

This document has been approved for public release and sale; its distribution is unlimited.

2

FINAL REPORT

AD66243

LEVEL III

AD A066244

DUTY MODULE VALIDATION FOR ACCOMPLISHING TRAINING FEEDBACK

VOLUME II. THE RELATIONSHIPS AMONG CODAP TASKS, SKILL QUALIFICATION TEST TASKS AND DUTY MODULE TASKS

DDC FILE COPY

November 14, 1977

Harry I. Hadley
Warren P. Davis
Arthur L. Korotkin

DDC
RECEIVED
MAR 22 1979
C

Prepared for

U.S. ARMY RESEARCH INSTITUTE FOR THE BEHAVIORAL & SOCIAL SCIENCES
5001 Eisenhower Avenue, Room 6S26, Alexandria, Virginia 22333

9 03 21 041
Contract No. DAHC-19-76-C-0046

The findings in this report are not to be construed as an official Department of the Army position unless so designated by other authorized documents

Unclassified
SECURITY CLASSIFICATION OF THIS PAGE (When Data is Entered)

1. REPORT DOCUMENTATION PAGE
2. GOVT ACCESSION NO.
3. RECIPIENT'S CATALOG NUMBER

Research Note 79-2
9

4. TITLE (and Subtitle)
5. TYPE OF REPORT & PERIOD COVERED

6. Duty Module Validation for Accomplishing Training Feedback - Volume II The Relationships among CODAP Tasks, Skill Qualification Test Tasks, and Duty Module Tasks.
Final Technical Report
7. PERFORMING ORG. REPORT NUMBER
8. CONTRACT OR GRANT NUMBER(s)
9. GA-42-701-2
10. DAHC 19-76-C-0046

11. PERFORMING ORGANIZATION NAME AND ADDRESS
12. REPORT DATE
13. NUMBER OF PAGES
14. CONTROLLING OFFICE NAME AND ADDRESS
15. SECURITY CLASS. (of this report)

R. A. Gibboney Associates, Inc.
10605 Concord St., Kensington, MD 20795
6.37.31A768
US Army Research Institute (PERI-IS)
5001 Eisenhower Avenue
Alexandria, VA 22333
11-14
November 1977
56
Unclassified

16. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)
17. DISTRIBUTION STATEMENT (of this Report)

10 Harry S. Hadley
Warren P. Mead
Approved for public release distribution unlimited.
12-57-1
15a. DECLASSIFICATION/DOWNGRADING SCHEDULE

18. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)

19. SUPPLEMENTARY NOTES
Technical monitor of the contract was Francis F. Medland, ARI.

20. KEY WORDS (Continue on reverse side if necessary and identify by block number)
Comprehensive Occupational Data Analysis Program (CODAP), Duty Modules, Skill Qualification Test (SQT), Written Component (WC), Hands-on Component (HOC), Performance Certification Component (PCC), Combat Arms Training Board (CATB), Soldier's Manual (SM).

21. ABSTRACT (Continue on reverse side if necessary and identify by block number)
Department of Army Contract DAHC19-76-C-0046, issued by US Army Research Institute for the Behavioral and Social Sciences to Richard A. Gibboney Associates, titled Duty Module Validation for Accomplishing Training Feedback, 15 Sep 76 contained a requirement for two separate final reports. The primary report covering the development of a mechanism for providing objective feedback from Army field units regarding the adequacy of occupational training in Army Service Schools, has been reported on by the Contractor under separate cover. The additional analyses, dealing with the relationship among CODAP tasks, Duty Module tasks and Skill

395496

✓

20. Qualification Test tasks and their utility for providing training information feedback, is contained in this second volume (Volume II).

The scope of size of a job task varies considerably depending on what the job data are to be used for and the level of the job the task data are defining. Job tasks that are to be used for personnel classification and assignment must be fairly broad in scope while those to be used to design an occupational training course for a piece of new equipment must be more detailed. Those that are describing a field grade officer position can be comprehensive in size while those describing a junior grade enlisted job must, by the nature of the work, be narrow and specific.

The interrelationship among tasks of differing scope, as employed in different programs, and their value in providing training information feedback was the basis for this report. Three sets of tasks, all describing the same job classification but drawn from different programs were used. In all three cases the MOS described was 11E, Armor Crewman, comprising four different skill levels and covering grades E-1 through E-8. The programs from which the task data were drawn were the DA program of enlisted Skill Qualification Tests, the Military Personnel Center's CODAP program of inventorying enlisted jobs on a cyclic basis, and the USARI program of developing Duty Modules for officer and enlisted jobs.

