and warrant officers. bGeography: 1, 2, . . . = 1st Army, 2nd Army, . . . M = Mean for all armies. cUnit type: C = Combat arms. CS = Combat support. CSS = Combat service support. dInteraction terms: RG = rank by geography. RU = rank by unit type. RC = rank by component. GU = geography by unit type. GC = geography by component. eLikert scale. fFour-point, quasi-interval scale with 1 being "often."

Mild agreement (means ranging from 2.25 to 2.99) was found for the following training descriptions:

1. ND38: Active Army assistance from Readiness Group personnel, Advisors, and Mobile Training Teams is available to my unit.

2. NB63: Mini-ranges at the armory/training center or local training area (LTA) are used by your unit for training.

3. NB25: My unit trains with the same kind of equipment that it would use during wartime.

4. NE56: I actually use the job aids I have for my work in the ARNG.

Analysis of variance revealed a significant difference on Item ND38: officers ($\bar{M}$ = 1.89) agreed that active army assistance was available to their units more than NCOs did ($\bar{M}$ = 2.24), and NCOs perceived this assistance to be more available than did junior enlisted soldiers ($\bar{M}$ = 2.68). On the average soldiers neither agreed nor disagreed that the training schedule often gets changed from the original plan (NB23). However, as indicated in the "R" column of Table B-11, officers tended to disagree more with this statement than did NCOs. Table B-12 shows the breakdowns of the responses to NB23 according to Rank. There it can be seen that while NCOs ($\bar{M}$ = 2.95) were slightly positive about the statement officers ($\bar{M}$ = 3.29) mildly disagreed with it.

On the average, soldiers mildly disagreed with three of the Likert-type items asked of all Ranks regarding current training. These were:

1. ND47: Soldiers in my unit know how to operate MILES ($\bar{M}$ = 3.367).

2. NE94: Simulators are available to me during drills ($\bar{M}$ = 3.387).

3. NE93: Simulators are available to me between drills ($\bar{M}$ = 3.776).

Substantial differences by Rank and Unit type were found for Item ND47. Officers tended to agree less than junior enlisted soldiers that soldiers in their units knew how to operate MILES. Soldiers in combat arms units agreed with this statement more than soldiers in combat support units, and the latter agreed more than did soldiers in combat service support units. Tables B-12 and B-13 contain breakdown means for these analyses.

Substantial differences by Rank, Geography, and Unit type were found for item NE94. NCOs tended to agree more than officers did with the statement that simulators were available to them during drills. Soldiers in 5th Army agreed with the

Table B-12

Group Means on Items Regarding Descriptions of Current Training Which Showed a Substantial Difference by Rank in the ARNG

Item	E1-E4s		NCOs		Officers		Overall	
	Mean	n	Mean	n	Mean	n	Mean	sd
NA6: Number of times you've changed MOS voluntarily	.44	619	1.55	687	-	-	1.02	1.49
NA7: Number of times you've changed MOS involuntarily	.17	562	.48	535	-	-	.32	.86
NA24: How many [in hundreds] soldiers are in your unit?	1.04	506	1.06	673	1.50	508	1.19	1.48
NB5: How many months since your last SQT in your duty MOS	5.17	637	8.41	715	-	-	6.89	11.84
NB23: ^a Tng schedule often gets changed from the original	3.05	643	2.95	714	3.29	540	3.08	1.21
NB24: ^a Tng priorities change too often to meet quarterly req	-	-	3.06	702	3.39	529	3.20	1.20
NB62: How often is MILES used in your unit to train bn/sqdn	-	-	3.23	499	3.56	344	3.36	.90
NB65: ^a Audio-visual equipment is used by my unit	2.21	651	2.01	711	1.94	521	2.06	.89
NB66: ^a TEC tapes for the Bessler Cue-See are used by my unit.	2.42	604	2.08	690	2.27	488	2.25	.97
NC10: Hrs receiving tng from Off/NCOs during avg 16 hr drill	7.37	661	4.70	707	-	-	5.99	4.77
ND38: ^a Active Army assistance is available to my unit	2.68	468	2.24	646	1.89	502	2.26	.97

(table continues)

Item	E1-E4s		NCOs		Officers		Overall	
	Mean	n	Mean	n	Mean	n	Mean	sd
ND47: ^a Soldiers in my unit know how to operate MILES	3.19	444	3.36	506	3.60	353	3.67	1.33
NE94: ^a Simulators: are available to me during drills	-	-	3.25	613	3.57	468	3.39	1.20
NU4: Authorized strength [in hundreds] for Off/WOs	0.10	661	0.19	718	0.42	522	0.22	0.39
NU5: Authorized strength [in hundreds] for E1 to E9	1.19	660	1.27	718	2.18	516	1.49	1.43
NU6: Assigned strength [in hundreds] for Off/WOs	0.10	653	0.20	719	0.41	514	0.22	0.42
NU7: Assigned strength [in hundreds] for E1 to E9	1.18	650	1.27	721	2.15	510	1.48	1.39

Note. Items not footnoted rendered ratio data in the unit of measure implied in the item descriptions.

^aLikert scale.

Table B-13

Group Means on Items Regarding Descriptions of Current Training Which Showed a Substantial Difference by Unit Type in the ARNG

Item	Combat		CS		CSS		Overall	
	Mean	n	Mean	n	Mean	n	Mean	sd
NA6: Number of times you've changed MOS voluntarily	.88	578	.93	362	1.34	366	1.02	1.49
NB57:a How often is MILES used in your unit to train individ	3.17	697	3.47	375	3.61	367	3.36	.88
NB58:a How often is MILES used in your unit to trn crew/team	3.06	691	3.41	372	3.60	361	3.29	.93
NB59:a How often is MILES used in your unit to train sqd/sec	3.04	688	3.40	374	3.60	366	3.28	.95
NB60:a How often is MILES used in your unit to train plt/det	3.02	690	3.44	370	3.59	357	3.27	.96
NB61:a How often is MILES used in unit to trn co/trp/btry	3.03	683	3.43	365	3.62	338	3.28	.95
NB62: How often is MILES used in your unit to train bn/sqdn	3.14	391	3.49	205	3.59	247	3.36	.89
NC9: Hrs training others during the avg 16 hr weekend drill	8.25	276	6.70	180	6.48	233	7.25	5.78
NC10: Hrs receiving tng from Off/NCOs during avg 16 hr drill	6.53	618	5.77	370	5.31	380	5.98	4.77
ND47:b Soldiers in my unit know how to operate MILES	2.97	641	3.55	337	3.94	325	3.36	1.33
NE94:b Simulators: are available to me during drills	3.24	442	3.47	289	3.49	350	3.38	1.20

(table continues)

Item	Combat		CS		CSS		Overall	
	Mean	n	Mean	n	Mean	n	Mean	sd
NU4: Authorized strength for Off/WOs	16.82	809	17.85	517	33.73	575	22.20	39.02
NU6: Assigned strength for Off/WOs	15.14	806	17.56	513	36.22	567	22.14	41.90

Note. Items not footnoted rendered ratio data in the unit of measure implied in the item descriptions.

a Four-point, quasi-interval scale with 1 being "often." b Likert scale.

statement more than soldiers across all of the CONUSAs. Soldiers in combat arms units tended to agree with the statement more than did soldiers in combat service support units. Tables B-12, B-13, and B-14 contain breakdown means for these analyses.

A Geographical difference, similar to that for NE94, was also found for NE93. Soldiers in 5th Army tended to agree more than soldiers across all the CONUSAs that simulators were available to them between drills (see Table B-13 for breakdown means).

Five items in Table B-11 assessed the frequency with which MILES was used at various organizational levels. Responses to these items can range from "1" (often) to "4" (never). At nearly every level the average response was somewhere between rarely and never: at the individual level the mean response was 3.366; at the squad/section level the response was 3.282; at the platoon/detachment level the mean was 3.277; at the company/troop/battery level the mean response was 3.281. Thus, soldiers seemed to be indicating that MILES was used even less at the individual and small unit levels than at the larger unit level. This difference, however, is only slight.

Six items regarding Training Description that were asked of all Ranks provided ratio-level data. One of these, NC2, asked what percentage of soldiers' training time is spent on individual-level training. The average response to this question was 42.3%. No differences by Rank, Geography, or Unit type were found.

The other five ratio items involved unit size. NA24 shows that the average unit size for soldiers in the sample was 119 soldiers. Data provided by commanding officers of soldiers in the sample showed that assigned and authorized strengths for E1s-E9s was approximately 148 per unit (Items NU7 and NU5). Assigned and authorized strength for officers and warrant officers in these same units was reported by commanding officers to be approximately 22 (items NU6 and NU4).

All of the training description items that were asked of only junior enlisted soldiers and NCOs produced ratio data. NA7 asked the number of times soldiers had involuntarily changed their MOSs. The average was .322 times, with soldiers in combat arms units having changed less frequently than soldiers in combat support and combat service support units. Means for individual Unit types on items which showed a significant difference by that factor are shown in Table B-14. Item NA6 asked soldiers about the number of times they had changed MOS voluntarily. The average was 1.025 times, with junior enlisted soldiers having changed less frequently than NCOs and soldiers in combat arms and combat support units.

Table B-14

Group Means on Items Regarding Descriptions of Current Training Which Showed a Substantial Difference by Geography in the ARNG

Item	All CONUSAs			Army showing a difference		
	Mean	n	sd	Army	Mean	n
Items regarding descriptions of current training						
NC10:a Hrs receiving tng from Off/NCOs during avg 16 hr drill	5.99	1368	4.77	1	5.37	306
				2	6.87	392
				3	5.39	251
NE94:b Simulators: are available to me during drills	3.39	1081	1.20	5	3.12	180
NE93:b Simulators: are available to me between drills	3.78	1065	1.11	5	3.52	179
Items regarding quality of training						
NE18:b AC schools have enough classroom openings	2.73	1432	1.14	6	3.21	205
NE26:b RF schools have enough funding for soldiers to go	2.76	819	1.08	6	3.07	109
NE19:b AC schools have enough funding for soldiers to go	2.85	1377	1.22	6	3.30	199
ED51:b The NCOs in my unit have good training skills	2.19	666	.84	6	1.90	73

(table continues)

Army showing a difference

All CONUSAs

Item	Mean	n	sd	Army	Mean	n	sd

Item regarding performance ability

ND45:b Soldiers in my unit use crew-served wpns to standard	2.32	1676	.95	6	2.56	219	.99

Item regarding reactions to proposed improvements

NF29:#b Make funds to attend AC sch available more often	2.48	1558	1.18	6	2.18	223	1.14

^aRatio data. ^bItem rephrased to parallel other items in this table as a proposed improvement. ^cThis item is rephrased to parallel other items in this table.

having changed substantially fewer times than soldiers in combat service support units (see Tables B-12 and B-13).

Item NB5 asked soldiers how many months it had been since their last Skill Qualification Test (SQT). The average was 6.9 months.

The remainder of the items in Table B-11 that were asked of junior enlisted soldiers and NCOs only, had to do with how drill time is utilized with regard to training or nontraining tasks. Soldiers said that they spent an average 16-hour drill period in the following way: 6.0 hours receiving training from officers and NCOs, 1.3 hours of which is spent waiting for other people or events; 2.3 hours doing non-MOS, administrative tasks, .8 hours of which are spent waiting for other people or events; 4.6 hours in nonlearning MOS work, 1 hour of which is spent waiting for other people or events; 2.6 hours doing tasks which are both non-MOS and nonadministrative, .8 hours of which is spent waiting for other people or events; 2.7 hours in travel, breaks, or meal time, 1 hour of which is spent in just doing nothing. Obviously these hours do not add up perfectly to the 16-hour drill period. However, they are interesting in and of themselves as proportions of their own total. The actual total equals 18.2 hours, of which 33.0% is spent receiving training, 12.6% is spent doing non-MOS/administrative tasks, 25.3% is spent in nonlearning MOS work, 14.3% is spent doing non-MOS/nonadministrative tasks, and 18.8% is spent in travel, breaks, and mealtime. Of that same 18.2 hours, 4.9 hours (26.9%) were estimated to be spent waiting for other people or events, or doing nothing.

Two Training Description items were asked of NCOs and officers only. Item NB24 stated that training priorities changed too often to meet quarterly requirements. On the average, soldiers neither agreed nor disagreed with this statement. Analysis of variance revealed that NCOs agreed with this statement substantially more than officers (Table B-12).

The second item fits in with items described earlier regarding the frequency of MILES use. NB62 asks how often MILES is used to train on the battalion and squadron level. The average response of 3.36 indicates that MILES is used very seldom at that level. Officers seemed to feel that it was used less often at that level than NCOs perceived it to be. Table B-12 shows the specifics of this breakdown. Apparently MILES is used at the battalion/squadron level about the same amount that it is used at the individual and small unit levels.

Two Training Description items were asked of NCOs only. Since NCOs are principally responsible for personal delivery of training to other soldiers, they were asked how many hours during a 16-hour weekend drill they spent in that kind of

activity. The average response was 7.25 hours. Of that time, 1.27 hours was reportedly spent waiting for other people or events. Analysis of variance revealed a difference by unit type for Item NC9. Table B-13 shows that NCOs in combat arms units reported more hours spent training others than did NCOs in combat support or combat service support units.

Two of the items in Table B-7 are Training Description items. Item NB13 asked who personally conducts most of the training in the soldiers' units. The mode response to this item was "8" which translates to "section leader." This option was selected by 30.6% of the soldiers in the ARNG sample. NCOs tended to select options indicating higher levels of responsibility than did junior enlisted soldiers. Soldiers in combat arms units tended to select options indicating lower levels of responsibility than did soldiers in combat support or combat service support units. Several Training Description items were dichotomous in nature. These yes-no items are listed in Table B-15. As can be discerned from the descriptions of those items, they cover a variety of training topics. The second column in Table B-15 gives the percentage of soldiers who answered "yes" to each item. Rather than relist these percentages here in the text, the reader is directed to Table B-15. Substantial differences by Rank, Geography, and Component were found on many of the items in Table B-15. These are described in detail below.

When asked if they had ever trained with an AC unit while in the RC (NB17), officers (56.8%) and NCOs (51.2%) answered "yes" more frequently than did junior enlisted soldiers (30.5%). Soldiers in 2nd Army (55.4%) answered "yes" more frequently than did soldiers across all CONUSAs (48.7%).

When asked if they had ever personally used MILES during training (NB19), soldiers in combat arms units (48.5%) responded "yes" more frequently than did soldiers in combat support units (26.9%) and these responded "yes" more frequently than did soldiers in combat service support units (18.8%).

When asked if their units had access to a Local Training Area (LTA) within two hours of their armory (NB20), 87.9% of all ARNG soldiers responded "yes." No substantial differences were found by Rank, Geography, or Unit type. Those soldiers who did not have an LTA within two hours were asked: "Does the lack of an LTA hurt training in your unit?" (NB21). Fewer junior enlisted soldiers (35.6%) and NCOs (49.6%) than officers (57.6%) answered "yes" to this question. Fewer soldiers in 2nd Army (39.5%) and more soldiers in 5th Army (59.7%) answered "yes" to this question than soldiers across all the CONUSAs (46.4%). Soldiers in combat arms units (51.6%) and combat support units (49.4%) responded "yes" more than did soldiers in combat service support units (35.1%).

Table B-15

Percentage of ARNG Respondents Who Answered "Yes" to Dichotomous Items Regarding Training Descriptions and Differences in Those Percentages by Rank (R), Geography (G), and Unit Type (U).

Item	%Yes	n	Differences ^a		
			R ^b	G ^c	U ^d
Items asked of all ranks					
NB17: Have you ever trained with an AC unit while in RC	48.7	1956	E<N,O	2>M	-
NB19: Have you personally ever used MILES during training?	33.8	1928	-	-	C>CS>CSS
NB20: Does your unit have access to an LTA within 2 hrs?	87.9	1928	-	-	-
NB21: If not, does lack of an LTA hurt tng in your unit?	46.4	386	E,N>O	2<M<5	C,CS>CSS
NE40: A full-time tng comm is already available to my unit	20.2	1393	E,N>O	-	-
NE45: My next higher HQ already uses a SUTA drill schedule	37.6	1274	E<N,O	-	CS<C,CSS
NE50: My unit already follows an adaptable drill schedule	18.6	1680	E,N>O	-	-
NU3: Has a FT tng off/NCO been asg to your unit for 9 mos	93.9	1964	-	-	-
(table continues)					

(table continues)

Differences

Item	%Yes	n	R	G	U

Item asked of junior enlisted soldiers and NCOs only

NB18: A full-time tng Off/NCO in your next higher HQ?	94.4	1368	-	-	-

Item asked of NCOs and officers only

NB16: Do NCO's conduct small unit tng when officers are gone?	68.6	1247	-	-	CS>CSS

Item asked of NCOs only

NB22: Have you completed the right NCOES for your grade?	77.2	728	-	2>M	-

Item asked of officers only

OB9: OK if NCOs do training without officers present	80.4	525	-	-	C>CSS

^a A 5% difference in the percentage of soldiers giving this option a first choice rating was considered substantial enough to report. Differences of this magnitude were significant (Chi-square adjusted residual) at least at the .01 level. ^bRank: E = Junior enlisted soldiers (E1-E4s). N = NCOs (E5-E9s). O = Officers and warrant officers. ^cGeography: 1, 2, . . . = 1st Army, 2nd Army, . . . M = Mean for all armies. ^dUnit type: C = Combat arms. CS = Combat support. CSS = Combat service support.

NE40 asked soldiers if a full-time training committee was already available to their units. Fewer officers (15.0%) than NCOs (23.4%) and junior enlisted soldiers (21.4%) answered "yes" to this question.

When asked if their next higher headquarters already used a SUTA drill schedule (NE45), fewer junior enlisted soldiers (32.1%) answered "yes" than NCOs (38.3%) or officers (40.8%). Fewer soldiers in combat support units (30.4%) said their higher headquarters used such a drill schedule than did soldiers in combat arms (38.6%) or combat service support units (42.8%).

COs of soldiers were asked if their units had a full-time training officer/NCO during the previous nine months (NU3). Ninety-four percent of the COs of all soldiers responded "yes." No substantial differences were found by Rank, Geography, or Unit type. Junior enlisted soldiers and NCOs only were asked directly if a full-time training officer/NCO was available in their next higher headquarters (NB18). Ninety-four percent responded that one was available.

One item in Table B-15 was asked of NCOs and officers only. NB16 asked if the NCOs in their unit conduct small unit training when the officers are gone. Soldiers in combat support units (71.3%) answered "yes" more frequently than did soldiers in combat service support units (65.5%).

One item in Table B-15 was asked of NCOs only. When asked if they had completed the right Noncommissioned Officer Education System (NCOES) leadership course for their grades (NB22), fewer NCOs in 2nd Army (69.8%) responded "yes" than did NCOs across all the CONUSAs (77.2%).

One item in Table B-15, OB9, was asked of officers only. When asked if they felt comfortable having their NCOs conduct individual/squad/section training while the officers were elsewhere for training, officers in combat arms units (83.2%) responded "yes" more frequently than did officers in combat service support units (77.5%).

Tables B-16 and B-17 give an analysis of the degree to which each of the major training methods was employed in the ARNG. Table B-16 shows the training methods for MOS qualification used by junior enlisted soldiers and NCOs. The survey items which collected this information produced rank-order data. One method for summarizing the responses is shown in the fourth column of Table B-16 which is titled "Most used by what %." A less accurate, but still useful, summary of responses for each of the items in Table B-16 is shown in Column 3, "Mean rank." Both Column 4 and Column 3 of Table B-16 were considered together to order the training methods

Table B-16

Training Methods for MOS Qualification Most Used by ARNG Soldiers

Method	n	Mean rank	Most used by what %	Differences		
				Rank ^a	Geog.	Unit ^b
NB6: AC school	1281	2.35	56.5	E<N**	-	-
NB7: SOJT	1463	1.97	48.3	E>N**	-	-
NB10: RF school	853	4.73	31.2	-	-	-
NB12: Corrspdnce crs	1116	3.59	26.8	E>N**	-	-
NB9: ARNG school	959	3.88	20.3	E>N**	-	-
NB11: Unit school	947	4.05	24.4	-	-	C<CS, CSS*
NB8: Civilian school	869	4.91	42.7	-	-	-

Note. The smaller the rank assigned, the more used the method. Thus E<N means that enlisted soldiers ranked the method as being more used than did NCOs. Differences were analyzed for statistical significance using the Kruskal-Wallis test.

^aRank: E = Junior enlisted soldiers (E1-E4s). N = NCOs (E5-E9s). O = Officers and warrant officers. ^bUnit type: C = Combat arms. CS = Combat support. CSS = Combat service support.

*p < .01. **p < .001.

Table B-17

Training Methods for Branch Qualification Most Used by Officers in the ARNG.

Method	n	Mean rank	Most used by what %	Differences	
				Geog.	Unit
OB4: AC School	587	1.464	70.2	-	-
OB5: Civilian school	395	3.089	49.9	-	-
OB6: RF school	419	2.568	35.3	-	-
OB7: Corrspdnce crs	536	2.144	37.7	-	-

Note. The smaller the rank assigned, the more used the method. Differences were analyzed for statistical significance using the Kruskal-Wallis test.

according to degree of use for MOS qualification. The result is the order in which the methods are listed in Table B-16. As can be seen there, AC school is the method most used for MOS qualification: 56.5% of the junior enlisted soldiers and NCOs in the sample indicated that this was the method that they had used most. Supervised on-the-job training (SOJT) was most used by 48.3% of the junior enlisted soldiers and NCOs in the sample. The remaining methods were ranked in the following order: RF school, correspondence courses, ARNG school, unit school, and civilian school. Differences in the degree to which each of the training methods were used for MOS qualification were tested by Rank, Geography, and Unit type using the Kruskal-Wallis test. Table B-16 shows a number of significant differences. Three of the training methods for MOS qualification were used less by junior enlisted soldiers than by NCOs. These methods were: SOJT, correspondence courses, and ARNG school. The opposite is true for AC school. That is, NCOs used AC school as the primary means for MOS qualification less than junior enlisted soldiers did.

Soldiers in 5th Army indicated that they use correspondence courses as a method of MOS qualification less than do soldiers in all of the CONUSAs. Soldiers in combat arms units said that they used Unit school as a method for MOS qualification more than did soldiers in combat support or combat service support units.

Table B-17 shows the training methods used by officers for branch qualification. AC school was the method most used, followed by civilian school, RF school, and correspondence courses. No differences by Geography or Unit type were found.

Quality of Training

The type of survey items which were grouped into the "Quality of Training" category have to do with soldiers' perceptions and value judgements about the training they have received. The Quality of Training category of items is different from the Performance category in that the latter type of items asks soldiers to evaluate their own or their unit members' performance of duty position skills. Such performance could partially be seen as an outcome of training and other factors. Quality of Training items, on the other hand, asked soldiers to evaluate the training itself rather than its outcome.

Table B-18 contains the means for all Quality of Training items which are quasi-interval and ratio in nature. The questions in this table are sorted and listed in order of their means within the Rank(s) of which they were asked. The vast majority of these items were rated on the favorable side of the Likert scale. Positive Likert-type items are those where a

Table B-18

Grand Means and Differences by Rank (R), Geography (G), and Unit Type (U) for ARNG Soldiers on Items Regarding Quality of Training

Item	Mean	n	Differences			
			Ra	Gb	Uc	Interactionsd
Items asked of all ranks						
NE77: Effective for individual tng: AT	1.751	1929	-	-	-	-
NE15: AC schools have good facilities	1.876	1483	-	-	-	-
NE57: Job aids are useful	1.876	1875	-	-	-	-
ND34: AC schools do a good job of training soldiers	1.884	1803	-	-	-	-
NE75: Effective for individual tng: SOJT	1.885	1873	-	-	-	-
NE104: Helpful in sufficient quantity: Tech Manuals	1.893	1945	-	-	-	-
NE103: Helpful in sufficient quantity: FMs	1.900	1949	-	-	-	-
NE102: Helpful in sufficient quantity: STPs/SMs	1.913	1949	-	-	-	-
NE13b: AC Schools have good instructors	1.921	1490	-	-	-	-
NE16: AC schools have good equipment	1.934	1489	-	-	-	-
(table continues)						

(table continues)

Differences

Item	Mean	n	R	G	U	Interactions
NE14: AC schools have good course content	1.937	1488	-	-	-	-
NE109: Helpful in sufficient quantity: ARTEP or equivalent	2.014	1883	-	-	-	-
NB26: NCOs in my unit require soldiers to meet SM standards	2.042	1939	-	-	-	-
NE6b: ARNG schools have good instructors	2.058	1301	-	-	-	-
NE110: Helpful in sufficient quantity: Tng Circulars	2.070	1890	-	-	-	-
NE7: ARNG schools have good course content	2.079	1300	-	-	-	-
NE111: Helpful in sufficient quantity: Field Circulars	2.094	1877	-	-	-	-
ND26: My unit's leaders know their jobs.	2.102	1967	-	-	-	-
NE108: Helpful in sufficient quantity: Job Books	2.106	1931	-	-	-	-
NC29:e Time not wasted with tng over the soldiers' heads	2.111	1917	-	-	-	-
NE105: Helpful in sufficient quantity: TEC lessons for QC	2.141	1790	-	-	-	-
NB49: My unit has enough ARNG Regs to support tng	2.142	1879	-	-	-	-
NB48: My unit has enough Army Regulations to support tng	2.177	1868	-	-	-	-

(table continues)

Differences

Item	Mean	n	R	G	U	Interactions
ND32: ARNG schools do a good job of training soldiers	2.192	1730	-	-	-	-
NE107: Helpful in sufficient quantity: NG Regs	2.215	1929	-	-	-	-
NB54: NCOs help well with SM tasks on which subs are weak	2.219	1913	-	-	-	RU
NB55: NCOs correct individual soldier weaknesses well	2.234	1920	N<O	-	-	-
ND39: Active Army assistance is helpful to my unit	2.239	1606	E>O	-	-	-
NE106: Helpful in sufficient quantity: Army Regs	2.244	1923	-	-	-	-
NE8: ARNG schools have good facilities	2.252	1304	-	-	-	-
NE76: Effective for individual tng: IDT	2.261	1909	-	-	-	-
NB50: My unit has enough Job Books to support training	2.264	1868	-	-	-	-
NC24:e Time not wasted with topics unimport to unt missn	2.307	1884	-	-	-	-
NB43: In my unit, unit training is supervised well	2.317	1952	-	-	-	GU
NE21: RF schools have good course content	2.329	861	-	-	-	-
NB41: In my unit, ARTEP tng is tailored to wartime mission	2.346	1824	-	-	-	RU

(table continues)

Differences

Item	Mean	n	R	G	U	Interactions
NE9: ARNG schools have good equipment	2.368	1301	-	-	-	-
NB51: My unit has enough Tac/ARTEPs Tng Guides to spt tng	2.412	1802	-	-	-	-
NB44: My unit has enough STPs/SMs to support training	2.412	1930	-	-	-	GU
ND90:e Poor quality of training has not made me want to leave	2.415	1924	E>O	-	-	-
NE20b: RF schools have good instructors	2.421	865	-	-	-	-
NB42: In my unit, individual training is supervised well	2.438	1964	-	-	-	GU
NB45: My unit has enough Field Manuals to support training	2.441	1918	-	-	-	-
NB52: My unit has enough Training Circulars to spt tng	2.456	1800	-	-	-	-
NB46: My unit has enough Tech Manuals to support training	2.458	1904	-	-	-	-
NB40: In my unit, ARTEP training is interesting	2.474	1842	-	-	-	-
NE10: ARNG schools have easy-to-meet course schedules	2.477	1313	-	-	-	-
NB47: My unit has enough TEC tapes to support training	2.483	1736	-	-	-	-
NE24: RF schools have easy-to-meet course schedules	2.487	865	-	-	-	-