Section
Number
BY _____
DATE _____
APPROVAL _____
A

INTRODUCTION:

Department of Army Contract DAHC19-0046, issued by US Army Research Institute for the Behavioral and Social Sciences to Richard A. Gibboney Associates, titled Duty Module Validation for Accomplishing Training Feedback, 15 Sep 76 contained a requirement for two separate final reports. The primary report covering the development of a mechanism for providing objective feedback from Army field units regarding the adequacy of occupational training in Army Service Schools, has been reported on by the Contractor under separate cover. The additional analyses, dealing with the relationship among CODAP tasks, Duty Module tasks and Skill Qualification Test tasks and their utility for providing training information feedback, is contained in this second volume (Volume II).

The scope or size of a job task varies considerably depending on what the job data are to be used for and the level of the job the task data are defining. Job tasks that are to be used for personnel classification and assignment must be fairly broad in scope while those to be used to design an occupational training course for a piece of new equipment must be more detailed. Those that are describing a field grade officer position can be comprehensive in size while those describing a junior grade enlisted job must, by the nature of the work, be narrow and specific. A few examples might aid in showing the wide range in scope of tasks depending on the program with which the tasks are to be employed or the level of the job being specified.

If the job being defined is that of an Operations Officer in the General Staff of the Department of the Army, "Plans and prepares classified operations orders" might be an appropriate task. If, however, the job of the GS-2 file clerk in the same office is being described, an appropriate level task might well be "Files second tissue copy of operations orders in classified file in accordance with file number entered in red on top of copy". Likewise, if the job data are going to be used largely for purposes of classification and assignment of personnel, an appropriate level of task might well be "Administers emergency first aid". If one is designing a Program of Instruction for a training course, however, a task on the level of "Administers atropine injections to nerve agent casualties with a pressure injector" would be needed.

The interrelationship among tasks of differing scope, as employed in different programs, and their value in providing training information feedback was the basis for this report. Three sets of tasks, all describing the same job classification but drawn from different programs were used. In all three cases the MOS described was 11E, Armor Crewman comprising four different skill levels and covering grades E-1 through E-8. The programs from which the task data were drawn were the DA program of enlisted Skill Qualification Tests, the Military Personnel Center's CODAP program of inventorying enlisted jobs on a cyclic basis, and the USARI program of developing Duty Modules for officer and enlisted jobs.

PROCEDURE:

1. Skill Qualification Test Tasks.

Recently, the Army started a program of Skill Qualification Testing (SQT); for example, the test for Armor Crewman, MOS 11E, was first given during the period April-June 1977. The test consists of three components, a Written Component (WC), a Hands-On Component (HOC), and a Performance Certification Component (PCC). There is a separate test for skill levels 2, 3, and 4. The MOS 11E, Armor Crewman, is currently undergoing revision, and will be broken into three new MOS. One MOS will be for the M60A1 tank crew, one for the M60A2 tank crew, and one for the M551 AR/AAV. This MOS revision is based on the job requirements of the tasks being performed in the field by units with radically different equipment. As a consequence, the tests not only have the three components explained above, each test component is divided into a common core of test items followed by three "tracks" where needed to bring out differences among the three kinds of armored vehicles in use. As a consequence the SQT for MOS 11E consists of 9 separate tests, one for each of the three skill levels of the MOS being tested (skill levels 2, 3, 4) each being in turn divided into three tracks (the M60A1 tank, the M60A2 tank and the M551 AR/AAV) and these into three components each. The written components of the tests contain between 40 and 50 scorable units each, and are based on tasks considered important to survival in combat, accomplishment of the job, and accomplishment of the mission of the unit. The Hands-On Component of the tests is also based on tasks considered important to the job of the Armor Crewman. The Performance Certification Component of the tests is based on a physical fitness

test and qualification with the Cal. 45 pistol. References supporting the above are listed in Inclosure 1, items 1 through 6.

The tasks used in SQT's were taken from the applicable Soldier's Manual (SM) for the applicable skill level of MOS 11E and are identical with those contained in the SM. The SQT's do not, of course, use all the tasks shown in the SM, but are a sample used to represent the whole of the MOS plus a skill level. The SM's from which the sample tasks were drawn are identified in Inclosure 1, items 8, 9, 10. The tasks used are also identical with those used in the TRADOC Individual Training Program (ITP) for MOS 11E, Skill Levels 1, 2, 3, 4, 5. (Reference 7, Inclosure 1.)