(table continues)

Differences

Item	Mean	n	R	G	U	Interactions
NB56: NCOs use gaps in tng well to help subs imp indiv skls	2.490	1897	E,N<O	-	-	-
ND33: RF schools do a good job of training soldiers	2.496	1407	-	-	-	-
NB39: In my unit, ARTEP training is realistic	2.507	1835	-	-	-	-
NE25: RF schools have enough classroom openings	2.518	848	-	-	-	-
NB53: My unit has enough Field Circulars to support tng	2.552	1760	-	-	-	-
NE22: RF schools have good facilities	2.568	851	-	-	-	-
NE11: ARNG schools have enough classroom openings	2.594	1303	-	-	-	-
NB38: ARTEP tng is tailored to needs/abilities of soldiers	2.618	1810	-	-	-	-
NE23: RF schools have good equipment	2.649	841	E<O	-	-	-
NC26:e Time not wasted with tng that is not well organized	2.685	1925	E>O	-	-	-
NE18: AC schools have enough classroom openings	2.729	1432	E<N<O	6>M	-	-
NC30:e Time not wasted with sldrs who don't try hard	2.731	1919	E,N>O	-	-	-
NC27:e Time not wasted with equip often breaking down	2.734	1901	-	-	-	-

(table continues)

Differences

Item	Mean	n	R	G	U	Interactions
NE26: RF schools have enough funding for soldiers to go	2.764	819	-	6>M	-	-
ND89:e Too much wasted tng time has not made me want to leave	2.766	1921	E,N>O	-	-	-
ND49: Tng needs of soldiers in my unit are met during IDT	2.780	1829	E<O	-	-	-
NB27: The way my unit uses MILES helps mission capab	2.791	874	-	-	C<CS, CSS	-
NE17: AC schools have easy-to-meet course schedules	2.815	1404	E,N<O	-	-	-
NE19: AC schools have enough funding for soldiers to go	2.847	1377	E<N<O	6>M	-	-
NE12: ARNG schools have enough funding for soldiers to go	2.923	1266	E<O	-	-	-
ND29:e Tng sched changes do not hurt qual of tng in my unit	2.980	1918	-	-	-	-
NC28:e Time not wasted with tng facil/equip/materl unavail	3.019	1919	-	-	-	-
NC25:e Time not wasted with other reqmnts interfering with tng	3.690	1925	E<N,O	-	-	-
NE59: In my unit hip pocket tng needs no improvement	3.769	1223	-	-	-	-

Items asked of junior enlisted soldiers and NCOs only

ND37:e Training in my unit is not too repetitive.	3.092	1387	-	-	-	(table continues)

Differences

Item	Mean	n	R	G	U	Interactions
NC10b:f How many hrs help build/maintain your skills	4.185	1344	E>N	-	-	-
ND21:f Percent of reclass tng like to get from correspond	9.847	1079	-	-	-	-
ND16:f Percent of reclass tng like to get from RF school	9.987	1059	-	-	-	-
ND18:f Percent of reclass tng like to get from Unit school	11.271	1083	-	-	-	-
ND20:f Percent of reclass tng like to get from home study	11.980	1078	-	-	-	-
ND19:f Percent of reclass tng like to get from civilian sch	13.140	1085	-	-	-	-
ND17:f Percent of reclass tng like to get from ARNG school	13.950	1103	-	-	-	RU
ND22:f Percent of reclass tng like to get from SOJT	27.698	1204	-	-	-	-
ND15:f Percent of reclass tng like to get from AC school	34.549	1199	-	-	-	RG

Items asked of NCOs and officers only

NE78: Effective for individual tng: Active Army schools	1.792	1257	-	-	-	-
NE86: Effective for individual tng: Overseas deployment tng	1.864	1182	-	-	-	-
NE97:g SOJT helps soldiers to be MOS qualified faster	1.880	1270	-	-	-	-

(table continues)

Differences

Item	Mean	n	R	G	U	Interactions
NE81: Effective for individual tng: individual training	1.933	1282	-	-	-	-
NF38: NCOs can perform skills they are resp to teach others	1.943	1247	-	-	-	-
NE82: Effective for individual tng: unit training	1.972	1284	-	-	-	-
NF36: NCOs in my unit have good training skills	1.983	1261	-	-	-	-
NE85: Effective for individual tng: unit exercises	2.027	1272	-	-	-	-
NE84: Effective for individual tng: joint tng exercises	2.204	1095	-	-	-	-
NE83: Effective for individual tng: joint readiness exer	2.267	1078	-	-	-	-
NE79: Effective for individual tng: RF schools	2.378	1113	-	-	-	-
NE98:e SOJT helps the quality of training	2.403	1257	-	-	-	-
NE80: Effective for individual tng: MOBEXs	2.409	1221	-	-	-	-
NC16:e AT evals don't detract from effient tng of my unit	2.459	1221	N>0	-	-	-
NC22:e Phys fitness tests don't detract from eff tng of unit	2.532	1247	-	-	-	-
NE100:e SOJT helps the quality of indiv tng	2.541	1253	-	-	-	-

(table continues)

Differences

Item	Mean	n	R	G	U	Interactions
NE101:e SOJT helps the quality of unit tng	2.571	1252	-	-	-	-
NF21 e Insufficient people to help conduct tng not a prob	2.665	1109	-	-	-	-
NC17:e IDT evals don't detract from effictnt tng of my unit	2.689	1169	-	-	-	-
NC21:e Phys exams don't detract from effictnt tng of my unit	2.773	1235	-	-	-	-
NC20:e Maint Insp don't detract from efficient tng of my unit	2.834	1233	-	-	-	-
NF15:e Insufficient training materials not a problem	2.925	1113	-	-	-	-
NF23:e Unit reorganization not a tng obstacle	2.936	1064	-	-	-	-
NF18:e Lack of a local training area not a problem	2.936	1106	-	-	-	-
NF40:e Unit doesn't lack realstc chances to use equip/skills	3.099	1248	-	-	-	-
NF20:e Insufficient classroom space not a problem	3.121	1110	-	-	-	-
NF19:e Lack of other physical facilities not a problem	3.137	1106	-	-	-	-
NF39:e Don't get conflicting tng guidance from diff higher HQ	3.144	1226	-	-	C>CSS	-
NC19:e Annual Genl Insp don't hurt effictnt tng of unt	3.154	1238	-	-	C,CS>CSS	-

(table continues)

Differences

Item	Mean	n	R	G	U	Interactions
NF22:e Soldier turnover is not a problem for tng my subords	3.195	1109	-	-	C>CSS	GU, RG
NC18:e Cmd Visits/Insp don't hurt efficiant tng of my unit	3.214	1245	-	-	C, CS>CSS	-
NF13:e Insuficent time to prepare not a probl for tng subords	3.244	1107	-	-	-	RG
NE99:g SOJT helps personnel retention	3.411	1213	-	-	-	-
NC15:e My unit doesn't train on more tasks than can learn in avail time	3.446	1178	-	-	C>CSS	-
NF14:e Insufficient time to conduct tng not a problem	3.481	1111	-	-	-	-
NF17:e Shortage of the right equip not a tng problem	3.537	1107	-	-	-	-
NF16:e Lack of simulators/tng devices not a problem	3.627	1084	-	-	CS>CSS	RU, RG
ND23:f What % of unit NCOs have good training skills	67.599	1245	-	-	-	-
ND24:f What % of unit NCOs can perf skills they teach	70.334	1235	-	-	-	-

Items asked of officers only

OD18:f Would want corresp course for what % of retrain	12.813	449	-	-	-	(table continues)

Differences

Item	Mean	n	R	G	U	Interactions
OD16:e Would want civilian school for what % of retnng	15.337	445	-	-	-	-
OD15:f Would want RF school for what % of retraining	16.064	455	-	-	-	-
OD17:f Would want Home Study for what % of retraining	16.861	452	-	-	-	-
OD14:f Would want AC school for what % of retraining	51.718	504	-	-	-	-

Items asked of NCOs only

NF2: Contrib to my tng success: prev ldr/counseling tng	1.956	586	-	-	-	-
NF5: Contrib to my tng success: reference books	2.037	602	-	-	-	-
NF4: Contrib to my tng success: higher HQ guidance	2.053	582	-	-	-	-
NF3: Contrib to my tng success: prev tng on "how to train"	2.053	582	-	-	-	-
NF11: Contrib to my tng success: trainers' manuals	2.054	598	-	-	-	-
NF7: Contrib to my tng success: help with conduct of tng	2.114	595	-	-	-	-
NF6: Contrib to my tng success: help with tng set-up	2.196	596	-	-	-	-
NF1: Contrib to my tng success: suggestions from others	2.201	573	-	-	-	-

(table continues)

Differences

Item	Mean	n	R	G	U	Interactions
NF10: Contrib to my tng success: hip pocket tng materials	2.285	586	-	-	-	-
NF9: Contrib to my tng success: simulators	2.342	520	-	-	-	-
ND55: I've had success tng my subord to reqd rdns levels	2.351	696	-	-	-	-
NF8: Contrib to my tng success: computers	2.847	452	-	-	-	-
NC9c:f How many hrs help build/maintain your ldr skills	3.691	676	-	-	C>CS, CSS	-
NC9b:f How many hours really help others maintain skills	4.314	679	-	-	C>CS, CSS	-

Items asked of junior enlisted soldiers only

EDt : NCOs in unit perf skills they are resp to trn othr on	2.179	664	-	-	-	-
ED51: The NCOs in my unit have good training skills	2.192	666	-	6<M	-	-

Note. The majority of items in this table are Likert scales. Exceptions are footnoted. All differences reported are statistically significant at the .001 level and substantial (at least a quarter of a scale point, or 5%, or one-fourth of the sd).

aRank: E = Junior enlisted soldiers (E1-E4s). N = NCOs (E5-E9s). O = Officers and warrant officers. bGeography: 1, 2, . . . = 1st Army, 2nd Army, . . . M = Mean for all armies. cUnit type: C = Combat arms. CS = Combat support. CSS = Combat service support. dInteraction terms: RG = rank by geography. RU = rank by unit type. GU = geography by unit type. eThis item has been rephrased and the polarity of its mean

(table continues)

reversed so as to parallel the "positive" Likert scales. f This item rendered ratio data in the unit of measure implied in the item description. g This item is rephrased to parallel other items in this table.

strong agreement indicates a favorable response. A favorable response on a positive item could range between 1 (strongly agree) to 3 (medium). Negative Likert-type items were reversed statistically so as to agree with positive ones. Thus a mean of 1 (strongly agree) would reflect a favorable response, rather than an unfavorable one. This was done in order to accommodate the ordering of items according to favorability of responses.

As can be seen in Table B-18, the Quality of Training items that received a mean response of "agree" (2.00) or better and were asked of all three Ranks were:

1. NE77: Annual Training is an effective means for training individual soldiers.
2. NE15: Active Component schools have good facilities.
3. NE57: Job aids, such as diagrams or checklists which are readily available are useful.
4. ND34: Active Component schools do a good job of training ARNG or USAR soldiers.
5. NE75: Supervised On-the Job Training (SOJT) is an effective means for training individual soldiers.
6. NE104: Technical Manuals are helpful when available in sufficient quantity.
7. NE103: Field Manuals are helpful when available in sufficient quantity.
8. NE102: Soldier Training Publications/Soldier's Manuals are helpful when available in sufficient quantity.
9. NE13b: Active Component schools have good instructors.
10. NE16: Active Component schools have good equipment.
11. NE14: Active Component schools have good course content.

Several Likert-type items regarding Quality of Training were asked of only NCOs and officers. Of these, seven items received a mean response of "agree" (2.00) or better. These were:

1. NE78: Active Component schools are an effective means for training individual soldiers.
2. NE86: Overseas Deployment Training (ODT) is an effective means for training individual soldiers.
3. NE97: If Supervised On-the-Job Training (SOJT) were eliminated as a method of MOS reclassification training, I think it would take longer for soldiers to become MOS qualified.

4. NE81: Individual training is an effective means for training individual soldiers.

5. NF38: I can perform the skills that I am responsible to teach others.

6. NE82: Unit training is an effective means for training individual soldiers."

7. NF36: I have good training skills.

Fourteen Likert-type items regarding Quality of Training were asked of NCOs only. Only one of these was responded to with a mean of less than 2.0. This item was NF2, "Previous training in leadership and counseling techniques is an important contributor to my success in personally training subordinates." Neither of the Likert-type items regarding Quality of Training that were asked of only junior enlisted soldiers were responded to with a mean of less than 2.0.

Table B-18 lists numerous items regarding Quality of Training which received moderate agreement, i.e., means ranging from 2.00 to 3.00. Means in this range indicate favorability; that is, the facet of training being evaluated was seen as having good quality. Rather than relist all of these here, the reader is directed to the table.

Although soldiers responded favorably to training in general, a few of the Quality of Training items received a mean response which was less than favorable (though not strongly so) i.e., less than 3.00. As responses to these items imply, there are certain areas which, while not strongly negative, still need attention more urgently than others. Those areas which seem to need attention are (in order, starting with the least favorable mean):

1. NE59: Hip pocket training.
2. NC25: Too many nontraining requirements.
3. NF16: Lack of simulators and training devices.
4. NF17: Shortage of the right equipment.
5. NF14: Insufficient time to conduct training.
6. NC15: Training on more tasks than can be learned in available time.
7. NF13: Insufficient time to prepare training.
8. NC18: Too many command visits and inspections.
9. NF22: Soldier turnover.
10. NC19: Interference of annual general inspections.
11. NF39: Conflicting training guidance from different higher headquarters.

12. NF19: Lack of physical facilities other than LTAs (firing ranges, armories, training centers, etc.).
13. NF20: Insufficient classroom space.
14. NF40: Lack of realistic chances to use equipment and skills.
15. ND37: Too much repetition in training.
16. NC28: Wasted time because of unavailable facilities, equipment, or materials.

Several facets of training were judged differently by soldiers in the various Ranks. These differences are noted in the Rank column of Table B-18. Breakdown means for the three Ranks are given in Table B-19 whenever a difference by Rank is noted in Table B-18. Those differences by Rank, which are especially noteworthy, are expressed textually below.

NCOs and junior enlisted soldiers agreed more strongly than officers that NCOs used gaps in training well to help subordinates improve individual skills (NB56). Officers agreed more strongly than NCOs and junior enlisted soldiers that time is not wasted because of soldiers who don't try hard (NC30) or that too much wasted training time is not a problem which would make them want to leave the RC (ND89). Junior enlisted soldiers did not agree as strongly as did officers that training time is not wasted because of poorly organized training (NC26). While all soldiers disagree that time is not wasted because of other requirements interfering, officers and NCOs disagreed more strongly than did junior enlisted soldiers (NC25). Responses to statements dealing with AC schools showed officers agreeing less than junior enlisted soldiers and NCOs that AC schools have:

1. NE17: Course schedules that are easy to meet.
2. NC18: Enough classroom openings.
3. NE19: Enough funding for soldiers to attend.

Only four substantial differences in Geography were found for Quality of Training items. The first three differences consisted of soldiers in 6th Army agreeing less with certain statements about schools than did soldiers across all of the CONUSAs. These statements were to the effect that: AC schools have enough classroom opening (NE18), AC schools have enough funding for soldiers to go (NE19), and RF schools have enough funding for soldiers to go (NE26). Item ED51, which was asked of junior enlisted soldiers only, also showed a difference for 6th Army. In this case, however, junior enlisted soldiers in 6th Army agreed more strongly than did soldiers across all the CONUSAs that NCOs in their units have good training skills. Breakdown means for these analyses are shown in Table B-13.

Table B-19

Group Means on Items Regarding Quality of Training Which Showed a Substantial Difference by Rank in the ARNG

Item	E1-E4s		NCOs		Officers		Overall	
	Mean	n	Mean	n	Mean	n	Mean	sd
NB55: I correct individual soldier weaknesses well	2.27	675	2.08	729	2.40	516	2.23	.90
NB56: I use gaps in unit tng well to help sub imp indv skls	2.44	670	2.33	722	2.77	505	2.49	.98
NC10b: How many hrs help build/maintain your skills	5.06	648	3.37	696	-	-	4.19	4.13
NC16: AT evals detract from efficient training of my unit	-	-	2.66	700	2.40	521	2.55	1.09
NC25:a Time not wasted with other reqmnts interfering with tng	3.14	669	3.34	719	3.51	537	3.58	1.12
NC26:a Time not wasted with tng that is not well organized	2.86	669	2.66	719	2.49	537	2.69	1.14
NC30:a Time not wasted with sldrs who don't try hard	2.91	668	2.84	717	2.35	534	2.73	1.24
ND39: Active Army assistance is helpful to my unit	2.41	463	2.22	645	2.11	498	2.24	.91
ND49: Tng needs of soldiers in my unit are met during IDT	2.66	588	2.74	715	2.96	526	2.78	.96
ND89:a Too much wasted tng time has not made me want to leave	2.93	676	2.78	721	2.53	524	2.77	1.20
ND90:a Poor quality of training has not made me want to leave	2.57	677	2.42	724	2.21	523	2.42	1.05

(table continues)

Item	E1-E4s		NCOs		Officers		Overall	
	Mean	n	Mean	n	Mean	n	Mean	sd
NE12: ARNG schools have enough funding for soldiers to go	2.73	278	2.90	557	3.08	431	2.92	1.17
NE17: AC schools have easy-to-meet course schedules	2.50	401	2.72	507	3.17	496	2.81	1.15
NE18: AC schools have enough classroom openings	2.37	417	2.73	519	3.03	496	2.73	1.14
NE19: AC schools have enough funding for soldiers to go	2.49	387	2.85	505	3.13	485	2.85	1.22
NE23: RF schools have good equipment	2.52	172	2.58	341	2.79	328	2.65	.93

^aThis item has been rephrased and the polarity of its mean reversed so as to parallel the "positive" Likert scales.

Analyses of variance pointed out a number of differences by Unit type in how soldiers rated facets of training. Breakdown means for these analyses are shown in Table B-20. Item NB27 states, "The way my unit uses MILES helps attain mission capability." Soldiers in combat arms units agreed with this statement more strongly than soldiers in combat support or combat service support units.

Soldiers in combat service support units agreed more strongly than did soldiers in other types of units with the following statements:

1. NF39: I receive conflicting training guidance from various higher headquarters.
2. NC19: Annual general inspections detract from the efficient training of my unit.
3. NF22: Soldier turnover is a serious obstacle to my success in training subordinates.
4. NC18: Command visits/inspections detract from the efficient training of my unit.
5. NC15: My unit trains on more tasks than can be trained to standard within the time available.
6. NF16: Lack of simulators/training devices are serious obstacles to my success in training subordinates.

Several of the items in Table B-18 are not Likert-type scales. Rather they obtained responses which are ratio data. Generally they are items which requested that the respondent estimate a number of hours or a percentage. These items are identified with a footnote in Table B-18. With ratio items, a larger mean indicates a more favorable response.

Item NC10b, "How many hours spent receiving training help to build or maintain your skills?" must be interpreted in light of soldiers' responses to Item NC10 (which was reported in Table B-11), "On an average 16-hour weekend drill period (MUTA-4) how much of your time is spent receiving training that is closely supervised by NCOs or officers?" Since the average answer to the later was 5.990 hours and the mean for NC10b was 4.185 hours, soldiers were indicating that roughly 70% (4.185 divided by 5.990) of the time they spent receiving training is actually helpful. While it is unfortunate that nearly two thirds of the soldiers' time in drills appears to be taken up by nontraining activities, it is gratifying to note that most of the time spent actually receiving training was thought by soldiers to be worthwhile. Differences indicated in Table B-18 between junior enlisted soldiers and NCOs are merely artifactual. This is so because the same difference between junior enlisted soldiers and NCOs is found for Item NC10 as it

Table B-20

Group Means on Items Regarding Quality of Training Which Showed a Substantial Difference by Unit Type in the ARNG

Item	Combat		CS		CSS		Overall	
	Mean	n	Mean	n	Mean	n	Mean	sd
NB27: The way my unit uses MILES helps mission capab	2.59	494	2.91	205	2.19	175	2.79	1.35
NC9b: ^a How many hours really help others maintain skills	5.00	274	3.90	176	3.80	229	4.31	4.06
NC9c: ^a How many hrs help build/maintain your ldr skills	4.37	272	3.21	175	3.24	229	3.69	4.29
NC15: ^b My unit doesn't train on more tasks than can learn in avail time	3.60	455	3.40	314	3.30	409	3.44	1.15
NC18: ^b Cmd Visits/Insp don't hurt efficient tng of my unit	3.31	482	3.29	332	3.03	431	3.21	1.13
NC19: ^b Annual Genl Insp don't hurt efficient tng of unit	3.21	480	3.30	326	2.96	432	3.15	1.14
NF16: ^b Lack of simulators/tng devices not a problem	3.63	436	3.77	296	3.49	352	3.62	1.09
NF22: ^b Soldier turnover is not a problem for tng my subords	3.31	443	3.17	304	3.06	362	3.19	1.09
NF39: ^b Don't get conflicting tng guidance from diff higher HQ	3.26	474	3.15	333	3.00	419	3.14	1.13

Note. The majority of items in this table are Likert scales. Exceptions are footnoted.

^aThis item rendered ratio data in the unit of measure implied in the item description.

^bThis item has been rephrased and the polarity of its mean reversed so as to parallel the "positive" Likert scales.

is for Item NC10B. Thus the percentage remains approximately the same regardless of Rank.

NCOs were asked a similar question regarding how much of the time they spend in a MUTA-4 training others is perceived by themselves as being helpful to themselves (NC9c) or to those whom they are training (NC9b). These two items from Table B-18 must be interpreted in light of NCO responses to item NC9 (reported in Table B-11), "On an average 16-hour weekend drill period (MUTA-4), how much of your time is spent training others?" The mean response to this item was 7.25 hours. Since the mean responses to NC9B and NC9C were 4.314 and 3.691 respectively, NCOs felt that roughly 59.4% of the time they spent training was actually helpful in building or maintaining the skills of other soldiers and 50.9% of the time they spent training others was actually helpful in building their own leadership skills. The differences by Unit type shown for items NC9B and NC9C in Table B-18 are somewhat artifactual. That is, when responses to NC9B and NC9C are expressed as proportions of Item NC9, these differences disappear. This means that although soldiers in combat arms units ($\bar{M}$ = 8.25 hours) indicated that they spent more time training soldiers than did soldiers in combat support and combat service support units (6.7 and 6.48 hours respectively), the percentage of hours that they indicated were helpful in maintaining the skills of others or of themselves was the same for NCOs in combat arms units as it was for NCOs in combat support and combat service support units.

Two percentage items asked of only NCOs and officers requested estimates of NCO capabilities. The first, ND23, inquired "What percentage of the NCOs in your unit have good training skills?" The mean response was 67.6%. The second, ND24, asked "What percentage of NCOs in your unit can perform the skills they are responsible for teaching?" The mean response was 70.3%. Thus, NCOs were rated fairly well in terms of their training ability, but there is still room for improvement.

The remaining non-Likert-type items in Table B-18 all have to do with soldier preferences for methods of reclassification. On these items soldiers were asked to imagine that they were changing MOS or branch and indicate what percentage of their training they would prefer to receive through each of various methods. For these items, the higher the mean the more preferred was the training method. As can be seen in the "junior enlisted soldiers and NCOs only" section of Table B-18 the most preferred method of reclassification training was AC school ($\bar{M}$ = 34.5%). The next highest preference was for SOJT ($\bar{M}$ = 27.7%). The next most preferred method of reclassification training was ARNG school ($\bar{M}$ = 14.0%) followed by civilian school ($\bar{M}$ = 13.1%), home study ($\bar{M}$ = 12.0%), unit

school ($\bar{M}$ = 11.3%), RF school ($\bar{M}$ = 10.0%), and correspondence course ($\bar{M}$ = 9.8%). These figures were a reaffirmation of the way ARNG soldiers valued AC school and SOJT as methods of reclassification training.

A similar but slightly different set of questions asked junior enlisted soldiers and NCOs which method for receiving reclassification training they would prefer if they could select only one method. Soldiers were asked to rank order their preferences. Table B-21 shows the results of these questions. The order of preference implied by the order in which the methods are listed in Table B-21 was derived by simultaneous consideration of the "Mode rank," "Mean rank," and "1st choice for what %" columns of the table. When allowed only one way of receiving reclassification training, soldiers most preferred AC school, even over SOJT. After SOJT they chose ARNG school, then unit school, then civilian school, then paid home study based on follow-up testing (possible option in the future), then RF school, followed by correspondence courses. Thus, ARNG soldiers would prefer to get the bulk of reclassification training through AC school and SOJT, mixed with a variety of other sources; but if only one source were available they would prefer AC school.

Four items in Table B-18 dealt with officer preferences among four training methods which could be used for branch requalification. They were asked what percentage of their training they would like to receive through each of the four methods. For these items, the higher the mean, the more preferred the training method. In the "officers only" section of Table B-18, the most preferred method of reclassification training was AC school. This method received more than double the preference assigned to the next highest method ($\bar{M}$ = 51.7% versus 16.9%). Home study, RF school, and civilian school received nearly the same indication of preference (means = 16.86, 16.06, and 15.34 respectively). Correspondence courses were least preferred for branch retraining with officers saying that they would like to obtain 12.8% of their retraining through this method.

A similar but slightly different set of questions asked officers which method for receiving reclassification training they would prefer if they could select only one of the five methods. Officers were asked to rank order their preferences. Table B-22 shows the results of these questions. When allowed only one means of obtaining reclassification training, officers preferred AC school far above any other method. This method was more preferred by soldiers in combat service support units than by soldiers in combat support units and the latter preferred AC school more than did soldiers in combat arms units. The remaining four methods of reclassification training were ranked about equally with one another. However, a slight

Table B-21
 Preferences of Junior Enlisted Soldiers and NCOs in the ARNG on Single Methods of
 Reclassification Training

	Method	Mode rank	Mean rank	1st choice for what %	Differences ^a		
					Rank	Geog.	Unit
ND7:	AC school	1	3.2	45.5	-	-	-
ND14:	SOJT	1	3.3	26.5	-	-	-
ND9:	ARNG school	3	3.9	9.5	-	-	-
ND10:	Unit school	5	4.6	5.6	-	-	-
ND11:	Civilian school	8	4.9	10.0	-	-	-
ND12:	Paid home study	7	5.2	9.5	-	-	-
ND8:	RF school	7	4.8	4.3	-	-	-
ND13:	Corrspdnce crs	8	5.4	4.0	-	-	-

^a A 5% difference in the percentage of soldiers giving this option a first choice rating was considered substantial enough to report. Differences of this magnitude were significant (Chi-square adjusted residual) at least at the .01 level.

Table B-22

Preferences of ARNG Officers on Single Methods of Retraining for Change of Branch

Method	Mode Rank	Mean Rank	1st Choice for what %	Differences ^a	
				Geog.	Unit ^{b,c}
OD9: AC school	1	1.8	68.8 ^b	-	C>CS>CSS*
OD10: RC school	2	2.8	7.0	-	-
OD11: Civilian school	3	3.17	8.7	-	CS>C>CSS*
OD12: Paid home study	4	3.5	9.9	-	-
OD13: Correspondence course	5	3.7	6.3	-	-

^aA 5% difference in the percentage of soldiers giving this option a first choice rating was considered substantial enough to report. Differences of this magnitude were significant (Chi-square adjusted residual) at least at the .01 level. ^bn = 535. ^cUnit type: C = Combat arms. CS = Combat support. CSS = Combat service support.

*p < .05.

indication of the order of preference among these last four is indicated by the order in which they are listed in Table B-22. This order was determined by considering simultaneously the "Mode rank" column, the "Mean rank" column, and the "1st choice for what %" column.