Tracking the origin of the tasks back even farther, however, it appears that they were adapted from those developed by the USA Combat Arms Training Board (USACATB) in a list of critical and important tasks in 8 combat arms MOS published in October, 1974. While not identical with those in the SQT's, they are so similar in scope and wording as to leave little doubt that the USACATB Report (Reference 11, Inclosure 1) served as the source material.

Pinning down the origin and development of the tasks in the SQT's is important in that it shows the entire process was carried out by training personnel. This may produce a bias in the tasks. It is a sort of closed loop wherein the trainers train what the testers test, and the testers test what the trainers train. There is no evidence to show that actual job requirements of units in the field were used to formulate the tasks used by the trainers or to change the emphasis of the testers. The tasks used in the SQT's for MOS 11D, Armor Reconnaissance Specialist, were also secured and examined, however no different types of problems were uncovered in the analysis of them. For purposes of any specialized interest, the tasks of the SQT's for MOS 11D are shown at Inclosure 3 by various test components and broken down by skill level.

The tasks for MOS 11E are shown at Inclosure 2. Each task is shown for the three components of the SQT's, i.e., WC, HOC and PCC separately. It will be noted that there is some duplication among components. Within component, each task is shown by task number, task title, and applicability to the separate skill levels (2, 3, 4) of MOS 11E. Tasks which form a common core of items which all Armor Crewman take regardless of type of tank or

AR/AAV with which a unit is equipped are shown first followed by those tasks unique to a particular track for the M60A1, the M60A2 or the M551 AR/AAV. It will be also noted that those tasks used to test skill level 2 are repeated for skill level 3 and additional items added on, and that for skill level 4 more additional items are added. Generally the vast majority of the task test items for skill level 3 are repeated in the skill level 4 test. In the HOC portions of the SQT's, the skill level 2 and 3 use identical task test items, while the skill level 4 has no HOC. All 3 skill levels have identical items in the PCC of the test.

2. CODAP Tasks.

While SQT tasks have been constructed by training personnel based upon subject matter knowledge, CODAP tasks have been gathered from personnel performing the applicable jobs in field units. CODAP reports are put out by MILPERCEN, DA based upon recurring job surveys of incumbents in CONUS and overseas units. The CODAP reports for both MOS 11E, Armor Crewman and MOS 11D, Armor Reconnaissance Specialist were requested from MILPERCEN for comparative research on the project, however, only that for MOS 11E was available.

The CODAP report for MOS 11E is based on a field survey sample of 658 cases, and contains 898 tasks which have been classified into 21 duties. The duties into which the tasks have been classified are shown at Inclosure 4 along with the percent of members performing one or more of the tasks of the duty, and three summaries of the average percent of time spent on a duty. Examination of the duties in MOS 11E indicates that they are primarily position groupings rather than occupational groupings, e.g., "Perform Master Gunner Duties", "Perform Tank Operator Duties", "Perform Operations Staff Section Duties". This is unfortunate because the interrelationships among duties and tasks are not apparent; such as that between master gunnery tasks and weapon systems operational tasks, or tank operation tasks and track vehicle operation tasks, which although similar in tasks performed and skills, knowledges and abilities required are not contiguous in the duty structure or the task structure.

A sample page from the task list is shown at Inclosure 5. The opposing figures again show percent of persons surveyed performing the task and percent of time spent on the task. An examination of the CODAP tasks reveals that

they are extremely narrow in scope. For example, the following tasks concerned with driving the M60A1 tank appear on this single page:

- Drive M60A1 over paved surfaces.
- Drive M60A1 during reduced visibility.
- Drive M60A1 during darkness under blackout conditions.
- Drive M60A1 in convoy.
- Drive M60A1 over mud/snow/sand/ice.
- Drive M60A1 crossing ditches/shell holes/trenches.
- Drive M60A1 ascending steep grades.
- Drive M60A1 descending steep grades.

Two additional tasks concerning driving the M60A1 appear on an adjacent page. An equivalent set of tasks are also shown for driving the M60A2, the M551, the M113 and wheel vehicles. This would seem to be a set of tasks which are too narrow for constructing or reviewing even the most detailed of training programs.