Satisfaction

Items in the "Satisfaction" category provide information on soldiers' affective responses toward various aspects of being in the ARNG. Quality of Training items are different from Satisfaction items in that the former ask for value judgements on how training is conducted, while the latter ask soldiers their own affective responses toward aspects of being in the ARNG. Like Performance, Satisfaction might be seen partially as an outcome of training rather than an evaluation of the training itself. Table B-23 provides the basic details on these items. Mean responses on all Likert-type, Satisfaction items are favorable (i.e., means are less than 3.00, indicating agreement). The means in Table B-23 are listed in order of their favorability. Accordingly, the aspect of being in the ARNG which soldiers found to be most satisfactory was their good working relationship with their unit leaders ($M = 1.835$). Officers agreed with this Satisfaction statement more strongly than did junior enlisted soldiers. Specific means for breakdowns by Rank are shown in Table B-24.

Soldiers solidly agreed that they are satisfied with the following:

1. ND68: Friends in their units.
2. ND74: Doing something worthwhile and important in the ARNG.
3. ND66: Having a chance to help protect their country.
4. ND85: Getting along with soldiers in their units.
5. ND62: Being in the ARNG in general.
6. ND57: The way the ARNG lets them defend their country.
7. ND28: The number of awards that are given to soldiers.
8. ND73: Opportunities in the ARNG to be responsible and lead.
9. ND58: Opportunity in the ARNG to earn a retirement.
10. ND64: Their assignments in the ARNG.
11. ND71: The way the ARNG allows them to maintain military retirement benefits.

Table B-23

Grand Means and Differences by Rank (R), Geography (G), and Unit Type (U) for ARNG Subjects on Items Regarding Satisfaction

Item	Differences				
	Mean	n	R ^a	G	U Interactns ^b
Items asked of all ranks					
ND35: I have a good working relatnshp with my unit ldrs	1.835	1966	E>O	-	- RG
ND68: Stay in the RC: friends I have in my unit	1.917	1973	-	-	-
ND74: Stay in the RC: doing something worthwhile/important	1.925	1970	E,N>O	-	-
ND66: Stay in the RC: chance to help protect my country	1.951	1967	-	-	-
ND85:c Not getting along with soldiers in my unit is not making me want to l	eave	1.972	1894	E>O	- -
ND62: I'm satisfied with being in the ARNG/USAR	2.002	1893	E>O	-	-
ND57: I'm satisfied with how RC lets me defend my country	2.038	1965	-	-	-
ND28:c Right amt of awards are given to soldiers in my unit	2.043	1955	-	-	-
ND73: Stay in the RC: opportu- nities to be responsible/lead	2.048	1967	E,N>O	-	-
ND58: I'm satisfied with how RC lets me earn a retirement	2.086	1954	E>O	-	-

(table continues)

Item	Differences				
	Mean	n	R	G	U Interactions
ND64: I'm satisfied with my assignment in the ARNG/USAR	2.097	1895	E>O	-	-
ND71: Stay in the RC: retire-ment benefits in the military	2.143	1952	E,N>O	-	-
ND69: Stay in the RC: change of pace from my civilian job	2.145	1811	-	-	-
ND80:c Plans to move have not made me want to leave	2.147	1743	E>N,O	-	RG
ND42: I have confidence in my unit's leader(s)	2.154	1969	N>O	-	RG
ND60: I'm satisfied with how RC gives me change of pace	2.184	1964	E,N>O	-	-
ND59: I'm satisfied with how RC lets me get educ benefits	2.226	1926	E,N<O	-	-
ND75: Stay in the RC: my status in the military	2.239	1968	E>N,O	-	-
ND70: Stay in the RC: the pay I receive	2.250	1966	E>N>O	-	-
ND61: I'm satisfied with how RC maintained my AC rank/resp	2.274	1450	-	-	-
ND82:c Low morale in my unit has not made me want to leave	2.288	1903	E,N>O	-	-
ND63: I'm satisfied with my pay in the ARNG/USAR	2.314	1893	E>N>O	-	-
ND87:c Boring work has not made me want to leave	2.347	1913	E>N>O	-	-

(table continues)

Differences

Item	Mean	n	R	G	U' Interactions
ND72: Stay in the RC: the military atmosphere	2.349	1968	E>O	-	-
ND81:c Low pay in the RC has not made me want to leave	2.354	1904	E>N,O	-	-
ND67: Stay in the RC: good morale in my unit	2.382	1973	E,N>O	-	-
ND56: I'm satisfied with how RC lets me learn a skill	2.391	1952	-	-	-
ND76: Stay in the RC: my status in the community	2.399	1935	-	-	-
ND44: Discipline is handled fairly in my unit	2.402	1944	E,N>O	-	-
ND84:c Difficulty keeping up with knowledge/skills has not made me want to leave	2.417	1910	-	-	-
ND83:c Leave the RC: pressure to work to hard in my duty asg	2.417	1910	-	-	-
ND30: The morale in my unit is high	2.420	1967	E,N>O	-	-
ND78:c Family concerns have not made me want to leave	2.622	1875	-	-	-
ND43: Promotions are handled fairly in my unit	2.631	1933	E,N>O	-	RG
ND79:c My civilian job has not made me want to leave	2.667	1761	-	-	-

(table continues)

Differences

Item	Mean	n	R	G	U	Interactions
ND92:c Leave the RC: not do all I would like to do out of RC	2.682	1898	-	-	-	-
ND27: Adequate recognition and awards given for good perf	2.694	1970	-	-	-	-
ND88:c Lack of recognition for what I do has not made me want to leave	2.711	1913	E,N>O	-	-	-
ND86:c Getting promoted slower than I wanted has not made me want to leave	2.718	1904	E>N>O	-	-	RU
ND91:c Not being able to do all I would like to do in the RC has not made me want to leave	2.795	1923	-	-	-	-
ND36: Soldiers in unit are promoted when they should be	2.884	1946	E>N>O	-	-	RG
ND31: I joined the ARNG/USAR in order to learn a skill	2.962	1930	E<N<O	-	-	-
ND2:d How many more yrs I'd stay in RC if asgt didn't change	9.485	1873	-	-	-	-
ND3:d How many more yrs I'd stay if RC if I could change asgt	11.143	1729	E,N<O	-	-	-
NU8:d Percentage of soldiers in your unit replaced in past year	15.656	1830	-	-	-	-

Item asked of junior enlisted soldiers and NCOs only

ND65: I'm satisfied with qual- ity of tng in my current asg	2.403	1887	-	-	-	-

(table continues)

Note. The majority of items in this table are Likert scales. Exceptions are footnoted. All differences reported are statistically significant at the .001 level and substantial (at least a quarter of a scale point, or 5%, or one-fourth of the sd).

^aRank: E = Junior enlisted soldiers (E1-E4s). N = NCOs (E5-E9s). O = Officers and warrant officers. ^bInteraction terms: RG = rank by geography. RU = rank by unit type. RC = rank by component. GU = geography by unit type. GC = geography by component. ^cThis item has been rephrased and the polarity of its mean reversed so as to parallel the "positive" Likert scales. ^dThis item rendered ratio data in the unit of measure implied in the item description.

Table B-24

Group Means on Items Regarding Satisfaction Which Showed a Substantial Difference by Rank in the ARNG

Item	E1-E4s		NCOs		Officers		Overall	
	Mean	n	Mean	n	Mean	n	Mean	sd
ND3: ^a How many more yrs I'd stay if RC if I could change asgt	10.21	579	10.49	651	13.08	499	11.14	9.63
ND30: The morale in my unit is high	2.63	680	2.47	744	2.09	543	2.42	1.09
ND31: I joined the ARNG/USAR in order to learn a skill	2.57	670	3.01	734	3.40	526	2.96	1.28
ND35: I have a good working reltnshp with my unit ldrs	2.03	682	1.79	743	1.65	541	1.84	.77
ND36: Soldiers in unit are promoted when they should be	3.15	672	2.88	740	2.56	534	2.88	1.19
ND42: I have confidence in my unit's leader(s)	2.21	684	2.23	742	1.98	543	2.15	.91
ND43: Promotions are handled fairly in my unit	2.88	661	2.64	738	2.32	534	2.63	1.12
ND44: Discipline is handled fairly in my unit	2.48	668	2.47	738	2.21	538	2.40	1.02
ND58: I'm satisfied with how RC lets me earn a retirement	2.25	670	2.03	740	1.97	544	2.09	.89
ND59: I'm satisfied with how RC lets me get educ benefits	2.14	673	2.15	733	2.44	520	2.23	1.05
ND60: I'm satisfied with how RC gives me change of pace	2.28	679	2.26	743	1.96	542	2.18	.96

(table continues)

Item	E1-E4s		NCOs		Officers		Overall	
	Mean	n	Mean	n	Mean	n	Mean	sd
ND62: I'm satisfied with being in the ARNG/USAR	2.20	645	1.96	719	1.81	529	2.00	.82
ND63: I'm satisfied with my pay in the ARNG/USAR	2.57	648	2.30	720	2.02	525	2.31	.97
ND64: I'm satisfied with my assignment in the ARNG/USAR	2.28	650	2.09	722	1.88	523	2.10	.85
ND67: Stay in the RC: good morale in my unit	2.55	682	2.41	747	2.13	544	2.38	1.00
ND70: Stay in the RC: the pay I receive	2.49	681	2.23	742	1.98	543	2.25	.92
ND71: Stay in the RC: retirement benefits in the military	2.35	666	2.07	743	1.99	543	2.14	.95
ND72: Stay in the RC: the military atmosphere	2.48	678	2.36	745	2.17	545	2.35	.94
ND73: Stay in the RC: opportunities to be responsible/lead	2.25	681	2.09	741	1.73	545	2.05	.88
ND74: Stay in the RC: doing something worthwhile/important	2.09	681	1.96	744	1.68	545	1.93	.84
ND75: Stay in the RC: my status in the military	2.46	681	2.20	744	2.01	543	2.24	.92
ND80: ^b Plans to move have not made me want to leave	2.41	627	2.02	656	1.96	460	2.15	1.01
ND81: ^b Low pay in the RC has not made me want to leave	2.64	672	2.29	716	2.07	516	2.35	1.06
ND82: ^b Low morale in my unit has not made me want to leave	2.50	668	2.34	719	1.94	516	2.29	1.08

(table continues)

Item	E1-E4s		NCOs		Officers		Overall	
	Mean	n	Mean	n	Mean	n	Mean	sd
ND85:b Not getting along with soldiers in my unit is not making me want to leave	2.14	664	1.97	714	1.76	516	1.97	.91
ND86:b Getting promoted slower than I wanted has not made me want to leave	3.10	670	2.77	718	2.15	516	2.72	1.30
ND87:b Boring work has not made me want to leave	2.73	673	2.29	719	1.92	521	2.35	1.09
ND88:b Lack of recognition for what I do has not made me want to leave	2.92	671	2.74	718	2.41	524	2.71	1.21

Note. The majority of items in this table are Likert scales. Exceptions are footnoted.

^aThis item rendered ratio data in the unit of measure implied in the item description.

^bThis item has been rephrased and the polarity of its mean reversed so as to parallel the "positive" Likert scales.

12. ND69: The way the ARNG provides a change of pace from civilian jobs (see also ND60).

13. ND42: The confidence they have in their unit leaders.

14. ND59: Education benefits.

15. ND75: Their status in the military.

Milder agreement (means ranging from 2.25 to 3.0) was indicated by soldiers on a variety of other items, all of which are listed in Table B-23. Those items which reflected the lowest degree of soldier satisfaction include the following areas:

1. ND36: Timeliness of promotions.

2. ND91: Ability to accomplish within the ARNG.

3. ND86: Speed of rank advancement.

4. ND88: Amount of personal recognition.

5. ND27: Adequacy of recognition and awards given to soldiers in one's unit.

6. ND92: Ability to accomplish all they would like to do outside of the ARNG without ARNG interference.

7. ND43: Fairness of promotion.

Again it should be stressed that while soldiers were least satisfied with the items listed above, responses were nonetheless favorable. The general view provided by these least favorable Satisfaction means is that stagnation, i.e., lack of upward progression in the ARNG, is probably the major cause of soldier dissatisfaction in the ARNG. It is clear from the differences indicated in the Rank column of Table B-23 that Satisfaction tended to increase with Rank. That is, where differences were found, they were always in the order of officers being more satisfied than NCOs and NCOs being more satisfied than junior enlisted soldiers. Breakdowns by Rank for these items are shown in Table B-24.

Three non-Likert-type items contributed to the Satisfaction picture. The first, ND2, is the number of years soldiers said that they would stay in the ARNG even if they had to stay in their present assignment. The average response was 9.5 years. If given a chance for a new assignment (NB3), soldiers on the average said that they would stay 11.1 years.

The third non-Likert item is an indirect indicator of Satisfaction. Unit commanders of respondents were asked the percentage of soldiers in their units who were replaced in the past year. The average response was 15.66%.

Performance

Items in the "Performance" category asked soldiers to evaluate their own or their unit members' performance of duty positions skills. Such performance could be seen as an outcome of training and other factors. All Performance items in the survey were stated with a positive valence.

The Performance item most strongly agreed with was asked of NCOs and officers only. Responses to this item, ND54, indicated solid agreement ($\bar{M} = 1.933$) that the overall performance of respondents' units in ARTEP training was good. This item is shown at the bottom of Table B-25. Solid agreement ($\bar{M} = 1.95$) was also indicated for Item ND46, "My unit is able to conduct sustained operations by continuously operating in the field for 72 hours or more."

Fairly strong agreement was also found for Item ND95, "Soldiers in my unit are good at performing MOS-specific tasks from the Soldier's Manual." The mean response to this item was 2.234. Milder agreement was found for the remainder of the Likert-type items in the Performance category. These items (ND96, ND45, ND94, and ND40) are listed together with their means in Table B-25.

The relatively high means for all of the Likert-type items regarding Performance is noteworthy. Soldiers in the ARNG apparently have a high degree of confidence in their own abilities to perform the tasks for which they are trained.

Four ratio-type items are included in the Performance category. Soldiers were asked what percentage of soldiers in the three Ranks would be able to perform well if their unit were mobilized (ND4, ND5, ND6). They responded that 64.2% of the E1s to E4s, 74.5% of the NCOs, and 70.6% of the officers could perform well if their unit were mobilized. NCOs were rated higher than the officers in their ability to perform, though this difference is small.

Soldiers from all three Ranks were asked, "What percentage of the critical tasks required for your duty assignment can you perform to standard?" (ND1). The overall average was 76.3%. No differences by Geography or Unit type were found for this item.

Junior enlisted soldiers and NCOs were asked what percentage of MOS tasks they had performed to Soldier Manual standard during the past year (NB1). While this item did not ask how many tasks they could perform to Soldier Manual standards, the average answer of 63.9% is somewhat of an indication of Performance ability from the perspective of frequency, recency, or currentness.

Table B-25

Grand Means and Differences by Rank (R), Geography (G), and Unit Type (U) for ARNG Soldiers on Items Regarding Performance Ability

Item	Mean	n	Differences			Interactions
			Ra	Gb	U	
			Items asked of all ranks			
ND46: My unit can operate in the field for 72 hrs or more	1.948	1818	-	-	-	-
ND95: Soldiers in my unit can do MOS tasks from the SM	2.234	1907	-	-	-	-
ND96: Soldiers in my unit can do missn essentl ARTEP tasks	2.251	1834	-	-	-	-
ND45: Soldiers in my unit use crew-served wpns to standard	2.316	1676	-	6>M	-	GU
ND94: Soldiers in my unit can do common tasks from the SM	2.331	1924	-	-	-	-
ND40: It's easy to maintain my duty asg individual skills	2.591	1962	-	-	-	RU
ND4:d Percent of E1-4 who could perform well if mobilized	64.196	1879	-	-	-	-
ND6:d Percent of Offs who could perform well if mobilized	70.633	1874	-	-	-	-
ND5:d Percent of NCOs who could perform well if mobilized	74.535	1896	-	-	-	-
ND1:d Percentage of critical tasks I can do to standard	76.272	1893	E,N<O	-	-	-
						(table continues)

(table continues)

Item	Differences				
	Mean	n	R	G	U
Item asked of junior enlisted soldiers and NCOs only					
NB1: ^a Percent of MOS tasks you perf to SM standards this yr	63.870	1252	-	-	-
Item asked of NCOs and officers only					
ND54: The overall perf of my unit in ARTEP tng is good	1.933	1207	-	-	-

Note. The majority of items in this table are Likert scales. Exceptions are footnoted. All differences reported are statistically significant at the .001 level and substantial (at least a quarter of a scale point, or 5%, or one-fourth of the sd).

^aRank: E = Junior enlisted soldiers (E1-E4s). N = NCOs (E5-E9s). O = Officers and warrant officers. ^bGeography: 1, 2, . . . = 1st Army, 2nd Army, ... M = Mean for all armies. ^cInteraction terms: RG = rank by geography. RU = rank by unit type. RC = rank by component. GU = geography by unit type. GC = geography by component. ^dThis item rendered ratio data in the unit of measure implied in the item description.

One of the items in Table B-25 (Item ND1) showed a difference by Rank. Table B-26 shows that while officers felt that they could perform 80.7% of the critical tasks required for their duty assignments, NCOs felt that they could perform 75.8% of their critical tasks, and junior enlisted soldiers felt that they could perform 73.2% of their critical tasks to standard.

Another item in Table B-25 (ND45) showed a difference by Geography. This item asked soldiers if they agreed that members of their units could use their crew-served weapons to standard. Soldiers in 6th Army tended to agree with this statement less than all the soldiers that were sampled. Details on this analysis are shown in Table B-13.

Four items regarding soldier Performance were dichotomous in nature. These yes-no questions are shown in Table B-27. The first of these items, NA27, asked junior enlisted soldiers and NCOs if they were qualified in any MOS, to which 95.2% answered "yes." The second item asked junior enlisted soldiers and NCOs if they were qualified at the correct skill level for their assignment, to which 87.7% responded "yes." Item NB15 asked only NCOs the following: "During a 16-hour drill period (MUTA-4), would you feel comfortable conducting individual/squad/section training while all of the officers were elsewhere for training?" Ninety-two percent responded "yes." Item OA25 asked only officers if they were branch qualified, to which 92.3% responded "yes."

Reactions to Proposed Improvements

Numerous items in the survey suggested various improvements that could be made in ARNG training methods. Details on the responses to these items are found in Table B-28. Wherever a difference in responses existed by Rank, Geography, or Unit type, breakdown means are given in Tables B-13, B-29, and B-30 respectively. The means in Table B-28 are listed in order with the most favorably received suggestion for improvement at the top. Rather than relist all of these proposed improvements and their means in the text, the reader is invited to derive this information from Table B-28. Important highlights from that Table follow:

Among the hundreds of agree-disagree items included in the survey only one received stronger agreement in the ARNG sample than the item listed at the top of Table B-28, i.e. NE28: "If a home study course were available to help you train for your duty assignment, video cassettes would probably be effective." (The one item that had a stronger degree of agreement, stated that AT was an effective means of training.) This finding underscores the feasibility both of home study and of video cassettes as methods for ARNG training. This is an important

Table B-26

Group Means on Items Regarding Performance Ability Which Showed a Substantial Difference by Rank in the ARNG

Item	E1-E4s		NCOs		Officers		Overall	
	Mean	n	Mean	n	Mean	n	Mean	sd
ND1: ^a Percentage of critical tasks I can do to stndrd	73.18	647	75.83	716	80.65	530	76.27	21.24

^aThis item rendered ratio data in the unit of measure implied in the item description.

Table B-27

Percentage of ARNG Respondents Who Answered "Yes" to Dichotomous Items and Differences in Those Percentages by Rank (R), Geography (G), and Unit Type (U).

Item	%Yes	n	Differences ^a		
			R	G ^b	U
Items asked of junior enlisted soldiers and NCOs only					
NA27: Are you qualified in any MOS?	95.2	1411	-	-	-
NA28: Are you qualified at correct skill level for your assignment?	87.7	1330	-	-	-
Item asked of NCOs only					
NB15: If no officers, could you conduct small unit training?	92.0	729	-	-	-
Item asked of officers only					
OA25: Are you branch qualified?	92.3	520	-	4<M	-

^aA 5% difference in the percentage of soldiers giving this option a first choice rating was considered substantial enough to report. Differences of this magnitude were significant (Chi-square adjusted residual) at least at the .01 level. ^bGeography: 1, 2, . . . = 1st Army, 2nd Army, ... M = Mean for all armies.

Table B-28

Grand Means and Differences by Rank (R), Geography (G), and Unit Type (U) for ARNG Soldiers on Items Regarding Reactions to Proposed Improvements

Item	Mean	n	Differences			
			R ^a	G ^b	U ^c	Interactns ^d
Items asked of all ranks						
NE28: Home study: video cassette would be effective	1.766	1891	-	-	-	-
NE33: Good idea: unit soldiers more MOS task tng	2.015	1948	-	-	-	-
NB32: I need more of right equip to maintain indiv skills	2.018	1926	-	-	-	-
NE31: Good idea: unit soldiers trained with an AC unit	2.031	1939	E,N>O	-	-	-
NB33: Need better facilities for tng to maintn indiv skills	2.047	1917	-	-	-	RU
NE34: Good idea: MILES were used more for tng in my unit	2.076	1471	-	-	C,CS<CSS	-
NB36: More sim/tng devices would help maintain indiv skills	2.090	1879	-	-	C<CSS	GU,RU
NE115: Tng more effective if: tng refs were better org	2.123	1909	-	-	-	-
NE71: Improve unit tng: better training materials	2.151	1892	E,N<O-	-	-	-
NE69: Improve unit tng: more access to computers/simulator	2.160	1902	-	-	-	-
(table continues)						

(table continues)

Differences

Item	Mean	n	R	G	U	Interactions
NE38: Full-time tng comm: MOS qualification training	2.170	1883	-	-	-	-
NE39: Full-time tng comm: skill retention training	2.207	1870	-	-	-	-
NE36: Full-time tng comm: MILES installation on vehicles	2.228	1410	-	-	C<CSS	-
NE55: More job aids would be helpful to me in my duty assg	2.239	1899	-	-	-	-
NE37: Full-time tng comm: ARTEP control & umpiring	2.250	1746	-	-	-	-
NE32: Good idea: unit soldiers did more Common task tng	2.278	1943	-	-	-	-
NE112: Tng more effective if: tng refs were consolidated	2.284	1843	E,N>O	-	-	-
NE29: Home study: personal computer would be effective	2.306	1792	-	-	-	-
NE65: Work more RC hrs: home study with pay and follow-up	2.331	1872	-	-	-	-
NE68: Improve unit tng: better training preparation	2.379	1882	-	-	-	-
NE70: Improve unit tng: more rewards for good performance	2.379	1930	E>N	-	-	-
NE30: Home study: corres courses would be effective	2.389	1894	E<O	-	-	-
NE67: Improve unit tng: better use of training time	2.391	1896	E>N,O	-	-	-

(table continues)

Differences

Item	Mean	n	R	G	U	Interactions
NE64: Work more RC hrs: extra paid time between drills	2.401	1895	N>O	-	-	-
NE27: Home study: audio cassette would be effective	2.454	1864	-	-	-	-
NE114: Tng more effective if: tng refs were easier to read	2.472	1900	-	-	-	-
NF29:e Make funds to attend AC sch available more often	2.479	1558	E>N,O	6<M	-	-
NB34: Less wasted tng time would help maintain indiv skills	2.481	1897	-	-	-	-
NB35: Tng better organized would help maintain indiv skills	2.502	1908	E,N<O	-	-	-
NE35: Full-time tng comm: range set up	2.506	1776	-	-	-	-
NB31: Need more tng materials to maintain individual skills	2.535	1930	-	-	-	GU
NE116: Tng more effective if: tng refs had more pictures	2.637	1894	E>O	-	-	-
NE73: Improve unit tng: better hip pocket/opportunity tng	2.648	1826	-	-	-	RU
NF26:e Offer AC tng at times that match my sched more often	2.685	1632	-	-	-	-
NE44:f SUTA drill sched: easier for me to attend drills	2.703	1649	-	-	-	-
NE72: Improve unit tng: better tng in common/MOS skills	2.731	1824	E>N,O	-	-	-

(table continues)

Differences

Item	Mean	n	R	G	U	Interactions
NE49:f Adaptable drill sched: easier for me to attend drills	2.830	1717	-	-	-	RU
NF28:e Open more AC sch classes so it's easier to get in	2.833	1476	E>N,O	-	-	RU
NF25:e Make AC courses shorter so it's easier to attend	2.871	1624	E>N,O	-	-	-
NE41: SUTA more effective: individual readiness	2.897	1721	-	-	-	-
NE53: Seasonal AD w/RC: specify time of year and location	2.942	1726	E>N,O	-	-	-
NE113: Tng more effective if: tng refs were reduced	2.945	1860	E,N>O	-	-	-
NE63: Work more RC hrs: more MUTA-5s and MUTA-6s	2.952	1863	-	-	-	RG
NE117: Tng more effective if: there were fewer indiv tasks	3.041	1906	-	-	-	-
NE60: Work more RC hrs: a longer(3 weeks+) AT each year	3.053	1917	E>O	-	-	-
NE42: SUTA more effective: unit readiness	3.064	1721	E<O	-	-	-
NE118: Tng more effective if: my unit had fewer unit tasks	3.075	1887	-	-	-	GU
NB37: Less unit-level tng would help maintain indiv skills	3.153	1877	-	-	-	-
NE61: Work more RC hrs: an extra AT each year	3.170	1916	-	-	-	-

(table continues)

Differences

Item	Mean	n	R	G	U	Interactions
NF27:e Reduce conflict btw unit sched & AC sch tng dates	3.199	1613	E>N,O	-	-	-
NE43: SUTA drill sched: easier for me to attend drills	3.231	1680	-	-	-	-
NE62: Work more RC hrs: more weekend drills	3.257	1922	E,N>O	-	-	-
NE46: Adaptable drill sched: more effective for indiv tng	3.258	1733	E<O	-	-	-
NE48: Adaptable drill sched: easier for me to attend drills	3.276	1723	-	-	-	RG
NE51: Seasonal AD w/RC: specify time of year/not location	3.290	1724	-	-	-	-
NF31:e Need easier way to get orders in time to attend AC sch	3.359	1572	-	-	-	-
NE47: Adaptable drill sched: more effective for unit tng	3.398	1723	E<O	-	-	-
NE3:g How many extra MUTA-4s per year would help your unit:	3.416	1806	-	-	-	-
NF30:e Need easier way to meet Preregs to attend AC sch	3.770	1558	E,N<O	-	-	-
NE52: Seasonal AD w/RC: specify location/not time of year	3.865	1706	E<O	-	-	-
NE54: Seasonal AD w/RC: specify neither time of year or loc	4.098	1680	-	-	-	-
NE4:g How many extra AT days per year would help your unit	5.640	1826	-	-	-	-

(table continues)

Differences

Item	Mean	n	R	G	U	Interactions
NE2:g How many extra UTAs per year would help your unit	7.943	1780	E<O	-	-	-
NE1:g How many ATAs per year would help your unit	13.864	1767	E<O	-	-	-
NC1:g How many paid hrs/mo over MUTA4 would you work for RC	24.137	1757	-	-	-	-

Items asked of NCOs and officers only

NF37: I would like to learn how to be a better trainer	1.768	1257	-	-	-	-
NE91: Use personal computer at Armory: during drills	1.914	1227	-	-	-	-
NE96: Simulators: need to be used more for training	1.942	1098	-	-	-	GU
NE92: Simulators: could help me improve my own skills	2.013	1160	-	-	-	RU, RG
NE88: Study at home for pay: in addition to weekend drills	2.034	1225	-	-	-	-
NE58: In my unit hip pocket tng should be done more freq	2.296	1231	-	-	-	-
NE90: Would use PC at Armory: between drills	2.312	1223	-	-	-	-
NE95: Simulators: need to be operational more of the time	2.377	903	-	-	-	-
NF32:e Reducing paperwork for tng would improve tng	2.678	1217	-	-	-	-

(table continues)

Differences

Item	Mean	n	R	G	U	Interactions
NF33:e Reducing paperwork for personnel would improve tng	2.748	1211	-	-	-	-
NF34:e Reducing paperwork for supply would improve tng	2.814	1210	-	-	-	-
NF35:e Reducing paperwork for maintenance would improve tng	2.864	1210	-	-	C,CS>CSS	-
NE89: Study at home for pay: in place of weekend drill	3.058	1217	-	-	-	-

Item asked of junior enlisted soldiers only

EE35: Good idea if addnl wk of AT were done another month	2.932	649	-	-	CS<CSS	-

Note. The majority of items in this table are Likert scales. Exceptions are footnoted. All differences reported are statistically significant at the .001 level and substantial (at least a quarter of a scale point, or 5%, or one-fourth of the sd).