While the figure given for percent of persons surveyed who are performing a task is of some value, it must be used with a fairly extensive knowledge of Armor tactics and Armor units and equipment. Otherwise, as far more persons responded to the item on driving the M60A1 than did the items on the M60A2 or the M551, it would be easy to come to the erroneous conclusion that the school should teach driving the M60A1 if you didn't know that it is being replaced. It would seem to be preferable for a task analysis to indicate and group the number of Armor Crewmen who drive tanks and other track vehicles as their primary duty as against the Armor Crewmen who serve the tank gun/missile. This cannot be determined from the CODAP report as it is presently constituted. Generally, too narrow or specific a set of tasks tends to yield a welter or somewhat meaningless data while obscuring the differences and relationships among jobs.

Nevertheless the CODAP tasks have one major advantage over the tasks contained in the SQT's. The CODAP task data were drawn directly from the job incumbents in active field units, and as such present an outside source for verifying training.

3. Duty Module Tasks.

Enlisted Duty Modules were conceived and developed in conjunction with a long range research program of the USARI. Details of the early conception and the subsequent development of Duty Modules into a usable instrument are described in References 12 and 13. Duty Modules are essentially clusters

of tasks that go together occupationally and organizationally in meaningful ways. They were originally designed for use with the Army's job classification and personnel assignment systems. Among the early enlisted Duty Modules developed by members of the research staff on the current project were those for the MOS 11E, Armor Crewman, examples of these are shown in Reference 13.

As the early Duty Modules for MOS 11E were constructed in 1973, it was found necessary to revise and update them to bring them abreast of changes in Armor organization and equipment. This was accomplished using the CODAP data for MOS 11E as furnished by USA MILPERCEN. Generally new tasks which showed a significant percentage of personnel performing them were added to the appropriate Duty Module and old tasks which showed little or no percent of job incumbents performing them were dropped. As the tasks in the CODAP runs are extremely narrow and tied to specific pieces of equipment, they were consolidated and broadened to match the scope of tasks employed in the Duty Module system. The resulting revised and updated Duty Modules for MOS 11E, Armor Crewman are attached at Inclosure 6. To date, enlisted Duty Module tasks have been employed experimentally in personnel and manpower management programs such as classifying and evaluating jobs, and matching manpower resources and requirements. As they were designed to bring out the similarities among jobs rather than the differences among jobs, they have proved their value in programs of this sort. The current research was directed toward the efficacy of Duty Module tasks in providing training feedback information for occupational training course revision.

4. Comparison of SQT, CODAP and Duty Module Tasks.

A close examination of the tasks contained in the SQT, the CODAP and the Duty Modules for MOS 11E, Armor Crewman reveals that they are of widely divergent scope. Figure 1 shows some examples of task scope with regard to identical occupational areas as shown from the three sources. In general, the CODAP tasks are the narrowest, the SQT tasks are intermediate, and the Duty Module tasks are the broadest in scope. In some cases the SQT tasks and the CODAP tasks are almost identical in breadth of coverage, but more often the SQT tasks cover more work activity within a single task than do those in CODAP. Occasionally a Duty Module task will be of similar scope to those in SQT or CODAP, but by and large they are much more comprehensive.

DIFFERENCES IN SCOPE FOR TASKS DRAWN FROM SQT, CODAP AND DUTY MODULES
FOR MOS 11E, ARMOR CREWMAN

<u>Duty Module Task</u>	<u>SQT Task</u>	<u>CODAP Task</u>
Drives tanks and armored vehicles in combat and non-combat situations	Operate M60A1 tank	Drive M60A1 ascending steep grades
Boresight and adjust tank gun and associated fire control equipment	Zero an M60A1 main gun	Zero M60A1 tank main gun
Plot distances and locations and determine elevations by intersection or other techniques	Measure ground distance using a map	Determine location by map intersection/resection
Employ tank gun	Perform loader prepare- to fire checks	Load M60A1 tank 155mm gun

Figure 1

The examples shown in Figure 1 all exemplify the greater scope of Duty Module tasks. While a broad, comprehensive task is desirable for classification of jobs and assignment of personnel where substitutability is important, it is not particularly helpful in the establishment or revision of a training course. For example a report that recent graduates of the Armor Crewman course are deficient in "Boresighting and adjusting a tank gun and associated fire control equipment" may not be too helpful to a curriculum designer. He would be left in doubt as to just what needed to be changed in the program of instruction. If, however, the report was that the graduates were deficient in "Zeroing the M60A1 tank main gun" the trainer would know exactly which part of the gunnery training should be modified or augmented.