^aRank: E = Junior enlisted soldiers (E1-E4s). N = NCOs (E5-E9s). O = Officers and warrant officers. ^bGeography: 1, 2, . . . = 1st Army, 2nd Army, . . . M = Mean for all armies. ^cUnit type: C = Combat arms. CS = Combat support. CSS = Combat service support. ^dInteraction terms: RG = rank by geography. RU = rank by unit type. RC = rank by component. GU = geography by unit type. GC = geography by component. ^eThis item is rephrased to parallel other items in this table. ^fThis item has been rephrased and the polarity of its mean reversed so as to parallel the "positive" likert scales. ^gThis item rendered ratio data in the unit of measure implied in the item description.

Table B-29

Group Means on Items Regarding Reactions to Proposed Improvements Which Showed a Substantial Difference by Rank in the ARNG

Item	E1-E4s		NCOs		Officers		Overall	
	Mean	n	Mean	n	Mean	n	Mean	sd
NB35: Tng better organized would help maintain indiv skills	2.31	666	2.50	722	2.76	520	2.50	1.14
NE1:a How many ATAs per year would help your unit	9.66	569	13.79	686	18.64	512	13.86	20.52
NE2:a How many extra UTAs per year would help your unit	6.18	575	8.26	687	9.48	518	7.94	12.09
NE30: Home study: correspond- ence would be effective	2.26	633	2.37	728	2.58	533	2.39	1.00
NE31: Good idea: unit soldiers trained with an AC unit	2.11	669	2.15	734	1.77	536	2.03	1.00
NE42: SUTA more effective: unit readiness	2.95	564	3.05	657	3.21	500	3.06	1.15
NE46: Adaptable drill sched: more effective for indiv tng	3.08	573	3.30	664	3.42	496	3.26	1.17
NE47: Adaptable drill sched: more effective for unit tng	3.21	570	3.40	663	3.62	490	3.40	1.12
NE52: Seasonal AD w/RC: specify location/not time of year	3.70	623	3.85	614	4.09	469	3.86	1.10
NE53: Seasonal AD w/RC: specify time of year and location	2.68	633	3.05	620	3.14	473	2.94	1.53
NE60: Work more RC hrs: a longer(3 weeks+) AT each year	3.19	670	3.04	721	2.89	526	3.05	1.39

(table continues)

Item	E1-E4s		NCOs		Officers		Overall	
	Mean	n	Mean	n	Mean	n	Mean	sd
NE62: Work more RC hrs: more weekend drills	3.37	674	3.32	720	3.03	528	3.26	1.26
NE64: Work more RC hrs: extra paid time between drills	2.41	668	2.50	707	2.25	520	2.40	1.13
NE67: Improve unit tng: better use of training time	2.62	627	2.29	731	2.26	538	2.39	.96
NE70: Improve unit tng: more rewards for good performance	2.61	658	2.18	734	2.37	538	2.38	1.06
NE71: Improve unit tng: better training materials	1.96	624	2.25	731	2.24	537	2.15	.89
NE72: Improve unit tng: better tng in common/MOS skills	3.71	563	2.28	732	2.32	529	2.73	1.16
NE112: Tng more effective if: tng refs were consolidated	2.39	615	2.34	703	2.08	525	2.28	.89
NE113: Tng more effective if: tng refs were reduced	3.07	627	3.04	708	2.66	525	2.95	1.07
NE116: Tng more effective if: tng refs had more pictures	2.47	647	2.63	719	2.84	528	2.64	.97
NF25:b Make AC courses shorter so it's easier to attend	3.15	523	2.80	606	2.67	495	2.87	1.19
NF27:b Reduce conflict btw unit sched & AC sch tng dates	3.41	509	3.13	607	3.07	497	3.20	1.06
NF28:b Open more AC sch classes so it's easier to get in	3.10	463	2.80	554	2.60	459	2.83	1.13
NF29:b Make funds to attend AC sch available more often	2.70	479	2.43	594	2.32	485	2.48	1.18

(table continues)

Item	E1-E4s		NCOs		Officers		Overall	
	Mean	n	Mean	n	Mean	n	Mean	sd
NF30:b Need easier way to meet prereqs to attend AC sch	3.55	477	3.70	594	4.07	487	3.77	.92

Note. The items in this table are Likert scales.

^aThis item rendered ratio data in the unit of measure implied in the item description.

^bThis item is rephrased to parallel other items in this table.

Table B-30

Group Means on Items Regarding Reactions to Proposed Improvements Which Showed a Substantial Difference by Unit Type in the ARNG

Item	Combat		CS		CSS		Overall	
	Mean	n	Mean	n	Mean	n	Mean	sd
EE35: Good idea if addnl wk of AT were done another month	2.95	324	2.77	187	3.12	138	2.93	1.42
NB36: More sim/tng devices would help maintain indiv skills	1.99	816	2.06	509	2.26	554	2.09	1.08
NE34: Good idea: MILES were used more for tng in my unit	2.00	700	1.99	396	2.31	375	2.08	1.07
NE36: Full-time tng comm: MILES installation on vehicles	2.14	674	2.20	365	2.40	371	2.22	1.03
NF35: ^a Reducing paperwork for maintenance would improve tng	2.76	470	2.76	328	3.08	412	2.86	1.17

Note. The items in this table are Likert scales.

^aThis item is rephrased to parallel other items in this table.

finding since home study courses do not detract from time available for unit training, and video cassettes are a relatively inexpensive medium to use.

Suggested improvements which were well received by all three Ranks included:

1. NE28: Home study with video cassette.
2. NE33: More MOS task training.
3. NB32: More of the right equipment.
4. NE31: More time training with an active army unit.
5. NB33: Better facilities for training.
6. NE34: More frequent use of MILES.
7. NB36: More simulators and training devices.
8. NE115: Better organized training references.
9. NE71: Better training materials.
10. NE69: More access to computers and simulators.
11. NE38: A full-time training committee to assist with MOS qualification training.
12. NE39: A full-time training committee to assist with skill retention training.
13. NE36: A full-time training committee to assist with MILES installation on vehicles.
14. NE55: More job aids.
15. NE37: A full-time training committee to assist with ARTEP control and umpiring.

Two of the items listed above showed a difference by Rank. While junior enlisted soldiers ($\bar{M}$ = 2.11) and NCOs ($\bar{M}$ = 2.15) solidly agreed that it would be a good idea if unit soldiers trained with an AC unit (NE31), officers ($\bar{M}$ = 1.77) were even more enthusiastic supporters of the idea. Junior enlisted soldiers ($\bar{M}$ = 1.96) agreed more than did NCOs ($\bar{M}$ = 2.25) or officers ($\bar{M}$ = 2.24) that better training materials would improve unit training (NE71).

Several proposed improvements were presented to NCOs and officers only. These items are contained in the "Items asked of NCOs and officers only" section of Table B-28. The item with which they agreed the most was NF37, "I would like to learn how to be a better trainer." The favorability with which this statement was received is outstanding ($\bar{M}$ = 1.768), given that its mean is one of the highest in the survey and given that most NCOs and officers had already had a number of years of experience in training. This indicates, as does research in the field of education, that experience in training does not

necessarily provide a trainer with the skills needed to do the job. The highly favorable response to Item NF37 is a call for improvements in the programs now used to teach NCOs and officers the skills of training per se.

The next four items in order of favorability of means showed NCO and officer acceptance of technology as aids in training. NE91 called for the use of personal computers at the armory or training center. NE96 and NE92 called for wider use of simulators by trainees, trainers, and training managers alike. Study at home for pay in addition to weekend drills (NE88) was also well received by NCOs and officers as a suggestion to enhance training.

Proposed improvements which received milder agreement (means ranging from 2.25 to 3.00) are listed in Table B-28 under all three subsections. Rather than relist all of these here, the reader is directed to the table. One of the items which received milder agreement showed a difference by Rank which is of research interest. Item NE53 asked if soldiers would be able to go on full time active duty on a seasonal basis (2 or 3 months out of every year) if they could specify both the time of year and the location. The overall mean for this item was 2.94, a neutral response. However, junior enlisted soldiers ($M = 2.68$) were much more able to go on seasonal active duty than were officers ($M = 3.14$). The degree of agreement between the two Ranks is different by three quarters of a scale point. This is one of the largest differences in the entire survey effort. The mean for NCOs on this item was 3.05, approximately midway between the responses of junior enlisted soldiers and those of officers.

It is also of research interest to note that a fairly substantial difference existed between the overall means of Items NE88 ($M = 2.03$), (study at home for pay in addition to weekend drills) and NE89 ($M = 3.06$), (study at home for pay in place of weekend drills). The difference between these two means is one scale point in favor of home study in addition to weekend drills.

All Ranks agreed that if training were better organized it would help maintain individual skills. It is noteworthy that junior enlisted soldiers agreed much less with this statement than did officers (NB35). All Ranks also agreed that if more AC school classes were opened up, and AC school courses were shorter, they would be easier to attend. Junior enlisted soldiers disagreed much less than NCOs and officers with these statements. The differences may be accounted for by assuming that junior enlisted soldiers use AC schools primarily for Basic and Advanced Individual Training, while NCOs and officers look to the AC school system for classes that are fewer in number, smaller in size, and which require the use of limited

funding to attend (NF28 and NF25). Officers agreed that training would be more effective if the number of training references were reduced, while both junior enlisted soldiers and NCOs disagreed (NE113).

Proposed improvements for which soldiers either were neutral or tended to disagree were those which had means ranging from 3.00 to 4.20. All such items are at the end of the section of Table B-28 subtitled "Items asked of all ranks." Those suggestions which were least well received are listed in order below starting with the least favorably received:

1. NE54: Seasonal active duty (2 or 3 months out of every year) in the ARNG when soldiers can specify neither time of year nor location.
2. NE52: Seasonal active duty (2 or 3 months out of every year) in the ARNG when soldiers can specify location but not time of year.
3. NF30: Easier way to meet prerequisites to attend AC school.
4. NE47: Adaptable drill schedule (see also NE48 and NE46).
5. NF31: Easier way to get orders in time to attend AC school.
6. NE51: Seasonal active duty in the ARNG when soldiers can specify time of year but not location.
7. NE62: More weekend drills.
8. NE43: Split Unit Training Assembly (SUTA) where parts of unit train on different weekends (see also NE42).
9. NF27: Reducing conflict between unit schedule and AC school training dates.
10. NE61: An extra AT each year.
11. NB37: Less emphasis on unit-level training.
12. NE118: Fewer unit tasks to train.
13. NE60: Longer ATs.
14. NE117: Fewer individual tasks to train.

Five of the items in Table B-28 produced ratio data. These items are found clustered near the end of the section subtitled "Items asked of all ranks." Item NE1 asked soldiers how many individual soldier training sessions, such as additional Training Assemblies (ATAs, 4 hours each) per year would be helpful in getting their units trained to readiness standards. Such ATAs would be in addition to regular drills. The average response to this item was 13.9 ATAs. Next, soldiers were asked how many extra unit training assemblies

(UTAs, 4 hrs.) per year would be helpful in getting their units trained to readiness standard (NE2). The mean response was 7.9. More officers than junior enlisted soldiers indicated that additional ATAs and UTAs would be helpful (Table B-29).

Item NE3 asked soldiers how many extra 16-hour drill periods per year would be helpful in getting their units trained to readiness standards. The mean response to this item was 3.4 MUTA-4s. Item NE4 asked soldiers how many extra AT days per year would be helpful in getting their units trained to readiness standards. The average response was 5.6 days. Items NE1 through NE4 do not measure willingness; instead they measure soldiers' perceptions of the effectiveness of spending various additional time increments in RC training.

Item NC1 asked soldiers how many paid hours per month they would be willing to work for the RC in addition to the normal 16-hour drill period. The mean response was 24.1 hours. However, the median response was 12.0 hours. This is because the responses of many soldiers indicated that they wished to work full time (or more) for the RC. When these responses were controlled for, the mean response was 13.0 hours and the median was 10.0 hours.

Thus it appears that in general, part-time soldiers in the ARNG are willing to spend 10 to 13 more hours each month working for the ARNG. But other items presented earlier in Table B-28 provide important qualifiers on how soldiers would be willing to spend those extra hours. Items NE60 through NE65 taken as a group show that there is an undecided or mixed degree of willingness to work more hours in the following time increments: three-week ATs (see also item EE35), extra ATs, more weekend drills, more MUTA-5s or MUTA-6s. A more favorable response was noted for extra paid time between weekend drills and home study with pay based on follow-up testing. The means for these two options are a half of a scale point more favorable than those for the earlier options. This is a substantial (as well as a statistically significant) difference.

Item NE5 in Table B-7 asked soldiers of all Ranks how often an extra AT period would help unit readiness. The mode response to this item was "1" which translates to "every year." This option was selected by 26.5% of the respondents; 26.3% said "never;" 22.6% said "every two years;" 18.0% said "every three years;" 6.5% said "every four to six years." Officers selected options which indicated that extra AT periods would be helpful less frequently than did junior enlisted soldiers and NCOs. (Kruskal-Wallis tests Chi-square = 16.12, $p < .0003$). (Note that in Table B-7 the smaller the response the more frequently ATs are called for; therefore, $N < 0$ would mean that NCOs selected smaller numbers than officers and those smaller

numbers correspond to more frequent ATs). Again, the fact that soldiers said that extra ATs would help improve readiness (NE5) must be tempored by the fact that on the average soldiers slightly disagreed that they would be willing to attend an extra AT session each year (NE61).

Conclusions and Recommendations

The conclusions based upon the results reported in this appendix are not appreciably different than those found in the main body of the report. Therefore, they are not repeated here. The reader may refer to pp. 137-144 of the main section to review the conclusions and recommendations which apply similarly to both the ARNG and the USAR.

APPENDIX C

Results for the U.S. Army Reserve (USAR)

Reported herein are the detailed results for USAR soldiers only. Analyses in this section tested for differences by Rank and Unit type within the USAR.

Demographics

The items addressed in this section are identical to those addressed in the demographics section of the main body of the report where all Army National Guard (ARNG) and USAR soldiers were included. The analyses in this section are restricted to USAR soldiers only.

All items listed in Table C-1 rendered ratio data, thus making comparisons of means plausible. The means in Table C-1 are listed in order of magnitude starting with the smallest. Item NA12 in Table C-1 shows that the average soldier in the USAR had served for 2.3 years in the active component (AC) of the Army. In contrast, Items NA15, NA16, NA13, and NA14 show that soldiers in the USAR had very little experience in the AC of other services.

With regard to the reserve component (RC), USAR soldiers had an average of 8.1 years of experience in the USAR itself (NA2), .66 years of experience in the ARNG (NA1), and .52 years of experience in other RC organizations (NA3). Years of experience in the USAR, ARNG, and other RC organizations were significantly less for the junior enlisted soldiers than for NCOs and officers. Means broken down for the three Ranks on these items are shown in Table C-2.

On the average, soldiers in the USAR had spent over half as many years ($\bar{M}$ = 4.95) in their current unit (NA4) as they had in the USAR itself ($\bar{M}$ = 8.1 years). Junior enlisted soldiers had spent fewer years in their current units than had officers, and officers had spent fewer years in their current units than had NCOs. Breakdown means for these Ranks are found in Table C-2.

Less than a third of soldiers' tenure in the USAR ($\bar{M}$ = 2.55 years) was spent in their current duty assignment or MOS (NA5). Junior enlisted soldiers and officers had spent fewer years in their current duty positions than had NCOs (see Table C-2 for breakdown means). The average age (NA8) for sampled soldiers in the USAR was 33.74 years. Age differences existed both by Rank and Unit type. Naturally, junior enlisted soldiers were younger than NCOs and officers (see Table C-2). Soldiers in Combat Arms and Combat Support were about two years

Table C-1

Grand Means and Differences by Rank (R) and Unit Type (U) for USAR Soldiers on Demographic Items

Item	Differences			
	Mean	n	Ra	Ub Interactionsc
Items asked of all ranks				
NA15: Years of experience in the AC-Coast Guard	.004	1050	-	-
NA16: Years of experience in the AC-Marines	.079	1050	-	-
NA13: Years of experience in the AC-Navy	.115	1050	-	-
NA14: Years of experience in the AC-Air Force	.167	1050	-	-
NA3: Years of experience in other RC organizations	.520	1049	E<N	-
NA1: Years of experience in the ARNG	.659	1049	E<O	-
NA12: Years of experience in the AC-Army	2.273	1050	E<N,O	-
NA5: Years of experience in your current duty MOS	2.554	1047	E,O<N	-
NA4: Years of experience your current unit	4.953	1050	E<O<N	-
NA2: Years of experience in the USAR	8.101	1048	E<N,O	RU

(table continues)

Item	Differences			
	Mean	n	R	U
NA8: What is your age?	33.739	1040	E<N,O	C,CS<CSS

Note. Unit of measure varies and are indicated in each item description. All differences reported are statistically significant at the .001 level and substantial (at least a quarter of a scale point, or 5%, or one-fourth of the sd).

^aRank: E = Junior enlisted soldiers (E1-E4s). N = NCOs (E5-E9s). O = Officers and warrant officers. ^bUnit type: C = Combat arms. CS = Combat support. CSS = Combat service support. ^cInteraction terms: RG = rank by geography. RU = rank by unit type. RC = rank by component. GU = geography by unit type. GC = geography by component.

Table C-2

Group Means on Demographic Items Which Showed a Substantial Difference by Rank in the USAR

Item	E1-E4s		NCOs		Officers		Overall	
	Mean	n	Mean	n	Mean	n	Mean	sd
NA1: Years of experience in the ARNG	.21	331	.79	308	.92	410	.66	2.36
NA2: Years of experience in the USAR	3.22	330	10.23	308	10.45	410	8.10	6.37
NA3: Years of experience in other RC organizations	.20	331	.75	308	.60	410	.52	1.78
NA4: Years of experience your current unit	2.82	332	7.29	308	4.93	410	4.95	4.29
NA5: Years of experience in your current duty MOS	1.84	330	3.84	308	2.16	409	2.55	3.35
NA8: What is your age?	25.12	327	37.21	307	38.06	406	33.74	9.21
NA12: Years of experience in the AC-Army	1.35	332	2.72	308	2.68	410	2.27	3.19

Note. Units of measure vary and are indicated in each item description.

younger than soldiers in Combat Service Support Units (see Table C-3).

Nine "yes-no" questions regarding demographics were asked of all ranks. These are listed in Table C-4 which reports the percentage of respondents who answered "yes" along with any differences by Rank, Geography, or Component. The items in Table C-4 are listed in order of their occurrence in the survey instrument.

The percentage of soldiers in the USAR sample who said that they were combat veterans was 15.2% (NA25). As expected, fewer junior enlisted soldiers reported combat experience than did NCOs or officers. Only 4.3% of junior enlisted soldiers reported having combat experience, while 22.7% of the NCOs and 18% of the officers reported combat experience.

Item NA26 showed that fewer than half (46.7%) of the soldiers in the USAR sample indicated that their employers paid them while they were at annual training (AT). Fewer junior enlisted soldiers than NCOs (26.3% versus 49.5% respectively) reported receiving pay from employers during AT. Fewer NCOs than officers (59.6%) reported receiving pay from employers during AT. The substantial difference for junior enlisted soldiers is possibly due to the fact that junior enlisted soldiers naturally would have been employed for a shorter period of time than NCOs and officers, simply because they were younger and closer to the beginning of their careers. This would imply that they would probably have lower employment benefits than their NCO and officer associates. Analysis also revealed a significant difference by Geography in responses to this item. While 46.7% of the soldiers across all of the CONUSAs received remuneration from employers during AT, 12.4% more than that average received outside remuneration in 6th Army, and 9% less than the average received outside remuneration in 4th Army. The receiving of pay from civilian employers during AT also varied according to Unit type. Of soldiers in combat support units only 42.7% said that they were paid by employers during AT, while 45.7% of the soldiers in combat arms units and 48.8% of the soldiers in combat service support units so indicated.

Soldiers in the USAR sample were asked if the work they do in their military occupations (MOS or branch) is similar to the work they do in their full-time job (NA29). Nearly a third (30.8%) responded "yes." A significant difference by Rank existed in these responses. While only 18.0% of the junior enlisted soldiers responded "yes," 27.2% of the NCOs and 43.2% of the officers reported a similarity between their military and their full-time work. This would seem to imply that officers tend to have management-related jobs in the civilian market. No differences were found by Geography for this item.

Table C-3

Group Means on Demographic Items Which Showed a Substantial Difference by Unit Type in the USAR

Item	Combat		CS		CSS		Overall	
	Mean	n	Mean	n	Mean	n	Mean	sd
NA8: What is your age?	32.34	148	32.10	278	34.82	614	33.74	9.21

Note. Unit of measure is indicated in the item description.

Table C-4

Percentage of USAR Respondents Who Answered "Yes" to Dichotomous, Demographic Items and Differences in Those Percentages by Rank (R), Geography (G), and Unit Type (U).

Item	%Yes	n	Differences ^a		
			R ^b	G ^c	U ^d
Items asked of all ranks					
NA25: Are you a combat veteran?	15.2	1041	E<N,O	-	-
NA26: Does your employer pay you while you are AT?	46.7	946	E<N<O	4<M<6	CS<CSS
NA29: Is your MOS similar to your full-time (civ/mil) job	30.8	1013	E<N<O	-	C<CS<CSS
NA30: Do you own a personal computer?	31.0	1047	E,N<O	6>M	-
NA31: If yes, is it IBM PC compatible?	37.1	488	E<N<O	-	CS<C,CSS
NA32: Are you employed full time as a civilian	78.9	1012	E<N<O	-	C,CS<CSS
NA33: Are you employed part time as a civilian	18.5	701	E>N,O	-	C>CS>CSS
NA34: Are you a full-time student?	12.4	930	E>N,O	-	CS>CSS
NA35: Are you a part-time student?	15.3	889	E,N<O	2<M<6	-

(table continues)

(table continues)

a A 5% difference in the percentage of soldiers giving this option a first choice rating was considered substantial enough to report. Differences of this magnitude were significant (Chi-square adjusted residual) at least at the .01 level. bRank: E = Junior enlisted soldiers (E1-E4s). N = NCOs (E5-E9s). O = Officers and warrant officers. cGeography: 1, 2, . . . = 1st Army, 2nd Army, . . . M = Mean for all armies. dUnit type: C = Combat arms. CS = Combat support. CSS = Combat service support.

However, substantial differences were found by Unit type. As would be expected because of the noncivilian character of soldier tasks in combat arms units, fewer soldiers (14.3%) in these types of units reported similarity between their civilian and their USAR work than did soldiers in combat support units (26.5%) and combat service support units (36.8%).

Thirty-one percent of the soldiers in the USAR sample said they owned a personal computer (NA30). Substantial differences in this response existed among Ranks. While only 19.0% of the junior enlisted soldiers said that they owned a personal computer, 22.9% of the NCOs and 46.8% of the officers said that they did. A significant difference in this item was also found by Geography. The average across all the soldiers sampled was 31% who owned personal computers. However, in 6th Army, 7% more soldiers said that they had personal computers than the average. Thirty-seven percent of those who said they owned a personal computer also indicated that that computer was IBM PC compatible (Item NA31). This was especially true for the officers (51.6%) who owned personal computers. Only 30.4% of the NCOs and 19.6% of the junior enlisted soldiers said that their computers were IBM PC compatible.

Although 78.9% of the soldiers in the USAR sample were employed full time as civilians (NA32), a substantially smaller proportion (62.5%) of the junior enlisted soldiers were employed full time than were NCOs (82.4%) or officers (82.7%). Conversely, more than three times as many (34.9%) junior enlisted soldiers were employed part-time than were NCOs (11.0%) or officers (9.3%). While very few NCOs or officers (5.8% and 5.0% respectively) indicated that they were full-time students, 27.6% of the junior enlisted soldiers reported that they were full-time students. This makes for a total of 12.4% full-time students among the USAR sample. The difference by Rank in full-time students reverses itself somewhat with regard to part-time students. Here more officers (19.7%) said that they were part-time students than did NCOs (11.3%) or junior enlisted soldiers (13.3%).

Two nominal variables, offering multiple-choice responses, were included in the survey instrument. The first of these had to do with employment status in the USAR. The majority (90.5%) of the soldiers in the USAR sample were part-time participants (M-Day soldiers). Four percent were full-time technicians; 3.8% had AGR status; .1% were on state active duty; and 1.6% were in some other employment status in the USAR. The second nominal variable, in this case a dichotomy, asked soldiers their gender. Of the 1442 USAR soldiers who responded to this question, 82.4% were male soldiers and 17.6% were female. When the number of male versus female soldiers was crosstabulated across the three Ranks, a statistically significant and substantial difference was found. Table C-5 gives the details

Table C-5

Soldier Gender Crosstabulated by Rank in the USAR

Gender	Enlisted Soldiers		NCOs		Officers	
	% of soldiers ^a	Adjusted residual	% of soldiers ^b	Adjusted residual	% of soldiers ^c	Adjusted residual
Female	26.2%	5.8**	12.4%	-3.3**	14.5%	-2.5*
Male	73.8%	-5.8**	87.6%	3.3**	85.5%	2.5*

Note. Overall Chi-square (2, N = 1142) = 34.83, $p < .001$.

^an = 458. ^bn = 419. ^cn = 565.

* $p < .01$. ** $p < .001$.

of this breakdown. There it can be seen that within the NCO and officer categories, the male-to-female ratio is approximately 6.6 to 1. Within the junior enlisted soldier category, however, the ratio of males to females is only 3 to 1. This means that a greater proportion of males had progressed to NCO and officer Ranks than had females. The adjusted residuals listed in Table C-5 are standardized for the Chi-square distribution and adjusted for continuity (Haberman, 1978). These adjusted residuals provide a standard for comparing the degree to which each percentage reported in Table C-5 differs from the hypothetically expected value. The larger the absolute value of the adjusted residual, the greater the degree of difference is between the expected and the observed values. For example, the expected value for female soldiers in the junior enlisted category would have been 17.6%. Instead the percentage actually observed in this sample was 26.2%, substantially higher than the expected value. Thus the adjusted residual for this figure is a positive value and one that is highly significant statistically (generally any adjusted residual over 1.645 would be statistically significant).

Since female soldiers are not permitted to have combat MOSs it is not surprising that a statistically significant difference in the gender ratio was found for Unit type. Table C-6 shows the details of this analysis.

Five of the items in Table C-7 are demographic items. the remainder of the items in that table will be discussed in later sections. All of the items in Table C-7 called for a multiple-choice response where the options can be considered ordinal. Item NA21 asked soldiers how many people lived in the largest city or town within 25 miles of their homes. The mode response was "5," which translates to "more than 250,000." The third column in Table C-5 is the percentage of soldiers who selected the mode response. In the case of NA21, 42.7% selected answer 5. The smaller the percentage in the third column of Table C-5, the greater is the spread or distribution of responses among the multiple choices available. The fourth, fifth, and sixth columns in Table C-5 show the results of the Kruskal-Wallis tests. This analysis tests for statistically significant differences among options which are ordinal. In the case of Item NA21, the Kruskal-Wallis tests revealed a statistically significant difference by Rank and Unit type. Officers tended to live in more densely populated areas than NCOs, and NCOs tended to live in more densely populated areas than junior enlisted soldiers. Soldiers in combat service support and combat support units tended to live in more densely populated areas than soldiers in combat arms units.

Item NA22 in Table C-7 asked soldiers for their highest level of civilian education. The mode response was "3," which

Table C-6

Soldier Gender Crosstabulated by Unit Type in the USAR

Gender	Combat arms		Combat support		Combat service support	
	% of soldiers ^a	Adjusted residual	% of soldiers ^b	Adjusted residual	% of soldiers ^c	Adjusted residual
Female	4.1%	-4.9**	14.8%	-1.8*	23.5%	5.0**
Male	95.9%	4.9**	85.2%	1.8*	76.5%	-5.0**

Note. Overall Chi-square (3, N = 1044) = 34.21, $p < .001$.^an = 147. ^bn = 277. ^cn = 618.* $p < .05$. ** $p < .001$.

Table C-7
Analysis of Multiple-Choice, Ordinal-Response Questions for Soldiers in the USAR

Method	Mode	% at the mode	Differences			Unit ^b
			Rank ^a	Geog.		
Items asked of all ranks						
NA21: Population of home town	5	42.7	E<N<O**	-	C<CS, CSS*	
NA22: Highest level of civilian education	3	27.7	E, N<O**	-	C, CS<CSS**	
NA23: Smallest group of soldiers I train with	1	59.5	E<N**	-	-	
NA9: Pay grade	4	28.4	E<N**	-	-	
NB13: Who personally condct most tng in unit	8	30.1	E<N**	-	-	
NU1: Level of unit CO commands	3	52.4	E<N<O**	-	CS<C, CSS**	
NE5: How often would an extra AT prd hlp unt	1	31.3	E, N<O*	-	-	
ND25: What level of tng should be emphasized	1	44.8	-	-	C>CS>CSS**	
Item asked of officers only						
OA21: I am responsible for tng what size group?	1	48.5	-	-	C>CS, CSS** (table continues)	

Note. Differences were analyzed for statistical significance using the Kruskal-Wallis test.

aRank: E = Enlisted Soldier (E1-E4s). N = NCOs (E5-E9s). O = Officers and warrant officers. bUnit: C = Combat Arms. CS = Combat Support. CSS = Combat Service Support.

*p < .01. **p < .001.

translates to "high school completed with diploma or GED." This option was selected by 27.7% of the soldiers in the USAR sample. Junior enlisted soldiers and NCOs had received significantly less civilian education than officers. Soldiers in combat arms and combat support units had received significantly less civilian education than soldiers in combat service support units.

Question NA23 in Table C-7 asked soldiers about the size of the smallest group of soldiers they trained with on a regular basis. The mode response was "1," which translates to "squad/section/crew." This response was selected by 59.5% of the respondents. Junior enlisted soldiers typically responded that they trained with smaller groups than NCOs.

Item NA9 in Table C-7 is, for all intents and purposes, artifactual. It essentially consists of the last digit of soldiers' pay grades, e.g., "3" in D-3, "1" in O-1, "2" in W-2. Together with the E, O, or W preceeding it, this variable was used to classify soldiers according to Rank.

Item NU1 in Table C-7 asked about the level of unit commanded by the CO of the individual respondent. The mode response to this item was "3," which translates to "company/crew/battery." This option was selected by 52.4% of the commanders. The COs of combat arms units tended to respond with higher options than did COs of combat support or combat service support units.

Involvement

Items in the soldier "Involvement" category provide information on some of the demands made of soldiers in terms of travel and time committed to the USAR, as well as their degree of involvement as trainers. The main cluster of these items is shown in Table C-8. Three items regarding Involvement were asked of all three Ranks. The first, NB3, asked how many individuals the particular soldier was responsible for training during an average MUTA-4. A total of 966 soldiers gave valid responses to this question. For that number the average number of trainees was 17.9. Table C-8 indicates that officers were responsible to train larger numbers of soldiers than were NCOs or junior enlisted soldiers. This of course is no surprise. Table C-9 shows that while officers are responsible to train 31.6 soldiers during the average MUTA-4, NCOs were responsible to train 13.4 soldiers and junior enlisted soldiers were responsible to train 4.4 soldiers.

Item NC3 was also asked of all three Ranks. It asked, "How many hours do you travel one way to attend drill at your unit's armory or reserve center?" The 1,042 soldiers who gave valid responses to this question indicated that they traveled

Table C-8

Grand Means and Differences by Rank (R) and Unit Type (U) for USAR Soldiers' on Items Regarding Soldier Involvement

Item	Mean	n	Differences		
			Ra	U	Interactionsb
Items asked of all ranks					
NB3: During avg MUTA-4 how many pers are you resp to train	17.890	966	E,N<O	-	-
NC3: How many hrs do you travel one-way to attend drills	.899	1042	E,N<O	-	RU
NC4: How many hrs per MUTA-4 willing to travel to drill	1.580	1035	-	-	-
Item asked of junior enlisted soldiers and NCOs only					
NB4: How many soldiers you personally train per avg MUTA-4	4.277	578	E<N	-	-
Items asked of NCOs and officers only					
NB2: What percentage of your unit's training do you plan?	29.072	670	N<O	-	-
NC5: How many hrs per MUTA-4 spent eval perf. of subord	4.499	689	N>O	-	-
NC6: How many hrs spent at drill preparing for next drill	2.002	697	-	-	-
NC7: How many unpaid hrs preparing for next drill	4.422	697	-	-	-
(table continues)					

(table continues)

Item	Mean	n	Differences		
			R	U	Interactions
NC8: How many paid hrs outside of drill prep for next drill	1.216	678	-	-	RU

Item asked of officers only

OB2: What percentage of your unit's training do YOU conduct?	16.921	390	-	-	-

Note. Unit of measure varies and are indicated in each item description. All differences reported are statistically significant at the .001 level and substantial (at least a quarter of a scale point, or 5%, or one-fourth of the sd).

a Rank: E = Junior enlisted soldiers (E1-E4s). N = NCOs (E5-E9s). O = Officers and warrant officers. b Interaction terms: RG = rank by geography. RU = rank by unit type. RC = rank by component. GU = geography by unit type. GC = geography by component.

Table C-9

Group Means on Items Regarding Soldier Involvement Which Showed a Substantial Difference by Rank in the USAR

Item	E1-E4s		NCOs		Officers		Overall	
	Mean	n	Mean	n	Mean	n	Mean	sd
NB2: What percent of your unit's training do you plan?	-	-	21.46	279	34.50	391	29.07	33.93
NB3: During avg MUTA-4 how many pers are you resp to train	4.43	293	13.38	290	31.60	383	17.89	46.22
NB4: How many soldiers you personally train per avg MUTA-4	2.32	287	6.20	291	-	-	4.28	7.63
NC3: How many hrs do you travel one-way to attend drills	.78	331	.72	306	1.13	405	.90	2.01
NC5: How many hrs per MUTA-4 spent eval perf. of subord	-	-	6.58	296	2.93	393	4.50	5.87

Note. Unit of measure varies and are indicated in each item description.

.90 hours (54 min.) to attend drills. Table C-8 indicates that officers traveled significantly longer than did NCOs or junior enlisted soldiers to get to weekend drills. Table C-9 shows that the mean for officers was 1.13 hours, while the means for NCOs and junior enlisted soldiers were .72 and .78 hours respectively.

Soldiers were also asked how many hours they were willing to travel to drill (NC4). The overall response was nearly double that of the amount of time they already spent traveling. Table C-8 shows that the overall mean for willingness to travel was 1.58 hours.

One Involvement item was asked of junior enlisted soldiers and NCOs only. NB4 asked, "How many soldiers do you personally train during the average 16-hour drill period (MUTA-4)?" This item is different from NB3 in that the emphasis is on personal delivery of training versus oversight of training. Table C-8 shows that the average number of soldiers personally trained by junior enlisted soldiers and NCOs is 4.3. The average is significantly higher for NCOs than it is for junior enlisted soldiers, with means of 6.2 and 2.3 respectively.

The next set of items in Table C-8 were asked of NCOs and officers only. On the average, officers and NCOs reported that they individually planned 29.1% of their units' training (NB2). The average was significantly greater for officers ($M = 34.5$) than for NCOs ($M = 21.5$). Officers and NCOs reported spending an average of 4.5 hours per MUTA-4 evaluating the performance of subordinates (NC5). This average was actually greater for NCOs ($M = 6.6$) than for officers ($M = 2.9$).

Officers and NCOs reported spending an average of 2.0 hours of drill time preparing for the next drill (NC6). They said that they spend an average of 4.4 hours of unpaid time preparing for the next drill (NC7). They also reported spending an average of 1.2 paid hours outside of drill time in preparation for the next drill (NC8).

One Involvement item was asked of officers only. On this item (OB2), officers reported that on the average they personally conducted 16.9% of their units' training.

Another Involvement item asked of officers only provided nominal data. OA15 asked, "What is your primary duty assignment?" Of the 557 valid responses to this question, 14.1% were platoon leaders, 33.6% were staff officers, 6.1% were executive officers, 12.6% were commanders at the company/battery/troop or higher levels, and 43.6% were "other."

Training Descriptions

Items in the "Training Description" category provided information on how training was being conducted at the time data were being collected. Many of the items in this category provided ratio and quasi-interval data. Such items are listed in Table C-10. Full agreement (means ranging from 2.00 to 2.24) with descriptions of current training was found on the following items:

1. NB28: My unit leader's) insist that subordinates maintain high standards of task performance.
2. NB65: Audio-visual equipment is used by my unit for training.
3. NB64: Training aids (e.g., mock-ups, models, charts, simulation devices) are used by my unit for training.
4. ND38: Active Army assistance from Readiness Group personnel, Advisors, and Mobile Training Teams is available to my unit.
5. ND41: The NCOs in my unit look out for the welfare of their soldiers.

Analysis of variance on Item NB65 revealed that officers ($\bar{M}$ = 1.92) and NCOs ($\bar{M}$ = 2.00) perceived a greater degree of use of audio/visual equipment in training than did junior enlisted soldiers ($\bar{M}$ = 2.31). This difference was statistically significant and substantial (a difference of .25 or greater). Detailed figures for the three Ranks are provided in Table C-11 under Item NB65.

Analysis of variance revealed a significant difference on Item ND38: Officers ($\bar{M}$ = 1.89) agreed that active army assistance was available to their units more than NCOs did ($\bar{M}$ = 2.19), and NCOs perceived this assistance to be more available than did junior enlisted soldiers ($\bar{M}$ = 2.54). Breakdown means for differences by Rank are shown in Table C-11.

A difference by Unit type was found for Item ND41. Soldiers in combat arms units agreed more strongly than soldiers in combat support units that NCOs in their units looked out for the welfare of their soldiers. Breakdown means for differences by Unit type are found in Table C-12

Mild agreement (means ranging from 2.25 to 2.99) was found for the following training descriptions:

1. NB66: Training Extension Course (TEC) tapes for the Bessler Cue-See are used by my unit for training.
2. NB63: Mini-ranges at the armory/training center or local training area (LTA) are used by your unit for training.

Table C-10

Grand Means and Differences by Rank (R) and Unit Type (U) for USAR Subjects on Items Regarding Descriptions of Current Training

Item	Mean	n	Differences		
			R ^a	U ^b	Interactions ^c
Items asked of all ranks					
NB28:d Unit ldrs insist subord maintain high stand of perfor	2.005	1018	-	-	-
NB65:d Audio-visual equipment is used by my unit	2.064	992	E>N,O	-	-
NB64:d Training aids used by my unit.	2.142	984	-	-	-
NND38:d Active Army assistance is available to my unit	2.152	853	E>N>O	-	-
NND41:d NCOs in my unit look out for the welfare of soldiers	2.237	1017	-	C<CS	-
NB66:d TEC tapes for the Bessler Cue-See are used by my unit.	2.463	911	E>N	-	-
NB63:d Mini-ranges are used by my unit	2.584	913	-	C<CS	-
NB25:d My unit trains with same equipment used in wartime	2.782	998	-	-	-
NE56:d I use the job aids I have in my work in the ARNG/USAR	2.799	916	N<O	-	-
NB23:d Tng schedule often gets changed from the original	3.066	1013	N<E,O	C<CS	-
(table continues)					

(table continues)

Item	Differences				Interactions
	Mean	n	R	U	
NB59:e How often is MILES used in your unit to train sqd/sec	3.647	624	-	C<CS, CSS	RU
NB57:e How often is MILES used in your unit to train individ	3.648	630	-	C<CS, CSS	RU
NB60:e How often is MILES used in your unit to train plt/det	3.664	619	-	C<CS, CSS	RU
NB58:e How often is MILES used in your unit to trn crew/team	3.668	620	-	C<CS, CSS	RU
NB61:e How often is MILES used in unit to trn co/trp/btry	3.687	603	-	C<CS, CSS	RU
NE94:d Simulators: are available to me during drills	3.790	779	E, N<O	-	-
ND47:d Soldiers in my unit know how to operate MILES	3.847	528	E, N<O	C<CS, CSS	-
NE93:d Simulators: are available to me between drills	4.031	764	-	-	-
NU6: Assigned strength for Off/WOs	40.635	997	E, N<O	C, CS<CSS	-
NC2: What percentage of your tng time is spent on indiv lvl tng	41.812	956	-	-	RU
NU4: Authorized strength for Off/WOs	42.986	1001	E<N<O	C, CS<CSS	-
NA24: How many soldiers are in your unit?	129.282	886	-	-	-
NU7: Assigned strength for E1 to E9	138.930	992	-	-	-

(table continues)

Item	Differences			
	Mean	n	R	U
NU5: Authorized strength for E1 to E9	139.129	992	N<O	-
Items asked of junior enlisted soldiers and NCOs only				
NA7: Number of times you've changed MOS involuntarily	.186	478	E<N	-
NC13a: Hrs waiting while doing non-MOS/nonadmin tasks	.789	592	-	-
NA6: Number of times you've changed MOS voluntarily	.836	579	-	-
NC11a: Hrs waiting while doing non-MOS, admin tasks	.911	601	-	-
NC14a: How many hours spent in just doing nothing	.956	603	-	-
NC12a: Hrs waiting while doing nonlearning MOS work	1.116	594	-	-
NC16a: Hrs waiting while receiving tng from Off/NCOs	1.251	604	-	-
NC14: Hrs in travel/breaks/ meals, etc during avg 16 hr drill	2.506	612	-	-
NC13: Hrs doing non-MOS/non-admin tasks in avg 16 hr drill	2.793	605	-	-
NC11: Hrs doing non-MOS admin tasks during avg 16 hr drill	2.904	614	-	-
NC12: Hrs in nonlearning MOS work during avg 16 hr drill	4.847	608	-	-

(table continues)

Item	Differences				Interactions
	Mean	n	R	U	
NC10: Hrs receiving tng from Off/NCOs during avg 16 hr drill	5.167	612	E>N	C>CSS	-
NB5: How many months since your last SQT in your duty MOS	8.244	606	-	-	-
Items asked of NCOs and officers only					
NB24: ^a Tng priorities change too often to meet quarterly req	3.180	677	N<O	C<CSS	-
NB62: How often is MILES used in your unit to train bn/sqdn	3.785	382	-	C<CSS	RU
Items asked of NCOs only					
NC9a: Hours waiting while training others	1.230	282	-	-	-
NC9: Hrs training others during the avg 16 hr weekend drill	6.286	279	-	-	-

Note. Items not footnoted rendered ratio data in the unit of measure implied in the item descriptions. All differences reported are statistically significant at the .001 level and substantial (at least a quarter of a scale point, or 5%, or one-fourth of the sd).

^aRank: E = Junior enlisted soldiers (E1-E4s). N = NCOs (E5-E9s). O = Officers and warrant officers. ^bUnit type: C = Combat arms. CS = Combat support. CSS = Combat service support. ^cInteraction terms: RG = rank by geography. RU = rank by unit type. RC = rank by component. GU = geography by unit type. GC = geography by component. ^dLikert scale. ^eFour-point, quasi-interval scale with 1 being "often."

Table C-11

Group Means on Items Regarding Descriptions of Current Training Which Showed a Substantial Difference by Rank in the USAR

Item	E1-E4s		NCOs		Officers		Overall	
	Mean	n	Mean	n	Mean	n	Mean	sd
NA7: Number of times you've changed MOS involuntarily	.11	257	.27	221	-	-	.19	.52
NB23: ^a Tng schedule often gets changed from the original	3.10	311	2.83	298	3.21	404	3.07	1.27
NB24: ^a Tng priorities change too often to meet quarterly req	-	-	3.01	286	3.30	391	3.18	1.20
NB65: ^a Audio-visual equipment is used by my unit	2.31	308	2.00	294	1.92	390	2.06	.87
NB66: ^a TEC tapes for the Bessler Cue-See are used by my unit	2.69	276	2.24	287	2.46	348	2.46	.99
NC10: Hrs receiving tng from Off/NCOs during avg 16 hr drill	6.11	320	4.13	292	-	-	5.17	4.61
ND38: ^a Active Army assistance is available to my unit	2.54	228	2.19	261	1.89	364	2.15	.91
ND47: ^a Soldiers in my unit know how to operate MILES	3.73	171	3.72	170	4.07	187	3.85	1.20
NE56: ^a I use the job aids I have in my work in the ARNG/USAR	2.79	299	2.65	283	2.93	334	2.80	1.08
NE94: ^a Simulators: are available to me during drills	3.69	257	3.68	223	3.96	299	3.79	1.10
NU4: Authorized strength for Off/WOs	23.53	314	32.82	297	66.38	390	42.99	72.59

(table continues)

Item	E1-E4s		NCOs		Officers		Overall	
	Mean	n	Mean	n	Mean	n	Mean	sd
NU5: Authorized strength for E1 to E9	131.17	312	121.11	294	159.29	386	139.13	123.00
NU6: Assigned strength for Off/WOs	23.19	315	28.24	294	64.19	388	40.63	66.03

^aLikert scale.

Table C-12

Group Means on Items Regarding Descriptions of Current Training Which Showed a Substantial Difference by Unit Type in the USAR

Item	Combat		CS		CSS		Overall	
	Mean	n	Mean	n	Mean	n	Mean	sd
NB23:a Tng schedule often gets changed from the original	2.85	142	2.98	271	3.16	600	3.07	1.27
NB24:a Tng priorities change too often to meet quarterly req	2.95	100	3.11	164	3.26	413	3.18	1.20
NB57:b How often is MILES used in your unit to train individ	3.39	112	3.72	184	3.69	334	3.65	.72
NB58:b How often is MILES used in your unit to trn crew/team	3.35	112	3.77	180	3.72	328	3.67	.72
NB59:b How often is MILES used in your unit to train sqd/sec	3.38	112	3.72	181	3.70	331	3.65	.74
NB60:b How often is MILES used in your unit to train plt/det	3.37	110	3.75	180	3.71	329	3.66	.70
NB61:b How often is MILES used in unit to trn co/trp/btry	3.35	110	3.79	177	3.75	316	3.69	.68
NB62: How often is MILES used in your unit to train bn/sqdn	3.59	75	3.79	107	3.86	200	3.79	.55
NB63:a Mini-ranges are used by my unit	2.41	136	2.68	245	2.58	532	2.58	1.10
NC10: Hrs receiving tng from Off/NCOs during avg 16 hr drill	6.04	100	5.40	178	4.78	334	5.17	4.61
ND41:a NCOs in my unit look out for the welfare of soldiers	2.08	144	2.34	272	2.23	601	2.24	.93

(table continues)

3. NB25: My unit trains with the same kind of equipment that it would use during wartime.

4. NE56: I actually use the job aids I have for my work in the USAR.

Analysis of variance on Item NB66 showed that NCOs ($M = 2.24$) perceived more frequent use of TEC tapes for the Bessler Cue-See than did junior enlisted soldiers ($M = 2.69$). A difference by Unit type was found for Item NB63. Soldiers in combat arms units agreed more strongly than soldiers in combat support units that mini ranges were used by their units. Breakdown means for differences by unit are shown in Table C-12.

A difference by Rank was shown for Item NE56. NCOs agreed more than officers that they use the job aids that they have available in their work in the USAR. See Table C-11 for breakdown means.

On the average soldiers neither agreed nor disagreed that the training schedule often gets changed from the original plan (NB23). However, as indicated in the "R" column of Table C-10, NCOs agreed more strongly than did either junior enlisted soldiers or officers that the training schedule for their units often gets changed from the original plan. This statement was also agreed with more strongly by soldiers in combat arms units than soldiers in combat support units. See Tables C-11 and C-12 for details.

On the average, soldiers disagreed with three of the Likert-type items asked of all Ranks regarding current training. These were:

1. NE94: Simulators are available to me during drills ($M = 3.79$).

2. ND47: Soldiers in my unit know how to operate MILES ($M = 3.847$).

3. NE93: Simulators are available to me between drills ($M = 4.031$).

Substantial differences by Rank were found for Item ND47. Officers tended to agree less than junior enlisted soldiers and NCOs that soldiers in their units knew how to operate MILES. Soldiers in combat arms units disagreed less with this statement than soldiers in combat service support units. Tables C-11 and C-12 contain breakdown means for these analyses.

Substantial differences by Rank were found for Item NE94. Junior enlisted soldiers and NCOs tended to disagree less than

officers did with the statement that simulators were available to them during drills.

Five items in Table C-10 assessed the frequency with which MILES was used at various organizational levels. Responses to these items can range from "1" (often) to "4" (never). At nearly every level the average response was somewhere between rarely and never: For use of MILES at the individual level the mean response was 3.648; at the squad/section level the response was 3.647; at the platoon/ detachment level the mean was 3.664; at the company/troop/battery level the mean response was 3.687. Thus, soldiers seemed to be indicating that MILES was used about the same at all levels. Smaller n's for Items NB57 through NB61 are indicative of the number of soldiers disqualifying themselves by responding "don't know" or "not applicable," which eliminated them from the calculation of the means for these items.

Six items regarding Training Descriptions that were asked of all Ranks provided ratio-level data. One of these, NC2, asked what percentage of soldiers' training time is spent on individual-level training. The average response to this question was 41.8%. No differences by Rank or Unit type were found.

The other five ratio items involve unit size. Item NA24 shows that the average unit size for soldiers in the sample was 129 soldiers. Data provided by COs of soldiers in the sample showed that assigned and authorized strengths for E1s-E9s was approximately 139 per unit (items NU7 and NU5). Assigned and authorized strength for officers and warrant officers in these same units was reported by commanding officers to be approximately 41 (Items NU6 and NU4).

All of the training description items that were asked only of junior enlisted soldiers and NCOs produced ratio data. NA7 asked about the number of times soldiers had involuntarily changed their MOSSs. The average was .186 times, with junior enlisted soldiers having changed fewer times involuntarily than NCOs. Means for the three Ranks which show a significant difference by Rank are shown in Table C-11.

Item NA6 asked soldiers the number of times they had changed MOS voluntarily. The average was .836 times, with no differences by Rank or Unit type.

Item NB5 asked soldiers how many months it had been since their last Skill Qualification Test (SQT). The average was 8.24 months.

The remainder of the items in Table C-10 that were asked of junior enlisted soldiers and NCOs only, have to do with how

drill time is utilized with regard to training or nontraining tasks. Soldiers said that they spend an average 16-hour drill period in the following way: 5.2 hours receiving training from officers and NCOs, 1.25 hours of which is spent waiting for other people or events; 2.9 hours doing non-MOS, administrative tasks, .9 hours of which are spent waiting for other people or events; 4.8 hours in nonlearning MOS work, 1.1 hours of which is spent waiting for other people or events; 2.8 hours doing tasks which are both non-MOS and nonadministrative, .8 hours of which is spent waiting for other people or events; 2.5 hours in travel, breaks, or meal time, 1 hour of which is spent in just doing nothing. Obviously these hours do not add up perfectly to the 16-hour drill period. However, they are interesting in and of themselves as proportions of their own total. The actual total equals 18.2 hours, of which 28.4% is spent receiving training, 15.9% is spent doing non-MOS/administrative tasks, 26.6% is spent in nonlearning MOS work, 15.3% is spent doing non-MOS/nonadministrative tasks, and 13.8% is spent in travel, breaks, and mealtime. Of that same 18.2 hours, 5.0 hours (27.6%) were estimated to be spent waiting for other people or events, or doing nothing.

Two Training Description items were asked of NCOs and officers only. Item NB24 stated that training priorities changed too often to meet quarterly requirements. On the average, soldiers slightly disagreed with this statement. Analysis of variance revealed that NCOs agreed with this statement substantially more than officers. (see Table C-11). Also, soldiers in combat arms units agreed with the statement more than did soldiers in combat service support units (see Table C-12).

The second item fits in with items described earlier regarding the frequency of MILES use. NB62 asks how often MILES is used to train on the battalion and squadron level. The average response of 3.79 indicates that MILES is used almost never at that level. Soldiers in combat arms units indicated higher use of MILES at the battalion/squadron level than did soldiers in combat service support units.

Two Training Description items were asked of NCOs only. Since NCOs are principally responsible for personal delivery of training to other soldiers, they were asked how many hours during a 16-hour weekend drill they spend in that kind of activity. The average response was 6.29 hours. Of that time, 1.23 hours was reportedly spent waiting for other people or events.

Two of the items in Table C-7 are Training Description items. Item NB13 asked who personally conducts most of the training in the soldiers' units. The mode response to this item was "8" which translates to "section leader." This option

was selected by 30.1% of the soldiers in the USAR sample. NCOs tended to select options indicating higher levels of responsibility than did junior enlisted soldiers. Soldiers in combat arms and combat support units tended to select options indicating lower levels of responsibility than did soldiers in combat service support units.

Several Training Description items were dichotomous in nature. These yes-no items are listed in Table C-13. As can be discerned from the descriptions of those items, they cover a variety of training topics. The second column in Table C-13 gave the percentage of soldiers who answered "yes" to each item. Rather than relist these percentages here in the text, the reader is directed to the table. Substantial differences by Rank and Component were found on many of the items in Table C-13. These are described in detail below.

When asked if they had ever trained with an AC unit while in the RC (NB17), officers (64.0%) answered "yes" more frequently than did NCOs (61.5%) and junior enlisted soldiers (39.4%). Soldiers in combat support units (51.1%) answered "yes" less frequently than did soldiers in combat service support units (57.7%).

When asked if they had ever personally used MILES during training (NB19), soldiers in combat arms units (42.5%) responded "yes" more frequently than did soldiers in combat support units (19.2%) or combat service support units (15.4%).

When asked if their units had access to a Local Training Area (LTA) within two hours of their armory (NB20), 85.8% of all soldiers responded "yes." No substantial differences were found by Rank or Unit type. Those soldiers who did not have an LTA within two hours were asked: "Does the lack of an LTA hurt training in your unit?" (NB21). More junior enlisted soldiers (45.9%) and NCOs (49.2%) than officers (40.3%) answered "yes" to this question. Soldiers in combat arms units (54.5%) responded "yes" more than did soldiers in combat support (40.9%) or combat service support units (45.3%).

NE40 asked soldiers if a full-time training committee was already available to their units. Fewer officers (15.3%) and NCOs (18.8%) than junior enlisted soldiers (23.9%) answered "yes" to this question. More soldiers in combat arms units (14.7%) answered "yes" to this question than did soldiers in combat support units (20.2%). When asked if their next higher headquarters already used a split unit training assembly (SUTA) drill schedule (NE45), 20.5% of all USAR soldiers responded "yes." No substantial differences were found by Rank or Unit type. When asked if their units already follow an adaptable drill schedule, 17.0% of all USAR soldiers responded "yes" (NE50). Officers (11.5%) agreed less that such was the case

Table C-13

Percentage of USAR Respondents Who Answered "Yes" to Dichotomous Items and Differences in Those Percentages by Rank (R), Geography (G), and Unit Type (U).

Item	%Yes	n	Differences	
			R ^b	U ^d
Items asked of all ranks				
NB17: Have you ever trained with an AC unit while in RC	55.5	1034	E<N,O	CS<CSS
NB19: Have you personally ever used MILES during training?	20.3	1013	-	C>CS,CSS
NB20: Does your unit have access to an LTA within 2 hrs?	85.8	994	-	-
NB21: If not, does lack of an LTA hurt tng in your unit?	44.9	216	E,N>O	C>CS,CSS
NE40: A full-time tng comm is already available to my unit	18.7	738	E>N,O	C<CS
NE45: My next higher HQ already uses a SUTA drill schedule	20.5	550	-	-
NE50: My unit already follows an adaptable drill schedule	17.0	878	E>N>O	C>CS
NU3: Has a FT tng off/NCO been asg to your unit for 9 mos	63.5	1037	E,N>O	C>CS
Item asked of junior enlisted soldiers and NCOs only				
NB18: A full-time tng Off/NCO in your next higher HQ?	82.1	571	-	-

(table continues)

(table continues)

Item	%Yes	n	Differences	
			R	U
Item asked of NCOs and officers only				
NB16: Do you conduct small unit tng when officers are gone?	68.7	689	-	-
Item asked of NCOs only				
NB22: Have you completed the right NCOES for your grade?	80.2	298	-	C,CS<CSS
Item asked of officers only				
OB9: OK if NCOs do training without officers present	82.3	389	-	-

C-34

^aA 5% difference in the percentage of soldiers answering "yes" was considered substantial enough to report. Differences of this magnitude were significant (Chi-square adjusted residual) at least at the .01 level. ^bRank: E = Junior enlisted soldiers (E1-E4s). N = NCOs (E5-E9s). O = Officers and warrant officers. ^cGeography: 1, 2, . . . = 1st Army, 2nd Army, ... M = Mean for all armies. ^dUnit type: C = Combat arms. CS = Combat support. CSS = Combat service support.

than did NCOs (17.5%), and NCOs agreed less than did junior enlisted soldiers (24.6%).

COs of soldiers were asked if their units had a full-time training officer/NCO during the previous nine months (NU3). A higher percentage of COs of junior enlisted soldiers (67.5%) and NCOs (64.8%) than COs of officers (59.5%) responded "yes." COs of soldiers in combat arms units (65.8%) responded "yes" more frequently than COs of soldiers in combat support units (60.2%). Junior enlisted soldiers and NCOs (but not officers) were asked directly if a full-time training officer/NCO was available in their next higher headquarters (NB18). In this case soldiers from both Ranks responded "yes" at the rate of 82.1%.

One item in Table C-13 was asked of NCOs and officers only. When soldiers were asked if the NCOs in their units conduct small unit training when the officers are gone (NB16), 68.7% responded "yes." No substantial differences were found by Rank or Unit type.

One item in Table C-13 was asked of NCOs only. When asked if they had completed the right Noncommissioned Officer Education System (NCOES) leadership course for their grades (NB22), 80.2% responded "yes." A substantial difference in responses was found by Unit type. Soldiers in combat arms and combat support units said "yes" less frequently than did soldiers in combat service support units.

One item in Table C-13 (OB9) was asked of officers only. When asked if they felt comfortable having their NCOs conduct individual/squad/section training while the officers were elsewhere for training, 82.3% of the officers responded "yes."

Tables C-14 and C-15 give an analysis of the degree to which each of the major training methods was employed in the USAR. Table C-14 shows the training methods for MOS qualification used by junior enlisted soldiers and NCOs. The survey items which collected this information produced rank-order data. One method for summarizing the responses is shown in the fourth column of Table C-14 which is titled "Most used by what %." A less accurate, but still useful, summary of responses for each of the items in Table 80 is shown in Column 3, "Mean rank." Both Column 4 and Column 3 of Table C-14 were considered together to order the training methods according to degree of use for MOS qualification. The result is the order in which the methods are listed in Table C-14. As can be seen there, AC school is the method most used for MOS qualification: 61.7% of the junior enlisted soldiers and NCOs in the sample indicated this was the method they had used most. Supervised on-the-job training (SOJT) was most used by 37.1% of the junior enlisted soldiers and NCOs in the sample. The remaining

Table C-14

Training Methods for MOS Qualification Most Used by USAR Soldiers

Method	n	Mean rank	Most used by what %	Differences	
				Ranker	Unit
NB6: AC school	629	2.11	61.7	E<N**	-
NB7: SOJT	622	2.32	37.1	E>N**	-
NB10: RF school	525	3.34	25.1	E>N**	-
NB12: Corrspdnce crs	517	3.58	25.9	E>N**	C, CS>CSS*
NB9: ARNG school	374	5.52	47.9	-	-
NB11: Unit school	463	4.01	20.1	-	-
NB8: Civilian school	429	4.80	35.4	-	-

Note. The smaller the rank assigned, the more used the method. Thus E<N means that enlisted soldiers ranked the method as being more used than did NCOs. Differences were analyzed for statistical significance using the Kruskal-Wallis test.

erRank: E = Junior enlisted soldiers (E1-E4s). N = NCOs (E5-E9s). O = Officers and warrant officers. egGeography: 1, 2, . . . = 1st Army, 2nd Army, . . . M = Mean for all armies. euUnit type: C = Combat arms. CS = Combat support. CSS = Combat service support.

*p < .05. **p < .001.

Table C-15

Training Methods for Branch Qualification Most Used by Officers in the USAR

Method	n	Mean rank	Most used by what %	Unit type differences ^a
OB4: AC school	429	1.543	64.2	-
OB5: Civilian school	336	2.845	40.5	C>CS>CSS*
OB6: RF school	346	2.550	37.0	-
OB7: Corrsdnce courses	276	2.142	40.9	-

Note. The smaller the rank assigned, the more used the method. Thus C>CS means that soldiers in combat arms units ranked the method as being less used than did soldiers in combat service units. Differences were analyzed for statistical significance using the Kruskal-Wallis test.

^aUnit type: C = Combat arms. CS = Combat support. CSS = Combat service support.

*p < .001.

methods were ranked in the following order: RF school, correspondence courses, ARNG school, unit school, and civilian school.

Differences in the degree to which each of the training methods were used for MOS qualification were tested by Rank and Unit type using the Kruskal-Wallis test. Table C-14 shows a number of significant differences. Three of the training methods for MOS qualification were used less by junior enlisted soldiers than by NCOs. These methods were: SOJT, RF school, and correspondence courses. The opposite is true for AC school. That is, NCOs used AC school as the primary means for MOS qualification less than junior enlisted soldiers did.

Soldiers in combat arms and combat support units indicated that they used correspondence courses as a method of MOS qualification less than did soldiers in combat service support units.

Table C-15 shows the training methods used by officers for branch qualification. AC school was the method most used, followed by civilian school, RF school, and correspondence courses. Soldiers in combat arms units had used civilian school as a method of branch qualification less than had soldiers in combat support units, and the latter had used civilian school less than had soldiers in combat service support units.

Quality of Training

The type of survey items which were grouped into the "Quality of Training" category have to do with soldiers' perceptions and value judgements about the training they have received. The Quality of Training category of items is different from the Performance category in that the latter type of items asks soldiers to evaluate their own or their unit members' performance of duty position skills. Such performance could partially be seen as an outcome of training and other factors. Quality of Training items, on the other hand, asked soldiers to evaluate the training itself rather than its outcome.

Table C-16 contains the means for all Quality of Training items which are quasi-interval and ratio in nature. The questions in that table are sorted and listed in order of their means within the Rank(s) of which they were asked.

The vast majority of the items regarding Quality of Training were rated on the favorable side of the Likert scale. Positive Likert-type items are those where a strong agreement indicates a favorable response. A favorable response on a positive item could range between 1 (strongly agree) to 3

Table C-16

Grand Means and Differences by Rank (R) and Unit Type (U) for USAR Soldiers on Items Regarding Quality of Training

Item	Differences			
	Mean	n	R ^a	U ^b Interactions ^c
Items asked of all ranks				
NE77: Effective for individual tng: AT	1.659	1019	-	-
ND34: AC schools do a good job of training soldiers	1.801	964	-	-
NE13b: AC Schools have good instructors	1.871	835	-	-
NE15: AC schools have good facilities	1.896	836	-	-
NE102: Helpful in sufficient quantity: STPs/SMs	1.903	1019	-	-
NE14: AC schools have good course content	1.904	835	-	-
NE103: Helpful in sufficient quantity: FMs	1.922	1021	-	-
NE104: Helpful in sufficient quantity: Tech Manuals	1.928	1009	-	-
NE57: Job aids are useful	1.943	954	-	-
NE75: Effective for individual tng: SOJT	1.947	974	-	-
(table continues)				

(table continues)

Item	Differences				Interactions
	Mean	n	R	U	
NE16: AC schools have good equipment	1.949	836	-	-	-
NE109: Helpful in sufficient quantity: ARTEP or equivalent	2.025	934	-	-	-
NC29:d Time not wasted with tng over the soldiers' heads	2.035	1014	-	-	-
NB26: NCOs in my unit require soldiers to meet SM standards	2.084	1014	-	-	-
NE110: Helpful in sufficient quantity: Tng Circulars	2.090	978	-	-	-
NE108: Helpful in sufficient quantity: Job Books	2.099	986	-	-	-
NE111: Helpful in sufficient quantity: Field Circulars	2.125	962	-	-	-
NE105: Helpful in sufficient quantity: TEC lessons for QC	2.144	902	-	-	-
NE106: Helpful in sufficient quantity: Army Regs	2.145	1021	-	-	-
ND26: My unit's leaders know their jobs.	2.174	1030	-	-	-
ND39: Active Army assistance is helpful to my unit	2.195	835	-	-	-
NE21: RF schools have good course content	2.212	722	N<0	-	-
NE20b: RF schools have good instructors	2.216	721	N<0	-	-

(table continues)

Item	Mean	n	Differences		
			R	U	Interactions
NE6b: ARNG schools have good instructors	2.219	219	-	-	-
NE76: Effective for individual tng: IDT	2.243	1013	E>O	-	-
NE7: ARNG schools have good course content	2.249	221	-	C<CS	-
NB54: NCOs help well with SM tasks on which subs are weak	2.306	996	-	-	-
NB55: NCOs correct individual soldier weaknesses well	2.307	1006	-	-	-
NE24: RF schools have easy-to-meet course schedules	2.356	720	-	-	-
NE8: ARNG schools have good facilities	2.357	224	-	C<CS, CSS	-
NC24:d Time not wasted with topics unimport to unit missn	2.361	1006	-	-	-
NB48: My unit has enough Army Regulations to support tng	2.396	984	-	-	-
NE25: RF schools have enough classroom openings	2.399	705	-	CS>CSS	RU
ND33: RF schools do a good job of training soldiers	2.401	821	-	-	-
NE9: ARNG schools have good equipment	2.417	223	-	C<CS, CSS	-
NB43: In my unit, unit training is supervised well	2.439	1011	-	-	-

(table continues)

Item	Differences			
	Mean	n	R	U
NB42: In my unit, individual training is supervised well	2.463	1025	-	-
ND90:a Poor quality of training has not made me want to leave	2.475	1011	-	-
NB41: In my unit, ARTEP tng is tailored to wartime mission	2.480	854	-	-
NB50: My unit has enough Job Books to support training	2.511	923	-	-
ND32: ARNG schools do a good job of training soldiers.	2.527	440	-	-
NB56: NCOs use gaps in tng well to help subs imp indiv skls	2.530	989	E, N<O	-
NE11: ARNG schools have enough classroom openings	2.538	212	-	-
NE22: RF schools have good facilities	2.575	720	E, N<O	-
NB40: In my unit, ARTEP training is interesting	2.589	868	-	-
NE10: ARNG schools have easy-to-meet course schedules	2.595	215	N<O	-
NB39: In my unit, ARTEP training is realistic	2.600	865	-	-
NB44: My unit has enough STPs/SMs to support training	2.601	1001	-	RU
NB51: My unit has enough ARTEPs/Tac Tng Guides to spt tng	2.611	854	-	RU

(table continues)

Item	Differences				Interactions
	Mean	n	R	U	
NB45: My unit has enough Field Manuals to support training	2.635	992	-	-	RU
NC27:d Time not wasted with equip often breaking down	2.652	948	-	-	-
NB46: My unit has enough Tech Manuals to support training	2.653	979	-	-	RU
NB52: My unit has enough Training Circulars to spt tng	2.656	910	-	-	RU
NB38: ARTEP tng is tailored to needs/abilities of soldiers	2.671	845	-	-	-
NC30:d Time not wasted with sldrs who don't try hard	2.679	1013	E,N>O	-	-
NE107: Helpful in sufficient quantity: NG Regs	2.697	314	-	-	-
NE23: RF schools have good equipment	2.697	715	E<O	-	RU
NE18: AC schools have enough classroom openings	2.732	780	E<N,O	-	-
ND89:d Too much wasted tng time has not made me want to leave	2.735	1013	E<O	-	-
NB53: My unit has enough Field Circulars to support tng	2.738	884	-	-	RU
NE17: AC schools have easy-to-meet course schedules	2.741	776	E,N<O	-	-
NC26:d Time not wasted with tng that is not well organized	2.825	1018	-	-	-

(table continues)

Item	Differences				Interactions
	Mean	n	R	U	
NB47: My unit has enough TEC tapes to support training	2.830	861	-	-	-
NE12: ARNG schools have enough funding for soldiers to go	2.887	212	-	-	RU
NE26: RF schools have enough funding for soldiers to go	2.895	668	E<O	-	-
ND49: Tng needs of soldiers in my unit are met during IDT	2.932	972	E<O	-	-
NE19: AC schools have enough funding for soldiers to go	3.031	748	E<N,O	-	-
ND29:d Tng sched changes do not hurt qual of tng in my unit	3.038	1010	-	C, CS>CSS	-
NB49: My unit has enough ARNG Regs to support tng	3.096	178	N<O	-	-
NB27: The way my unit uses MILES helps mission capab	3.289	315	-	-	-
NC28:d Time not wasted with tng facil/equip/materl unavail	3.291	1009	-	-	-
NC25:d Time not wasted with other reqmnts interfering with tng	3.668	1016	E>N,O	-	-
NE59: In my unit hip pocket tng needs no improvement	3.840	655	-	-	-
Items asked of junior enlisted soldiers and NCOs only					
ND37:d Training in my unit is not too repetitive	3.115	616	-	-	-

(table continues)

Item	Mean	n	Differences		
			R	U	Interactions
NC10b:e How many hrs help build/maintain your skills	3.863	600	E>N	C>CS	-
ND17:e Percentage of reclass tng like to get from ARNG school	5.940	451	-	-	-
ND21:e Percentage of reclass tng like to get from correspond	11.255	482	-	-	-
ND18:e Percentage of reclass tng like to get from Unit school	11.720	465	-	-	-
ND20:e Percentage of reclass tng like to get from home study	13.008	483	-	-	-
ND'9:e Percentage of reclass tng like to get from civilian sch	16.897	487	-	C<CS, CSS	-
ND16:e Percentage of reclass tng like to get from RF school	17.750	504	E<N	C<CS	RU
ND22:e Percentage of reclass tng like to get from SOJT	24.202	540	-	-	-
ND15:e Percentage of reclass tng like to get from AC school	37.794	558	-	-	-

Items asked of NCOs and officers only

NE78: Effective for individual tng: Active Army schools	1.665	699	-	-	-
NF38: NCOs can perform skills they are resp to teach others	1.886	693	-	-	-
NE86: Effective for individual tng: Overseas deployment tng	1.893	609	-	-	-

(table continues)

Item	Differences			
	Mean	n	R	U
NF36: NCOs in my unit have good training skills	1.939	701	-	-
NE81: Effective for individual tng: individual training	1.984	702	-	-
NE82: Effective for individual tng: unit training	2.030	697	-	-
NE85: Effective for individual tng: unit exercises	2.039	688	-	-
NE79: Effective for individual tng: RF schools	2.106	671	-	-
NE97:f SOJT helps soldiers to be MOS qualified faster	2.110	682	-	-
NE84 Effective for individual tng: joint tng exercises	2.178	580	-	-
NE83: Effective for individual tng: joint readiness exer	2.247	571	-	-
NE80: Effective for individual tng: MOBEXs	2.284	670	-	-
NC22:d Phys fitness tests don't detract from eff tng of unit	2.396	680	-	-
NE98:d SOJT helps the quality of training	2.431	673	-	-
NC16:d AT evals don't detract from effict tng of my unit	2.479	653	-	-
NE100:d SOJT helps the quality of indiv tng	2.567	656	-	-

(table continues)

Item	Mean	n	Differences		
			R	U	Interactions
NE101:d SOJT helps the quality of unit tng	2.617	653	-	C>CSS	-
NC21:d Phys exams don't detract from efficient tng of my unit	2.656	666	-	-	-
NC17:d IDT evals don't detract from efficient tng of my unit	2.669	626	-	-	-
NE99:f SOJT helps personnel retention	2.745	635	-	C, CSS<CS	-
NC20:d Maint Insp don't detract from efficient tng of my unit	2.784	617	-	-	-
NF21:d Insufficient people to help conduct tng not a prob	2.788	631	N<O	-	-
NF23:d Unit reorganization not a tng obstacle	2.903	577	-	-	-
NF18:d Lack of a local training area not a problem	3.008	622	N>O	-	-
NC19:d Annual Genl Insp don't hurt efficient tng of unit	3.076	658	-	CS>CSS	RU
NF19:d Lack of other physical facilities not a problem	3.161	620	N>O	-	-
NF20:d Insufficient classroom space not a problem	3.163	632	-	-	-
NF15:d Insufficient training materials not a problem	3.167	630	N<O	-	-
NC18:d Cmd Visits/Insp don't hurt efficient tng of my unit	3.197	669	-	-	RU

(table continues)

Differences

Item	Mean	n	R	U	Interactions
NF39:d Don't get conflicting tng guidance from diff higher HQ	3.201	673	-	-	-
NF40:d Unit doesn't lack realstc chances to use equip/skills	3.228	676	-	-	-
NC15:d My unit doesn't train on more tasks than can learn in avail time	3.359	629	-	-	-
NF22:d Soldier turnover is not a problem for tng my subords	3.397	633	-	-	-
NF13:d Insuficent time to prepare not a probl for tng subords	3.476	634	N<O	-	-
NF14:d Insufficient time to conduct tng not a problem	3.546	632	-	-	-
NF16:d Lack of simulators/tng devices not a problem	3.693	602	-	-	-
NF17:d Shortage of the right equip not a tng problem	3.712	624	-	-	-
ND23:e What % of unit NCOs have good training skills	68.994	688	-	-	-
ND24:e What % of unit NCOs can perf skills they teach	70.662	677	-	-	-

Items asked of officers only

OD18:e Would want corresp course for what % of retrain	12.066	318	-	-	-

(table continues)

Item	Mean	n	Differences		
			R	U	Interactions
OD17:e Would want Home Study for what % of retraining	18.211	323	-	-	-
OD16:e Would want civilian school for what % of retn	18.308	315	-	C<CSS	-
OD15:e Would want RF school for what % of retraining	18.958	332	-	-	-
OD14:e Would want AC school for what % of retraining	46.662	364	-	C>CS, CSS	-

Items asked of NCOs only

NF2: Contrib to my tng success: prev ldr/counseling tng	1.934	243	-	-	-
NF4: Contrib to my tng success: higher HQ guidance	2.029	239	-	-	-
NF3: Contrib to my tng success: prev tng on "how to train"	2.029	239	-	-	-
NF5: Contrib to my tng success: reference books	2.065	246	-	-	-
NF11: Contrib to my tng success: trainers' manuals	2.094	245	-	-	-
NF7: Contrib to my tng success: help with conduct of tng	2.107	243	-	-	-
NF1: Contrib to my tng success: suggestions from others	2.136	236	-	-	-
NF6: Contrib to my tng success: help with tng set-up	2.163	246	-	C<CS	-

(table continues)

Item	Differences			
	Mean	n	R	U
NF10: Contrib to my tng success: hip pocket tng materials	2.278	234	-	-
NF9: Contrib to my tng success: simulators	2.386	207	-	-
ND55: I've had success tng my subord to reqd rdns levels	2.406	278	-	-
NF8: Contrib to my tng success: computers	2.714	189	-	CS<C,CSS
NC9c:e How many hrs help build/maintain your ldr skills	3.534	283	-	-
NC9b:e How many hours really help others maintain skills	3.747	284	-	-
Items asked of junior enlisted soldiers only				
ED51: The NCOs in my unit have good training skills	2.227	322	-	-
ED52: NCOs in unit perf skills they are resp to trn othr on	2.268	325	E>N	-

Note. The majority of items in this table are Likert scales. Exceptions are footnoted. All differences reported are statistically significant at the .001 level and substantial (at least a quarter of a scale point, or 5%, or one-fourth of the sd).

^aRank: E = Junior enlisted soldiers (E1-E4s). N = NCOs (E5-E9s). O = Officers and warrant officers. ^bUnit type: C = Combat arms. CS = Combat support. CSS = Combat service support. ^cInteraction terms: RG = rank by geography. RU = rank by unit type. RC = rank by component. GU = geography by unit type. GC = geography by component. ^dThis item has been rephrased and the polarity of its mean reversed so as to parallel the "positive" Likert scales. ^eThis item rendered ratio data in the unit of measure implied in the item description. ^fThis item is rephrased to parallel other items in this table.

(medium). Negative Likert-type items were reversed statistically so as to agree with positive ones. Thus a mean of 1 (strongly agree) would reflect a favorable response, rather than an unfavorable one. This was done in order to accomodate the ordering of items according to favorability of responses.

In Table C-16, the Quality of Training items that received a mean response of "agree" (2.00) or better and were asked of all three Ranks were:

1. NE77: Annual Training is an effective means for training individual soldiers.
2. ND34: Active Component schools do a good job of training ARNG or USAR soldiers.
3. NE13b: Active Component schools have good instructors.
4. NE15: Active Component schools have good facilities.
5. NE102: Soldier Training Publications/Soldier's Manuals are helpful when available in sufficient quantity.
6. NE14: Active Component schools have good course content.
7. NE103: Field Manuals are helpful when available in sufficient quantity.
8. NE104: Technical Manuals are helpful when available in sufficient quantity.
9. NE57: Job aids, such as diagrams or checklists which are readily available are useful.
10. NE75: Supervised On-the Job Training (SOJT) is an effective means for training individual soldiers.
11. NE16: Active Component schools have good equipment.

Several Likert-type items regarding Quality of Training were asked of only NCOs and officers. Of these, five items received a mean response of "agree" (2.00) or better. These were:

1. NE78: Active Component schools are an effective means for training individual soldiers.
2. NF38: I can perform the skills that I am responsible to teach others.
3. NE86: Overseas Deployment Training (ODT) is an effective means for training individual soldiers.
4. NF36: I have good training skills.
5. NE81: Individual training is an effective means for training individual soldiers.

Fourteen Likert-type items regarding Quality of Training were asked of NCOs only. Only one of these was responded to with a mean of less than 2.0. This item was NF2, "Previous training in leadership and counseling techniques is an important contributor to my success in personally training subordinates." Neither of the Likert-type items regarding Quality of Training that were asked of only junior enlisted soldiers were responded to with a mean of less than 2.0.

Table C-16 lists numerous items regarding Quality of Training which received moderate agreement, i.e., means ranging from 2.00 to 3.00. Means in this range indicate favorability; that is, the facet of training being evaluated was seen as having good quality. Rather than relist all of these here, the reader is directed to the table.

Although soldiers responded favorably to training in general, a few of the Quality of Training items received a mean response which was less than favorable (though not strongly so) i.e., less than 3.00. As responses to these items imply, there are certain areas which, while not strongly negative, still need attention more urgently than others. Those areas which seem to need attention are (in order, starting with the least favorable mean):

1. NE59: Hip pocket training.
2. NF17: Shortage of the right equipment.
3. NF16: Lack of simulators and training devices.
4. NC25: Too many nontraining requirements.
5. NF14: Insufficient time to conduct training.
6. NF13: Insufficient time to prepare training.
7. NF22: Soldier turnover.
8. NC15: Training on more tasks than can be learned in available time.
9. NC28: Wasted time because of unavailable facilities, equipment, or materials.
10. NB27: The way MILES is used.
11. NF40: Lack of realistic chances to use equipment and skills.
12. NF39: Conflicting training guidance from different higher headquarters.
13. NC18: Too many command visits and inspections.
14. NF15: Lack of training materials (books, manuals, etc.)
15. NF20: Insufficient classroom space.

16. NF19: Lack of physical facilities other than LTAs (firing ranges, armories, training centers, etc.).
17. ND37: Too much repetition in training.
18. NB49: Too many National Guard Regulations.
19. NC19: Interference of annual general inspections.
20. ND29: Too many changes in my unit training schedules.
21. NE19: Not enough funding for soldiers to attend AC schools.
22. NF18: Lack of local training areas.

Several facets of training were judged differently by soldiers in the various Ranks. These differences are noted in the Rank column of Table C-16. Breakdown means for the three Ranks are given in Table C-17 whenever a difference by Rank is noted in Table C-16. Only these differences which are especially noteworthy are expressed textually below.

Although all Ranks agreed, officers agreed more strongly than did junior enlisted soldiers that IDT is effective for individual training (NE76). Officers agreed less strongly than did NCOs that NCOs use pauses/breaks in unit training to help subordinates improve their individual skills (NB56). All Ranks generally agreed with positive statements regarding the adequacy of that part of the military school system that is available to the RC soldier, i.e., Active Component, Reserve Forces, and National Guard schools. However, officer opinions were almost always significantly more negative about the schools than were the opinions of junior enlisted soldiers and NCOs (NE6-26). All Ranks disagreed that training time was not wasted due to other requirements interfering with training (NC25). Officers disagreed more strongly than did junior enlisted soldiers.

Analyses of variance pointed out a number of differences by Unit type on how soldiers rated facets of training. Breakdown means for these analyses are shown in Table C-18. None of the differences between type of units stood out as being worthy of particular mention.

Several of the items in Table C-16 are not Likert-type scales. Rather they obtained responses which are ratio data. Generally they are items which requested that the respondent estimate a number of hours or a percentage. These items are identified with a footnote in Table C-16. With ratio items, a larger mean indicates a more favorable response.

Item NC10b, "How many hours spent receiving training help to build or maintain your skills?" must be interpreted in light

Table C-17

Group Means on Items Regarding Quality of Training Which Showed a Substantial Difference by Rank in the USAR

Item	E1-E4s		NCOs		Officers		Overall	
	Mean	n	Mean	n	Mean	n	Mean	sd
ED52: NCOs in unit perf skills they are resp to trn othr on	2.27	324	2.00	1	-	-	2.27	.87
NB56: NCOs use gaps in tng well to help subs imp indiv skls	2.47	322	2.33	295	2.74	372	2.53	1.02
NC10b: How many hrs help build/maintain your skills	4.66	314	2.99	286	-	-	3.86	4.12
NC25:a Time not wasted with other reqmnts interfering with tng	3.41	322	3.71	297	3.85	397	3.67	1.12
NC30:a Time not wasted with sldrs who don't try hard	2.95	321	2.74	296	2.42	396	2.68	1.19
ND16: Percent of reclass tng like to get from RF school	14.85	255	20.72	249	-	-	17.75	22.36
ND49: Tng needs of soldiers in my unit are met during IDT	2.75	295	2.90	289	3.09	388	2.93	1.02
ND89:a Too much wasted tng time has not made me want to leave	3.11	324	3.26	295	3.39	394	3.26	1.23
NE9: ARNG schools have good equipment	2.58	62	2.37	78	2.34	83	2.42	.93
NE10: ARNG schools have easy-to-meet course schedules	2.54	61	2.46	74	2.76	80	2.60	1.04
NE17: AC schools have easy-to-meet course schedules	2.56	214	2.59	224	2.96	338	2.74	1.09

(table continues)

Item	E1-E4s		NCOs		Officers		Overall	
	Mean	n	Mean	n	Mean	n	Mean	sd
NE18: AC schools have enough classroom openings	2.41	222	2.71	219	2.95	339	2.73	1.12
NE19: AC schools have enough funding for soldiers to go	2.61	207	3.05	210	3.28	331	3.03	1.23
NE20b: RF schools have good instructors	2.15	165	2.10	263	2.36	293	2.22	.82
NE21: RF schools have good course content	2.15	165	2.08	263	2.36	294	2.21	.79
NE22: RF schools have good facilities	2.39	163	2.46	262	2.78	295	2.58	.92
NE23: RF schools have good equipment	2.53	163	2.62	263	2.86	289	2.70	.94
NE26: RF schools have enough funding for soldiers to go	2.71	156	2.90	243	3.00	269	2.90	1.15
NE76: Effective for individual tng: IDT	2.46	311	2.22	299	2.09	403	2.24	.94
NF13:a Insuficnt time to prepare not a probl for tng subords	-	-	3.30	240	3.59	394	3.48	1.09
NF15:a Insufficient training materials not a problem	-	-	2.65	241	2.95	389	2.83	1.08
NF18:a Lack of a local training area not a problem	-	-	3.17	239	2.91	383	3.01	1.15
NF19:a Lack of other physical facilities not a problem	-	-	3.33	236	3.06	384	3.16	1.14
NF21:a Insufficient people to help conduct tng not a prob	-	-	2.62	241	2.89	390	2.79	1.00

(table continues)

Note. The items in this table are Likert scales.

aThis item has been rephrased and the polarity of its mean reversed so as to parallel the "positive" Likert scales.

Table C-18

Group Means on Items Regarding Quality of Training Which Showed a Substantial Difference by Unit Type in the USAR

Item	Combat		CS		CSS		Overall	
	Mean	n	Mean	n	Mean	n	Mean	sd
NC10b: ^a How many hrs help build/maintain your skills	4.75	100	3.99	174	3.52	326	3.86	4.12
NC19: ^b Annual Genl Insps don't hurt efficient tng of unt	3.16	99	3.27	165	2.97	394	3.08	1.17
ND16: ^a Percent of reclass tng like to get from RF school	13.91	75	20.44	144	17.40	285	17.75	22.36
ND19: ^a Percent of reclass tng like to get from civilian sch	12.18	74	18.57	140	17.32	273	16.90	23.55
ND29: ^b Tng sched changes do not hurt qual of tng in my unit	3.22	144	3.19	268	2.92	598	3.04	1.14
NE7: ARNG schools have good course content	2.07	42	2.32	53	2.28	126	2.25	.86
NE8: ARNG schools have good facilities	2.12	42	2.44	55	2.40	127	2.36	.96
NE9: ARNG schools have good equipment	2.21	42	2.47	55	2.46	126	2.42	.93
NE25: RF schools have enough classroom openings	2.49	98	2.56	185	2.31	422	2.40	.94
NE86: Effective for individual tng: Overseas deployment tng	1.76	86	2.00	146	1.88	377	1.89	1.00
NE99: ^c SOJT helps personnel retention	2.65	93	2.95	153	2.69	389	2.74	1.10

(table continues)

Item	Combat		CS		CSS		Overall	
	Mean	n	Mean	n	Mean	n	Mean	sd
NE101:b SOJT helps the quality of unit tng	2.82	92	2.63	159	2.57	402	2.62	1.13
NF6: Contrib to my tng success: help with tng set-up	1.98	44	2.23	56	2.19	146	2.16	.84
NF8: Contrib to my tng success: computers	2.89	35	2.45	38	2.75	116	2.71	1.17
OD14:a Would want AC school for what % of retraining	58.26	42	43.89	88	45.62	234	46.66	29.52
OD16:a Would want civilian school for what % of retnng	12.41	34	15.63	76	20.28	205	18.31	22.26

Note. The majority of items in this table are Likert scales. Exceptions are footnoted.

c
1
5
8

a This item rendered ratio data in the unit of measure implied in the item description.

b This item has been rephrased and the polarity of its mean reversed so as to parallel the "positive" Likert scales. c This item is rephrased to parallel other items in this table.

of soldiers' responses to item NC10 (which was reported in Table C-10), "On an average 16-hour weekend drill period (MUTA-4) how much of your time is spent receiving training that is closely supervised by NCOs or officers?" Since the average answer to the later was 5.167 hours and the mean for NC10b was 3.863 hours, soldiers were indicating that roughly 75% ($3.863 \div 5.167$) of the time they spend receiving training is actually helpful. While it is unfortunate that nearly two thirds of the soldiers' time in drills appears to be taken up by nontraining activities, it is gratifying to note that most of the time spent actually receiving training was thought by soldiers to be worthwhile. Differences indicated in Table C-16 between junior enlisted soldiers and NCOs and between Unit types are merely artifactual. This is so because the same differences by Rank and Unit type were found for item NC10 as were found for item NC10B. Thus the percentages remain approximately the same regardless of Rank or Unit type.

NCOs were asked a similar question regarding how much of the time they spend in a MUTA-4 training others is actually helpful in building or maintaining their own leadership ability (NC9C) and the skills of those whom they train (NC9B). These two items from Table C-16 must be interpreted in light of NCO responses to Item NC9 (reported in Table C-16), "On an average 16-hour weekend drill period (MUTA-4), how much of your time is spent training others?" The mean response to this item was 6.29 hours. Since the mean responses to NC9C and NC9B were 3.534 and 3.747 respectively, NCOs felt that roughly 59.6% of the time they spent training is actually helpful in building or maintaining the skills of other soldiers and 56.2% of the time they spend training others is actually helpful in building their own leadership skills. Two percentage items, asked of only NCOs and officers, requested estimates of NCO capabilities. The first, ND23, inquired "What percent of the NCOs in your unit have good training skills?" The mean response was 69.0%. The second, ND24, asked "What percentage of NCOs in your unit can perform the skills they are responsible for teaching?" The mean response was 70.7%. Thus, NCOs were rated fairly well in terms of their training ability, but there is still room for improvement.

The remaining non-Likert-type items in Table C-16 all have to do with soldier preferences for methods of reclassification. On these items soldiers were asked to imagine that they were changing MOS or branch and indicate what percentage of their training they would prefer to receive through each of various methods. For these items, the higher the mean the more preferred the training method. As can be seen in the "junior enlisted soldiers and NCOs only" section of Table C-16 the most preferred method of reclassification training was AC school ($\bar{M} = 37.8\%$). The next highest preference was for SOJT ($\bar{M} = 24.2\%$). The next most preferred method of reclassification

training was RF school ($\bar{M}$ = 17.8%) followed by civilian school ($\bar{M}$ = 16.9%), home study ($\bar{M}$ = 13.0%), unit school ($\bar{M}$ = 11.7%), correspondence courses ($\bar{M}$ = 11.3%), and ARNG school ($\bar{M}$ = 5.9%). These figures were a reaffirmation of the way USAR soldiers valued AC school and SOJT as methods of reclassification training.

A similar but slightly different set of questions asked junior enlisted soldiers and NCOs which method for receiving reclassification training they would prefer if they could select only one method. Soldiers were asked to rank order their preferences. Table C-19 shows the results of these questions. The order of preference implied by the order in which the methods are listed in Table C-19 was derived by simultaneous consideration of the "Mode rank," "Mean rank," and "1st choice for what %" columns of the table. When allowed only one way of receiving reclassification training, soldiers most preferred AC school, even over SOJT. After SOJT they chose RF school, then civilian school, then unit school, then paid home study based on follow-up testing (possible option in the future), then correspondence courses, followed by ARNG school. Thus, USAR soldiers would prefer to get the bulk of reclassification training through AC school and SOJT, mixed with a variety of other sources; but if only one source were available they would prefer AC school. Four items in Table C-16 dealt with officer preferences among four training methods which could be used for branch requalification. They were asked what percentage of their training they would like to receive through each of the four methods. For these items, the higher the mean, the more preferred the training method. The "officers only" section of Table C-16 shows that the most preferred method of reclassification training was AC school ($\bar{M}$ = 46.7%). This method received more than double the preference assigned to the next highest method, RF school ($\bar{M}$ = 19.0%). As can be seen in Table C-16, home study and civilian school received nearly the same indication of preference (means = 18.2% and 18.3% respectively). Correspondence courses were least preferred for branch retraining with officers saying that they would like to obtain 12.1% of their retraining through this method.

A similar but slightly different set of questions asked officers which method for receiving reclassification training they would prefer if they could select only one of the five methods. Officers were asked to rank order their preferences. Table C-20 shows the results of these questions. When allowed only one means of obtaining reclassification training, officers preferred AC school far above any other method. The order of preference among these remaining four is indicated by the order in which they are listed in Table C-20, namely RF school, civilian school, paid home study, and correspondence courses. This order was determined by considering simultaneously the

Table C-19

Preferences of Enlisted Soldiers and NCOs in the USAR on Single Methods of Reclassification Training

Method	Mode rank	Mean rank	1st choice for what %	Differences ^a	
				Rank ^{b, c}	Unit
ND7: AC school	1	2.727	49.9	E>N**	-
ND14: SOJT	1	3.507	21.2	-	-
ND8: RF school	2	3.641	12.1	E>N***	-
ND11: Civilian school	3	4.312	13.6	E<N*	-
ND9: ARNG school	8	6.053	1.1	-	-
ND10: Unit school	5	4.775	5.3	-	-
ND12: Paid home study	7	5.028	9.9	-	-
ND13: Corrspdnce crs	7	5.140	4.4	-	-

^a A 5% difference in the percentage of soldiers giving this option a first choice rating was considered substantial enough to report. Differences of this magnitude were significant (Chi-square adjusted residual) at least at the .01 level. ^b n = 833. ^c Rank: E = Junior enlisted soldiers (E1-E4s). N = NCOs (E5-E9s). O = Officers and warrant officers.

*p < .5. **p < .05. ***p < .001.

Table C-20
 Preferences of USAR Officers on Single Methods of Retraining for Change of Branch

Method	Mode rank	Mean rank	1st Choice for what %	Differences by unit type
OD9: AC school	1	1.960	62.9	-
OD10: RF school	2	2.779	9.3	-
OD11: Civilian school	3	3.067	12.4	-
OD12: Paid home study	4	3.347	11.7	-
OD13: Correspondence course	5	3.778	5.7	-

^aA 5% difference in the percentage of soldiers giving this option a first choice rating was considered substantial enough to report. Differences of this magnitude were significant (Chi-square adjusted residual) at least at the .01 level.

"Mode rank" column, the "Mean rank" column, and the "1st choice for what %" column.

Satisfaction

Items in the "Satisfaction" category provide information on soldiers' affective responses toward various aspects of being in the USAR. Quality of Training items are different from Satisfaction items in that the former ask for value judgements on how training is conducted, while the latter ask soldiers their own affective responses toward aspects of being in the USAR. Like Performance, Satisfaction might be seen partially as an outcome of training rather than an evaluation of the training itself. Table C-21 provides the basic details on these items. Mean responses on all Likert-type, Satisfaction items are favorable (i.e., means are less than 3.00, indicating agreement). The means in Table C-21 are listed in order of their favorability. Accordingly, the aspect of being in the USAR which soldiers found to be most satisfactory was their good working relationship with their unit leaders ($M = 1.838$). Officers agreed with this Satisfaction statement more strongly than did junior enlisted soldiers. Specific means for breakdowns by Rank are shown in Table C-22.

Soldiers solidly agreed that they are satisfied with the following:

1. ND85: Getting along with soldiers in their units.
2. ND68: Friends in their units.
3. ND74: Doing something worthwhile and important in the USAR.
4. ND66: Having a chance to help protect their country.
5. ND28: The number of awards that are given to soldiers.
6. ND58: Opportunity in the USAR to earn a retirement.
7. ND62: Being in the USAR in general.
8. ND71: The way the USAR allows them to maintain military retirement benefits.
9. ND57: The way the USAR lets them defend their country.
10. ND73: Opportunities in the USAR to be responsible and lead.
11. ND64: Their assignments in the USAR.
12. ND69: The way the USAR provides a change of pace from civilian jobs (see also ND60).

Table C-21

Grand Means and Differences by Rank (R) and Unit Type (U) for USAR Soldiers on Items Regarding Satisfaction

Item	Mean	n	Differences		
			Ra	Ub	Interactionse
Items asked of all ranks					
ND35: I have a good working relatnshp with my unit ldrs	1.838	1034	E>O	-	-
ND85:d Not getting along with soldiers in my unit is not making me want to leave	1.860	1006	-	-	-
ND68: Stay in the RC: friends I have in my unit	1.966	1032	-	-	-
ND74: Stay in the RC: doing something worthwhile/important	1.971	1033	E>O	-	-
ND66: Stay in the RC: chance to help protect my country	2.042	1029	-	-	-
ND28:d Right amt of awards are given to soldiers in my unit	2.054	1030	-	-	-
ND58: I'm satisfied with how RC lets me earn a retirement	2.067	1033	-	-	RU
ND62: I'm satisfied with being in the ARNG/USAR	2.075	985	E>O	-	-
ND80:d Plans to move have not made me want to leave	2.083	912	E>N,O	-	-
ND71: Stay in the RC: retire-ment benefits in the military	2.096	1033	E,N>O	C>CSS	-
(table continues)					

(table continues)

Item	Differences			
	Mean	n	R	U
ND57: I'm satisfied with how RC lets me defend my country	2.098	1030	-	-
ND73: Stay in the RC: opportunities to be responsible/lead	2.101	1033	E>O	-
ND64: I'm satisfied with my assignment in the ARNG/USAR	2.146	987	E>N,O	-
ND60: I'm satisfied with how RC gives me change of pace	2.166	1028	E>O	-
ND69: Stay in the RC: change of pace from my civilian job	2.173	992	-	-
ND42: I have confidence in my unit's leader(s)	2.197	1032	E,N>O	-
ND75: Stay in the RC: my status in the military	2.224	1034	-	RU
ND70: Stay in the RC: the pay I receive	2.235	1037	E,N>O	-
ND61: I'm satisfied with how RC maintained my AC rank/resp	2.259	792	E,N>O	-
ND81: Low pay in the RC has not made me want to leave	2.299	1007	E>N>O	-
ND63: I'm satisfied with my pay in the ARNG/USAR	2.316	987	E,N>O	-
ND82: Low morale in my unit has not made me want to leave	2.325	1013	E,N>O	-

(table continues)

Item	Mean	n	Differences		
			R	U	Interactions
ND84:d Difficulty keeping up with knowledge/skills has not made me want to leave	2.375	1013	E>N,O	-	-
ND87:d Boring work has not made me want to leave	2.383	1011	E>N>O	-	-
ND44: Discipline is handled fairly in my unit	2.386	1004	E,N>O	-	-
ND59: I'm satisfied with how RC lets me get educ benefits	2.432	969	E,N<O	-	-
ND72: Stay in the RC: the military atmosphere	2.435	1031	-	-	-
ND67: Stay in the RC: good morale in my unit	2.441	1029	E>O	-	-
ND56: I'm satisfied with how RC lets me learn a skill	2.455	1000	-	-	-
ND83:d Leave the RC: pressure to work to hard in my duty asg	2.491	1013	E<N,O	-	-
ND76: Stay in the RC: my status in the community	2.527	1016	-	-	-
ND30: The morale in my unit is high	2.541	1038	E>N>O	-	-
ND86:d Getting promoted slower than I wanted has not made me want to leave	2.611	1009	-	-	-
ND79:d My civilian job has not made me want to leave	2.622	971	E,N<O	-	-

(table continues)

Item	Differences				Interactions
	Mean	n	R	U	
ND88:d Lack of recognition for what I do has not made me want to leave	2.626	1014	E,N>0	-	-
ND43: Promotions are handled fairly in my unit	2.628	1005	E,N>0	-	RU
ND78:d Family concerns have not made me want to leave	2.687	989	E,N<0	-	-
ND92:d Leave the RC: not do all I would like to do out of RC	2.688	1009	E,N<0	-	-
ND27: Adequate recognition and awards given for good perf	2.692	1037	N>0	-	-
ND91:d Not being able to do all I would like to do in the RC has not made me want to leave	2.755	1013	-	-	RU
ND36: Soldiers in unit are promoted when they should be	2.906	1020	E,N>0	C<CS,CSS	-
ND31: I joined the ARNG/USAR in order to learn a skill	3.223	1005	E<N<0	-	RU
ND2:e How many more yrs I'd stay in RC if asgt didn't change	8.856	992	-	-	-
ND3:e How many more yrs I'd stay if RC if I could change asgt	10.517	908	-	-	-
NU8:e Percentage of soldiers in your unit replaced in past year	22.79	979	-	C>CSS	-

(table continues)

Item	Mean	n	Differences		
			R	U	interactions
Item asked of junior enlisted soldiers and NCOs only					
ND65: I'm satisfied with quality of tng in my current asg	2.480	980	-	-	-

Note. The majority of items in this table are Likert scales. Exceptions are footnoted. All differences reported are statistically significant at the .001 level and substantial (at least a quarter of a scale point, or 5%, or one-fourth of the sd).

^aRank: E = Junior enlisted soldiers (E1-E4s). N = NCOs (E5-E9s). O = Officers and warrant officers. ^bUnit type: C = Combat arms. CS = Combat support. CSS = Combat service support. ^cInteraction terms: RG = rank by geography. RU = rank by unit type. RC = rank by component. GU = geography by unit type. GC = geography by component. ^dThis item has been rephrased and the polarity of its mean reversed so as to parallel the "positive" Likert scales. ^eThis item rendered ratio data in the unit of measure implied in the item description.

Table C-22

Group Means on Items Regarding Satisfaction Which Showed a Substantial Difference by Rank in the USAR

Item	E1-E4s		NCOs		Officers		Overall	
	Mean	n	Mean	n	Mean	n	Mean	sd
ND27: Adequate recognition and awards given for good perf	2.69	329	2.86	304	2.56	404	2.69	1.19
ND30: The morale in my unit is high	2.81	327	2.56	305	2.31	406	2.54	1.06
ND31: I joined the ARNG/USAR in order to learn a skill	2.64	324	3.14	301	3.78	380	3.22	1.25
ND35: I have a good working relatsnshp with my unit ldrs	2.03	325	1.82	306	1.59	403	1.84	.78
ND36: Soldiers in unit are promoted when they should be	3.21	322	3.10	300	2.51	398	2.91	1.19
ND42: I have confidence in my unit's leader(s)	2.29	327	2.32	303	2.02	402	2.20	.92
ND43: Promotions are handled fairly in my unit	2.95	315	2.84	299	2.21	391	2.63	1.11
ND44: Discipline is handled fairly in my unit	2.53	313	2.55	297	2.15	394	2.39	.99
ND59: I'm satisfied with how RC lets me get educ benefits	2.22	325	2.30	297	2.75	347	2.43	1.12
ND60: I'm satisfied with how RC gives me change of pace	2.29	327	2.24	301	2.01	400	2.17	.91
ND61: I'm satisfied with how RC maintained my AC rank/resp	2.46	249	2.30	256	2.05	287	2.26	.93

(table continues)

Item	E1-E4s		NCOs		Officers		Overall	
	Mean	n	Mean	n	Mean	n	Mean	sd
ND62: I'm satisfied with being in the ARNG/USAR	2.27	308	2.06	281	1.94	396	2.08	.83
ND63: I'm satisfied with my pay in the ARNG/USAR	2.58	312	2.38	282	2.06	393	2.32	.96
ND64: I'm satisfied with my assignment in the ARNG/USAR	2.41	312	2.10	283	1.96	392	2.15	.85
ND67: Stay in the RC: good morale in my unit	2.61	326	2.49	300	2.27	403	2.44	1.02
ND70: Stay in the RC: the pay I receive	2.52	328	2.30	304	1.96	405	2.24	.98
ND71: Stay in the RC: retirement benefits in the military	2.34	325	2.08	303	1.91	405	2.10	.95
ND73: Stay in the RC: opportunities to be responsible/lead	2.32	327	2.12	301	1.91	405	2.10	.89
ND74: Stay in the RC: doing something worthwhile/important	2.15	326	1.97	302	1.83	405	1.97	.87
ND78:a Family concerns have not made me want to leave	2.53	317	2.57	289	2.90	383	2.67	1.25
ND79:a My civilian job has not made me want to leave	2.48	302	2.51	286	2.81	383	2.62	1.25
ND80:a Plans to move have not made me want to leave	2.28	308	1.93	268	2.03	336	2.08	1.02
ND81:a Low pay in the RC has not made me want to leave	2.68	322	2.30	293	1.98	392	2.30	1.05
ND82:a Low morale in my unit has not made me want to leave	2.56	324	2.41	294	2.07	395	2.32	1.13

(table continues)

Item	E1-E4s		NCOs		Officers		Overall	
	Mean	n	Mean	n	Mean	n	Mean	sd
ND83: ^a Leave the RC: pressure to work to hard in my duty asg	2.22	323	2.53	295	2.68	395	2.49	1.17
ND84: ^a Difficulty keeping up with knowledge/skills has not made me want to leave	2.19	323	2.45	295	2.47	395	2.38	1.08
ND87: ^a Boring work has not made me want to leave	2.80	323	2.33	296	2.07	392	2.38	1.12
ND88: ^a Lack of recognition for what I do has not made me want to leave	2.82	323	2.77	298	2.35	393	2.63	1.20
ND92: ^a Leave the RC: not do all I would like to do out of RC	2.50	321	2.57	296	2.92	392	2.69	1.19

Note. The items in this table are Likert scales.

^aThis item has been rephrased and the polarity of its mean reversed so as to parallel the "positive" Likert scales.

13. ND42: The confidence they have in their unit leaders.

14. ND75: Their status in the military.

15. ND70: The pay they receive.

Milder agreement (means ranging from 2.25 to 3.0) was indicated by soldiers on a variety of other items, all of which are listed in Table C-21. Those items which reflected the lowest degree of soldier satisfaction include the following areas.

1. ND36: Timeliness of promotions.

2. ND91: Ability to accomplish within the USAR.

3. ND27: Adequacy of recognition and awards given to soldiers in one's unit.

4. ND92: Ability to accomplish all they would like to do outside of the USAR without USAR interference.

5. ND43: Fairness of promotion.

6. ND88: Amount of personal recognition.

7. ND86: Speed of rank advancement.

Again it should be stressed that while soldiers were least satisfied with the items listed above, responses were nonetheless favorable. The general view provided by these least favorable Satisfaction means is that stagnation, i.e., lack of upward progression in the USAR, is probably the major cause of soldier dissatisfaction in the USAR. It is clear from the differences indicated in the Rank column of Table C-21 that Satisfaction tended to increase with Rank. That is, where differences were found, they were always in the order of officers being more satisfied than NCOs and NCOs being more satisfied than junior enlisted soldiers. Breakdowns by Rank for these items are shown in Table C-22.

The third non-Likert item is an indirect indicator of Satisfaction. Unit commanders of respondents were asked the percentage of soldiers in their units who were replaced in the past year. The average response was 22.79%. Unit type accounted for differences in the responses to two of the Satisfaction items. These differences are broken down in Table C-23. There it can be seen that soldiers in combat arms units ($\bar{M}$ = 2.66) tended to agree more that soldiers are promoted when they should be (ND36) than do soldiers in combat support ($\bar{M}$ = 2.96) and combat service support units ($\bar{M}$ = 2.94). Soldiers in combat service support units ($\bar{M}$ = 2.00) tended to agree more that they stay in the USAR because of retirement benefits (ND71) than did soldiers in combat arms units ($\bar{M}$ = 2.26).

Table C-23

Group Means on Items Regarding Satisfaction Which Showed a Substantial Difference by Unit Type in the USAR

Item	Combat		CS		CSS		Overall	
	Mean	n	Mean	n	Mean	n	Mean	sd
ND36: Soldiers in unit are promoted when they should be	2.66	144	2.96	272	2.94	1.18	2.91	1.19
ND71: Stay in the RC: retirement benefits in the military	2.26	146	2.20	277	2.00	610	2.10	.95

Note. The items in this table are Likert scales.

Three non-Likert-type items contributed to the Satisfaction picture. The first, ND2, is the number of years soldiers said that they would stay in the USAR even if they had to stay in their present assignment. The average response was 8.9 years. If given a chance for a new assignment (NB3), soldiers on the average said that they would stay 10.5 years.

Performance

Items in the "Performance" category asked soldiers to evaluate their own or their unit members' performance of duty positions skills. Such performance could be seen as an outcome of training and other factors. All Performance items in the survey were stated with a positive valence.

The Performance item most strongly agreed with was asked of NCOs and officers only. Responses to this item, ND54, indicated solid agreement ($M = 1.997$) that the overall performance of respondents' units in ARTEP training was good. This item is shown at the bottom of Table C-24.

Fairly strong agreement was also found for Item ND46, "My unit can operate in the field for seventy-two hours or more." The mean response to this item was 2.188. Milder agreement was found for the remainder of the Likert-type items in the Performance category. These items (ND94, ND95, ND96, ND40, and ND45) are listed together with their means in Table C-24.

Item ND45, "Soldiers in my unit use crew-served weapons to standard," showed a statistically significant difference both by Rank and by Unit type. Table C-25 shows that officers did not agree with the statement as strongly as did junior enlisted soldiers. Table C-26 shows that soldiers in combat arms units agreed with this statement more than did soldiers in combat support or combat service support units.

The relatively high means for all of the Likert-type items regarding Performance is noteworthy. Soldiers in the USAR apparently have a high degree of confidence in their own abilities to perform the tasks for which they are trained.

Four ratio-type items are included in the Performance category. Soldiers were asked what percentage of soldiers in the three Ranks would be able to perform well if their unit were mobilized (ND4, ND5, ND6). They responded that 62.7% of the E1s to E4s, 73.1% of the NCOs, and 71.0% of the officers could perform well if their unit were mobilized.

Soldiers from all three Ranks were asked, "What percentage of the critical tasks required for your duty assignment can you perform to standard?" (ND1). The overall average was 77.5%. Officers answered with a slightly higher percent than did

Table C-24

Grand Means and Differences by Rank (R) and Unit Type (U) for USAR Soldiers on Items Regarding Performance Ability

Item	Mean	n	Differences		
			R ^a	U ^b	Interactions ^c
Items asked of all ranks					
ND46: My unit can operate in the field for 72 hrs or more	2.188	812	-	-	-
ND94: Soldiers in my unit can do common tasks from the SM	2.399	993	-	-	-
ND95: Soldiers in my unit can do MOS tasks from the SM	2.401	988	-	-	-
ND96: Soldiers in my unit can do missn essentl ARTEP tasks	2.430	877	-	-	-
ND40: It's easy to maintain my duty asg individual skills	2.597	1033	-	-	-
ND45: Soldiers in my unit use crew-served wpns to standard	2.619	646	E<O	C<CSS	-
NU8: Percentage of soldiers in your unit replaced in past year	22.793	979	-	C>CSS	-
ND4:a Percent of E1-4 who could perform well if mobilized	62.676	996	-	-	RU
ND6:a Percent of Offs who could perform well if mobilized	71.042	992	E,N<O	-	-
ND5:a Percent of NCOs who could perform well if mobilized	73.082	1003	-	-	-
(table continues)					

(table continues)

Item	Differences			
	Mean	n	R	U
ND1: ^d Percentage of critical tasks I can do to standard	77.547	992	E<O	-
Item asked of junior enlisted soldiers and NCOs only				
NB1: ^d Percent of MOS tasks you perf to SM standards this yr	61.341	545	-	-
Item asked of NCOs and officers only				
ND54: The overall perf of my unit in ARTEP tng is good	1.997	585	-	-

Note. The majority of items in this table are Likert scales. Exceptions are footnoted. All differences reported are statistically significant at the .001 level and substantial (at least a quarter of a scale point, or 5%, or one-fourth of the sd).

^aRank: E = Junior enlisted soldiers (E1-E4s). N = NCOs (E5-E9s). O = Officers and warrant officers. ^bUnit type: C = Combat arms. CS = Combat support. CSS = Combat service support. ^cInteraction terms: RG = rank by geography. RU = rank by unit type. RC = rank by component. GU = geography by unit type. GC = geography by component. ^dThis item rendered ratio data in the unit of measure implied in the item description.

Table C-25

Group Means on Items Regarding Performance Ability Which Showed a Substantial Difference by Rank in the USAR

Item	E1-E4s		NCOs		Officers		Overall	
	Mean	n	Mean	n	Mean	n	Mean	sd
ND45: Soldiers in my unit use crew-served wpns to standard	2.51	245	2.60	201	2.77	200	2.62	1.00
ND6: ^a Percent of Offs who could perform well if mobilized	67.32	304	64.97	290	78.31	398	71.04	26.55
ND1: ^a Percentage of critical tasks I can do to standard	74.69	307	76.12	294	80.87	391	77.55	21.62

Note. The exceptions to non- Likert scale items are footnoted.

^aThis item rendered ratio data in the unit of measure implied in the item description.

Table C-26

Group Means on Items Regarding Performance Ability Which Showed a Substantial Difference by Unit Type in the USAR

Item	Combat		CS		CSS		Overall	
	Mean	n	Mean	n	Mean	n	Mean	sd
ND45: Soldiers in my unit use crew-served wpns to standard	2.42	115	2.61	185	2.69	346	2.62	1.00
NU8: Percentage of soldiers in your unit replaced in past year	26.04	137	23.74	258	21.62	584	22.79	15.50

Note. The items in this table are Likert scales.

junior enlisted soldiers. The breakdown means for this item are shown in Table C-25

Four items regarding soldier Performance were dichotomous in nature. These yes-no questions are shown in Table C-27. The first of these items, NA27, asked junior enlisted soldiers and NCOs if they were qualified in any MOS, to which 95.3% answered "yes." The second item asked junior enlisted soldiers and NCOs if they were qualified at the correct skill level for their assignment, to which 87.6% responded "yes." Item NB15 asked only NCOs the following: "During a 16-hour drill period (MUTA-4), would you feel comfortable conducting individual/squad/section training while all of the officers were elsewhere for training?" Those who responded "yes" comprised 91.3% of the valid responses. Item OA25 asked only officers if they were branch qualified, to which 93.1% responded "yes."

Reactions to Proposed Improvements

Numerous items in the survey suggested various improvements that could be made in USAR training methods. Details on the response to these items are found in Table C-28. Whenever a difference in responses existed by Rank breakdown means are given in Table C-29. Whenever a difference exists by Unit type, breakdown means are given in Table C-30. The means in Table C-28 are listed in order with the most favorably received suggestion for improvement at the top. Rather than relist all of these proposed improvements and their means in the text, the reader is invited to derive this information from Table C-28. Important highlights from that table are pointed out here in the text. Among the hundreds of agree-disagree items included in the survey only one received stronger agreement in the USAR sample than the item listed at the top of Table C-28, i.e. NE28: "If a home study course were available to help you train for your duty assignment, video cassettes would probably be effective." (The one item that had a stronger degree of agreement, stated that AT was an effective means of training.) This finding underscores the feasibility both of home study and of video cassettes as methods for USAR training. This is an important finding since home study courses do not detract from time available for unit training, and video cassettes are a relatively inexpensive medium to use.

Suggested improvements which were well received by all three Ranks included:

1. NE28: Home study with video cassette.
2. NE31: More time training with an active army unit.
3. NB32: More of the right equipment.
4. NE33: More MOS task training.

Table C-27

Percentage of USAR Respondents Who Answered "Yes" to Dichotomous Items and Differences in Those Percentages by Rank (R), Geography (G), and Unit Type (U).

Item	Differences ^a			
	%Yes	n	R ^b	G ^c U ^d
Items asked of junior enlisted soldiers and NCOs only				
NA27: Are you qualified in any MOS?	95.3	636	-	CS<C, CSS
NA28: Are you qualified at correct skill level for your assignment?	87.6	615	-	5<M CS<C, CSS
Item asked of NCOs only				
NB15: If no officers, could you conduct small unit training?	91.3	300	-	6>M
Item asked of officers only				
OA25: Are you branch qualified?	93.1	391	-	CS<C<CSS

^a A 5% difference in the percentage of soldiers giving this option a first choice rating was considered substantial enough to report. Differences of this magnitude were significant (Chi-square adjusted residual) at least at the .01 level. ^b Rank: E = Junior enlisted soldiers (E1-E4s). N = NCOs (E5-E9s). O = Officers and warrant officers. ^c Geography: 1, 2, . . . = 1st Army, 2nd Army, . . . M = Mean for all armies. ^d Unit type: C = Combat arms. CS = Combat support. CSS = Combat service support.

Table C-28

Grand Means and Differences by Rank (R) and Unit Type (U) for USAR Soldiers on Items Regarding Enhancement of Training

Item	Differences			
	Mean	n	R ^a	Interactions ^c
Items asked of all ranks				
NE28: Home study: video cassette would be effective	1.787	982	-	-
NE31: Good idea: unit soldiers trained with an AC unit	1.860	1012	E>O	-
NB32: I need more of right equip to maintain indiv skills	1.925	994	-	-
NE33: Good idea: unit soldiers more MOS task tng	1.983	1007	-	-
NB33: Need better facilities for tng to maintn indiv skills	2.082	995	E<O	-
NE69: Improve unit tng: more access to computers/simulator	2.086	992	-	-
NE38: Full-time tng comm: MOS qualification training	2.095	971	-	-
NE71: Improve unit tng: better training materials	2.114	980	-	-
NB36: More sim/tng devices would help maintain indiv skills	2.128	968	E,N>O	-
NE115: Tng more effective if: tng refs were better org	2.135	994	E>O	-

(table continues)

Item	Differences				
	Mean	n	R	U	Interactions
NE39: Full-time tng comm: skill retention training	2.156	968	-	-	-
NE112: Tng more effective if: tng refs were consolidated	2.187	970	E,N>O	CS>C>CSS	-
NE29: Home study: personal computer would be effective	2.232	938	-	-	-
NE34: Good idea: MILES were used more for tng in my unit	2.253	569	E,N>O	C<CSS	-
NE65: Work more RC hrs: home study with pay and follow-up	2.256	993	-	-	-
NF29:d Make funds to attend AC sch available more often	2.275	848	E>N,O	-	RU
NE64: Work more RC hrs: extra paid time between drills	2.279	1010	-	-	-
NE37: Full-time tng comm: ARTEP control & umpiring	2.310	806	-	-	-
NE32: Good idea: unit soldiers did more Common task tng	2.321	1004	E>O	-	-
NE36: Full-time tng comm: MILES installation on vehicles	2.329	553	E,N<O	-	-
NE67: Improve unit tng: better use of training time	2.343	989	E>N,O	-	-
NE55: More job aids would be helpful to me in my duty assg	2.346	980	E,N<O	-	-
NE68: Improve unit tng: better training preparation	2.363	988	E>N,O	-	-

(table continues)

Item	Differences				Interactions
	Mean	n	R	U	
NE70: Improve unit tng: more rewards for good performance	2.431	1022	E>N,O	-	-
NE114: Tng more effective if: tng refs were easier to read	2.434	995	E>N,O	C>CSS	-
NE27: Home study: audio cassette would be effective	2.471	969	N<O	-	-
NB31: Need more tng materials to maintain individual skills	2.472	1004	E,N<O	-	-
NB34: Less wasted tng time would help maintain indiv skills	2.437	985	-	-	-
NE30: Home study: corresp courses would be effective	2.490	991	-	-	-
NB35: Tng better organized would help maintain indiv skills	2.491	994	E,N>O	-	-
NE35: Full-time tng comm: range set up	2.579	867	-	-	-
NE116: Tng more effective if: tng refs had more pictures	2.695	992	-	-	-
NE73: Improve unit tng: better hip pocket/opportunity tng	2.701	923	E>N,O	-	-
NE72: Improve unit tng: better tng in common/MOS skills	2.715	933	E>N,O	CS>CSS	-
NF26:d Offer AC tng at times that match my sched more often	2.739	870	E>O	-	-
NF28:d Open more AC sch classes so it's easier to get in	2.786	789	E>N,O	-	-

(table continues)

Differences

Item	Mean	n	R	U	Interactions
NE113: Tng more effective if: tng refs were reduced	2.788	975	E,N>O	-	-
NE44:e SUTA drill sched: easier for me to attend drills	2.846	792	-	-	-
NE60: Work more RC hrs: a longer(3 weeks+) AT each year	2.914	1016	N<E,O	-	RU
NE49:e Adaptable drill sched: easier for me to attend drills	2.936	881	-	-	-
NF25:d Make AC courses shorter so it's easier to attend	2.937	858	E,N>O	-	-
NE63: Work more RC hrs: more MUTA-5s and MUTA-6s	2.966	983	-	-	-
NE61: Work more RC hrs: an extra AT each year	2.979	1016	-	-	-
NE41: SUTA more effective: individual readiness	3.004	823	-	-	-
NE117: Tng more effective if: there were fewer indiv tasks	3.059	990	-	-	-
NF31:d Need easier way to get or- ders in time to attend AC sch	3.070	838	E<N,O	CS>CSS	-
NE118 Tng more effective if: my unit had fewer unit tasks	3.114	968	-	-	-
NE53: Seasonal AD w/RC: specify time of year and location	3.126	954	E<N<O	C<CS,CSS	-
NE62: Work more RC hrs: more weekend drills	3.136	1017	-	-	-

(table continues)

Differences

Item	Mean	n	R	U	Interactions
NE42: SUTA more effective: unit readiness	3.142	817	-	-	-
NB37: Less unit-level tng would help maintain indiv skills	3.215	972	-	-	-
NF27:d Reduce conflict btw unit sched & AC sch tng dates	3.265	855	E>N,O	-	-
NE46: Adaptable drill sched: more effective for indiv tng	3.310	874	-	-	-
NE48: Adaptable drill sched: easier for me to attend drills	3.342	898	-	-	-
NE43: SUTA drill sched: easier for me to attend drills	3.397	906	-	-	-
NE47: Adaptable drill sched: more effective for unit tng	3.453	879	-	-	-
NE51: Seasonal AD w/RC: specify time of year/not location	3.521	952	E<N<O	-	RU
NE3: How many extra MUTA-4s per year would help your unit	3.600	918	-	-	-
NF30:d Need easier way to meet Preregs to attend AC sch	3.870	828	-	-	-
NE52: Seasonal AD w/RC: specify location/not time of year	4.020	938	E,N<O	-	-
NE54: Seasonal AD w/RC: specify neither time of year or loc	4.285	931	E,N<O	-	RU
NE4: How many extra AT days per year would help your unit	5.285	937	-	-	-

(table continues)

Item	Mean	n	Differences		
			R	U	Interactions
NE2: How many extra UTAs per year would help your unit	8.672	916	-	-	-
NE1: How many ATAs per year would help your unit	13.270	912	E<N<O	-	RU
NC1:f How many paid hrs/mo over MUTA4 would you work for RC	22.701	979	-	-	-
Items asked of NCOs and officers only					
NF37: I would like to learn how to be a better trainer	1.824	699	-	-	-
NE91: Use personal computer at Armory: during drills	1.848	663	-	-	-
NE96: Simulators: need to be used more for training	1.972	535	-	-	-
NE88: Study at home for pay: in addition to weekend drills	2.082	686	-	-	RU
NE92: Simulators: could help me improve my own skills	2.131	581	N<O	C<CSS	-
NE58: In my unit hip pocket tng should be done more freq	2.242	661	-	-	-
NE95: Simulators: need to be operational more of the time	2.383	407	-	-	-
NE90: Use personal computer at Armory: between drills	2.438	651	-	-	-
NF33:d Reducing paperwork for personnel would improve tng	2.462	662	N<O	C>CSS	-

(table continues)

Item	Differences				
	Mean	n	R	U	Interactions
NF32: ^d Reducing paperwork for tng would improve tng	2.526	662	-	-	-
NF34: ^d Reducing paperwork for supply would improve tng	2.685	648	-	C>CSS	-
NF35: ^d Reducing paperwork for maintenance would improve tng	2.815	623	-	C>CS, CSS	-
NE89: Study at home for pay: in place of weekend drill	2.921	680	-	-	-

Item asked of junior enlisted soldiers only

EE35: Good idea if addnl wk of AT were done another month	2.834	313	-	-	-

Note. The majority of items in this table are Likert scales. Exceptions are footnoted. All differences reported are statistically significant at the .001 level and substantial (at least a quarter of a scale point, or 5%, or one-fourth of the sd).

^aRank: E = Junior enlisted soldiers (E1-E4s). N = NCOs (E5-E9s). O = Officers and warrant officers. ^bUnit type: C = Combat arms. CS = Combat support. CSS = Combat service support. ^cInteraction terms: RG = rank by geography. RU = rank by unit type. RC = rank by component. GU = geography by unit type. GC = geography by component. ^dThis item is rephrased to parallel other items in this table. ^eThis item has been rephrased and the polarity of its mean reversed so as to parallel the "positive" Likert scales. ^fThis item rendered ratio data in the unit of measure implied in the item description.

Table C-29

Group Means on Items Regarding Reactions to Proposed Improvements Which Showed a Substantial Difference by Rank in the USAR

Item	E1-E4s		NCOs		Officers		Overall	
	Mean	n	Mean	n	Mean	n	Mean	sd
NB31: Need more tng materials to maintain individual skills	2.30	323	2.29	302	2.73	385	2.46	1.21
NB33: Need better facilities for tng to maintn indiv skills	1.95	319	2.02	302	2.23	379	2.08	1.11
NB35: Tng better organized would help maintn indiv skills	2.34	323	2.34	299	2.72	378	2.49	1.13
NB36: More sim/tng devices would help maintain indiv skills	3.96	320	4.05	294	3.65	360	3.87	1.09
NE1: ^a How many ATAs per year would help your unit	9.03	266	12.16	282	17.22	364	13.27	20.61
NE27: Home study: audio cassette would be effective	2.48	304	2.29	283	2.59	388	2.49	1.00
NE31: Good idea: unit soldiers trained with an AC unit	2.05	318	1.87	298	1.70	396	1.86	.90
NE32: Good idea: unit soldiers did more Common task tng	2.48	320	2.35	297	2.18	393	2.32	.90
NE34: Good idea: MILES were used more for tng in my unit	2.04	320	1.94	294	2.35	360	2.12	1.08
NE36: Full-time tng comm: MILES installation on vehicles	2.13	202	2.31	172	2.57	179	2.33	1.12
NE51: Seasonal AD w/RC: specify time of year/not location	3.22	306	3.50	270	3.78	376	3.52	1.40

(table continues)

Item	E1-E4s		NCOs		Officers		Overall	
	Mean	n	Mean	n	Mean	n	Mean	sd
NE52: Seasonal AD w/RC: specify location/not time of year	3.75	302	3.94	267	4.30	369	4.02	1.08
NE53: Seasonal AD w/RC: specify time of year and location	2.52	311	3.14	272	3.61	371	3.13	1.59
NE54: Seasonal AD w/RC: specify neither time of year or loc	4.14	298	4.19	263	4.47	370	4.28	.98
NE55: More job aids would be helpful to me in my duty assg	2.28	318	2.18	293	2.53	369	2.35	.98
NE60: Work more RC hrs: a longer(3 weeks+) AT each year	2.99	321	2.73	297	3.00	398	2.91	1.36
NE67: Improve unit tng: better use of training time	2.63	300	2.21	294	2.23	395	2.34	.97
NE68: Improve unit tng: better training preparation	2.62	297	2.21	294	2.28	397	2.36	.97
NE70: Improve unit tng: more rewards for good performance	2.85	326	2.10	296	2.34	400	2.43	1.09
NE72: Improve unit tng: better tng in common/MOS skills	4.02	249	2.23	295	2.24	389	2.71	1.19
NE73: Improve unit tng: better hip pocket/opportunity tng	3.69	257	2.31	289	2.33	377	2.70	1.14
NE92: Simulators: could help me improve my own skills	-	-	1.91	253	2.30	328	2.13	.96
NE112: Tng more effective if: tng refs were consolidated	2.38	297	2.25	287	1.99	386	2.19	.84
NE113: Tng more effective if: tng refs were reduced	3.05	306	2.97	287	2.44	382	2.79	1.07

(table continues)

Item	E1-E4s		NCOs		Officers		Overall	
	Mean	n	Mean	n	Mean	n	Mean	sd
NE114: Tng more effective if: tng refs were easier to read	2.62	316	2.35	292	2.35	387	2.43	.98
NE115: Tng more effective if: tng refs were better org	2.29	315	2.13	292	2.01	387	2.13	.86
NF25: Hard to get AC sch tng: courses are too long	3.21	257	2.97	251	2.72	356	2.94	1.17
NF26: Hard to get AC sch tng: dates don't match my sched	2.92	265	2.68	252	2.64	359	2.73	1.13
NF27: Hard to get AC sch tng: dates conflict w/unit sched	3.53	257	3.07	245	3.20	359	3.26	1.06
NF28: Hard to get AC sch tng: Class size full	3.15	244	2.75	228	2.53	322	2.78	1.15
NF29: Hard to get AC sch tng: funds not available	2.57	247	2.15	249	2.15	358	2.27	1.16
NF31: Hard to get AC sch tng: Can't get orders in time	2.64	246	3.11	239	3.01	359	2.93	1.22
NF33: ^b Reducing paperwork for personnel would improve tng	-	-	3.36	284	3.66	383	3.53	1.14

Note. The majority of items in this table are Likert scales. Exceptions are footnoted.

^aThis item rendered ratio data in the unit of measure implied in the item description.

^bThis item is rephrased to parallel other items in this table.

Table C-30

Group Means on Items Regarding Reactions to Proposed Improvements Which Showed a Substantial Difference by Unit Type (U) in the USAR

Item	Combat		CS		CSS		Overall	
	Mean	n	Mean	n	Mean	n	Mean	sd
NE34: Good idea: MILES were used more for tng in my unit	2.04	111	2.28	165	2.32	298	2.56	1.16
NE53: Seasonal AD w/RC: specify time of year and location	2.86	135	3.13	254	3.19	565	3.13	1.59
NE72: Improve unit tng: better tng in common/MOS skills	2.72	135	2.92	253	2.62	545	2.71	1.19
NE92: Simulators: could help me improve my own skills	1.92	90	2.13	149	2.19	342	2.13	.96
NE112: Tng more effective if: tng refs were consolidated	2.35	139	2.78	259	2.10	572	2.19	.84
NE114: Tng more effective if: tng refs were easier to read	2.65	144	2.47	266	2.37	585	2.43	.98
NF31: ^a Need easier way to get orders in time to attend AC sch	2.91	121	3.11	223	2.85	500	2.93	1.22
NF33: ^b Reducing paperwork for personnel would improve tng	3.72	94	3.62	162	3.45	411	3.53	1.14
NF34: ^b Reducing paperwork for supply would improve tng	3.53	92	3.31	159	3.27	402	3.31	1.18

Note. The items in this table are Likert scales.

^aThis item is rephrased to parallel other items in this table. ^bThis item has been rephrased and the polarity of its mean reversed so as to parallel the "positive" Likert scales.

5. NB33: Better facilities for training.
6. NE69: More access to computers and simulators.
7. NE38: A full-time training committee to assist with MOS qualification training.
8. NE71: Better training materials.
9. NB36: More simulators and training devices.
10. NE115: Better organized training references.
11. NE39: A full-time training committee to assist with skill retention training.
12. NE112: Consolidated training references.
13. NE29: Home study with personal computer.

Several proposed improvements were presented to NCOs and officers only. These items are contained in the "Items asked of NCOs and officers only" section of Table C-28. The item with which they agreed the most was NF37, "I would like to learn how to be a better trainer." The favorability with which this statement was received is outstanding ($\bar{M} = 1.82$), given that most NCOs and officers had already had a number of years of experience in training. This indicates, as does research in the field of education, that experience in training does not necessarily provide a trainer with the skills needed to do the job. The highly favorable response to item NF37 is a call for improvements in the programs now used to teach NCOs and officers the skills of training per se.

The next four items in order of favorability of means showed NCO and officer acceptance of technology as aids in training. NE91 called for the use of personal computers at the armory or training center. NE96 and NE92 called for wider use of simulators by trainees, trainers, and training managers alike. Study at home for pay in addition to weekend drills (NE88) was also well received by NCOs and officers as a suggestion to enhance training.

Proposed improvements which received milder agreement (means ranging from 2.25 to 3.00) are listed in Table C-28 under all three subsections. Rather than relist all of these here, the reader is directed to the table.

Proposed improvements for which soldiers either were neutral or tended to disagree were those which had means ranging from 3.00 to 4.30. All such items are at the end of the section of Table C-28 subtitled "Items asked of all ranks." Those suggestions which were least well received are listed in order below starting with the least favorably received:

1. NE54: Seasonal active duty (2 or 3 months out of every year) in the USAR when soldiers can specify neither time of year nor location.

2. NE52: Seasonal active duty (2 or 3 months out of every year) in the USAR when soldiers can specify location but not time of year.

3. NF30: Easier way to meet prerequisites to attend AC school.

4. NE51: Seasonal active duty in the ARNG when soldiers can specify time of year but not location.

5. NE47: Adaptable drill schedule (see also NE48 and NE46).

6. NE43: Split Unit Training Assembly (SUTA) where parts of unit train on different weekends (see also NE42).

7. NF27: Reducing conflict between unit schedule and AC school training dates.

8. NB37: Less emphasis on unit-level training.

9. NE62: More weekend drills.

10. NE53: Seasonal active duty in the USAR when soldiers can specify both time of year and location.

11. NE116: Fewer unit tasks to train.

12. NF31: Easier way to get orders in time to attend AC school.

13. NE117: Fewer individual tasks to train.

Responses to seven items resulted in differences between Ranks which were great enough to be worthy of emphasis. Mean differences on these items ranged from $\bar{M} = .49$ to $\bar{M} = 1.09$. A short description of each item, in the order of greatest difference follows.

Junior enlisted soldiers agreed that they would be able to go on full time active duty with the USAR on a seasonal basis (2 or 3 months out of every year) if they could specify time of year and location ($\bar{M} = 2.52$). Both NCOs ($\bar{M} = 3.14$) and officers ($\bar{M} = 3.61$) disagreed (NE53). Three other items involving time and location options for this type of active duty with the RC were rejected by all Ranks. However, in all three instances, rejection was less by junior enlisted soldiers than by NCOs and officers (NE51, NE52, NE54).

NCOs agreed much more than did junior enlisted soldiers ($\bar{M} = 2.10$ versus $\bar{M} = 2.85$) that "more rewards for good performance would really improve the training of my unit" (NE70).

Seven items dealt with reasons why AC school training was difficult to obtain. On six of these, officers agreed more than either junior enlisted soldiers or NCOs. Two items showed

especially large differences. On one (NF28), officers agreed ($\bar{M}$ = 2.53) and junior enlisted soldiers disagreed ($\bar{M}$ = 3.15) that AC school training was difficult to obtain due to classes having more applicants than there is room for. On the second (NF25), officers agreed ($\bar{M}$ = 2.72) and junior enlisted soldiers disagreed ($\bar{M}$ = 3.21) that AC school courses are too long.

Officers agreed ($\bar{M}$ = 2.44) much more than junior enlisted soldiers ($\bar{M}$ = 3.05) that training would be more effective if training references were reduced (NE113).

Nine items had statistically different means among Unit types. These are detailed in Table C-30. Comparisons of means from two of these items resulted in differences which were large enough to be mentioned here. Both combat support and combat service support units responded negatively to the statement regarding seasonal active duty with the RC if time and location could be specified. (means = 3.13 and 3.19 respectively). However, combat arms units responded positively ($\bar{M}$ = 2.86) to this item (NE53).

In the second instance, combat service support units were much more positive regarding more effective training resulting from consolidation of training references than were combat support units ($\bar{M}$ = 2.10 versus $\bar{M}$ = 2.78) (NE112). Responses to one other item is worthy of note. All three Unit types were very favorable towards "simulators could help me improve my own skills." The response to this item (NE92) from junior enlisted soldiers was also highly positive ($\bar{M}$ = 1.92).

Five of the items in Table C-28 produced ratio data. These items are found clustered near the end of the section of Table C-28 subtitled "Items asked of all ranks." Item NE1 asked soldiers how many individual soldier training sessions, such as Additional Training Assemblies (ATAs, 4 hours each) per year would be helpful in getting their units trained to readiness standards. Such ATAs would be in addition to regular drills. The average response to this item was 13.3 ATAs. Officers indicated more often than did NCOs that more ATAs would be helpful and the latter did so more than junior enlisted soldiers (see Table C-29). Next, soldiers were asked how many extra unit training assemblies (UTAs, 4 hrs.) per year would be helpful in getting their units trained to readiness standard (NE2). The mean response was 8.7.

Item NE3 asked soldiers how many extra 16-hour drill periods per year would be helpful in getting their units trained to readiness standards. The mean response to this item was 3.6 MUTA-4s. Item NE4 asked soldiers how many extra AT days per year would be helpful in getting their units trained to readiness standards. The average response was 5.3 days. Items NE1 through NE4 do not measure willingness; instead they measure soldiers' perceptions of the effectiveness of spending various additional time increments in RC training.

Item NC1 asked soldiers how many paid hours per month they would be willing to work for the RC in addition to the normal 16-hour drill period. The mean response was 22.7 hours. However, the median response was 12.0 hours. This is because the responses of many soldiers indicated that they wished to work full time (or more) for the RC. When these responses were controlled for, the mean response was 13.0 hours and the median was 10.0 hours.

Thus it appears that, in general, part-time soldiers in the USAR are willing to spend 10 to 13 more hours each month working for the USAR. But other items presented earlier in Table C-28 provide important qualifiers on how soldiers would be willing to spend those extra hours. Items NE60 through NE65 taken as a group show that there is an undecided or mixed degree of willingness to work more hours in the following time increments: three-week ATs (see also item EE35), extra ATs, more weekend drills, more MUTA-5s or MUTA-6s. A more favorable response was noted for extra paid time between weekend drills and home study with pay based on follow-up testing. The means for these two options are a half of a scale point more favorable than those for the earlier options. This is a substantial (as well as a statistically significant) difference.

Item NE5 in Table C-7 asked soldiers of all Ranks how often an extra AT period would help unit readiness. The mode response to this item was "1" which translated is "every year." This option was selected by 31.3% of the respondents; 19.7% said "never;" 28.0% said "every two years;" 15.5% said "every three years;" 6.5% said "every four to six years." Officers selected options which indicated that extra AT periods would be helpful less frequently than what junior enlisted soldiers and NCOs indicated (Kruskal-Wallis tests Chi-square = 20.49, $p < .0001$). (Note that in Table C-7 the smaller the response the more frequently ATs are called for; therefore, $N < 0$ would mean that NCOs selected smaller numbers than officers and those smaller numbers correspond to more frequent ATs). Again, the fact that soldiers said that extra ATs would help improve readiness (NE5) must be tempered by the fact that on the average soldiers were neutral about whether they would be willing to attend an extra AT session each year (NE61).

Conclusions and Recommendations

The conclusions based upon the results reported in this appendix are not appreciably different than those found in the main body of the report. Therefore, they are not repeated here. The reader may refer to pp. 137-144 of the main section to review the conclusions and recommendations which apply similarly to both the USAR and the ARNG.