In addition to the difference in scope of the three sets of tasks, it is also important to examine the total job coverage of the three, particularly those tasks in the SQT which are a sample of tasks rather than a complete list. As the CODAP run was used to update the Duty Module tasks, all significant tasks in the CODAP run can be accounted for by the Duty Module tasks either as a counterpart task, or as a sub-task which can be subsumed under a Duty Module task along with others. This relationship is shown in Figure 2. In the interests of brevity, only a sample of the many tasks that would be subsumed under the single Duty Module task are shown.

As the Duty Module tasks and the CODAP tasks have already been tied together, of greater interest is the relationship between the SQT tasks and the Duty Module tasks. The SQT tasks are, by definition, a sample of tasks for testing various skill levels of MOS 11E, Armor Crewman; while the Duty Module tasks provide complete coverage of all Armor Crewmen in all positions. In order to determine the relationship, the first step was to see if there was a Duty Module task which was a counterpart of or a wider description of each SQT task. The results of this allocation of tasks is shown at Inclosure 7.

Inclosure 7 shows the Duty Module task number in the first column, the SQT task title which is a counterpart of or has been subsumed under it in the second column, and the skill levels to which the SQT task applies in the third set of columns. Additionally, the entire list is broken into the written, hands-on and performance certification components of the tests and the three tracks for different armored vehicles. As can be observed, the SQT

SUBSUMMATION OF CODAP TASKS UNDER DUTY MODULE TASK

Duty Module Task: Drives tanks and armored vehicles in combat and non-combat situations.

Subsumed CODAP Tasks:

- - Drive M60A1 over paved surfaces.
- - Drive M60A1 during reduced visibility (dust/darkness).
- - Drive M60A1 in convoy.
- - Drive M60A1 over mud/snow/sand/ice.
- - Drive M551 AR/AAV over level terrain.
- - Drive M551 AR/AAV during reduced visibility (dust/darkness).
- - Drive M60A2 ascending steep grades.
- - Drive M60A2 during darkness under blackout conditions.
* * * * *
- - Drive M60A2 over water obstacles.

Figure 2

tasks were easily classified against Duty Module tasks with a few exceptions. The exceptions were of two types. The first is an extremely narrow task in the SQT which is difficult to place with certainty in a Duty Module task. An example of this type of task is "Extinguish a fire in a tank". It does not fit appropriately in either the Duty Module on operation of the tank, or in the Duty Module on servicing and maintaining the tank. The second type of exception is indicated by the SQT task "Prepare a spot report". As shown in the Inclosure this could be placed in either of Duty Module tasks F-2(2) or E-5(6) depending on exactly what is meant. In one case the task would be included in a scouting and reporting task performed by tank or reconnaissance crewmen, and in the other case it would be included with the functions of an Armor intelligence sergeant. The problem is you can't tell by the SQT task exactly which is meant.

Generally, however, there is a remarkable fit when classifying SQT tasks into Duty Module tasks. Out of the 93 tasks in the SQT, only 9 could not be placed or could have been placed in more than one place. Further coordination between the two sets of tasks would undoubtedly eliminate these left-overs.

Of greater importance to the establishment of a training information feedback system is the reverse relationship between the SQT tasks and the Duty Module tasks. In other words, the sample tasks of the SQT plotted against the related Duty Module task. Because if the test is to be fair, the SQT sample should represent the full range of the jobs for which the personnel are being tested, and the emphasis or number of SQT tasks should be in some direct relationship to the frequency and criticality of those tasks in the jobs. The inclosure shows the Duty Modules and subordinate tasks which presumably account for the full range of Armor Crewman jobs on the left with the related SQT tasks, by task number, in the right hand column.

A number of significant observations can be made based on the data in Inclosure 8:

1. There are 13 Duty Modules, each with subordinate tasks, which cover the MOS 11E, Armor Crewman. Of these, 10 Duty Modules have one or more SQT tasks related to them; however, three entire Duty Modules have no representation at all in the SQT sample. These three are:

- A-2 Performs Unit Supervision and Control of Personnel.
- B-2 Conducts and Coordinates Training in the Unit.
- D-1 Operates Unit Combat Support Vehicles.

This raises a number of questions. If they are truly part of the job, why have they not been sampled by the SQT? Although no extensive field surveys have been made with the Duty Modules for Armor Crewman, surveys in related MOS have shown that a considerable amount of time is spent on these three Duty Modules and the NCO's rate them as critical to their job. It is understood that some unit administration has been reduced by Project CABL, but a great deal of unit administration and training would seem to be untransferrable.

2. Of the ten Duty Modules which do have related tasks in the SQT, the number of such tasks by Duty Module varies from 1 to 37 SQT tasks. The list of the ten Duty Modules with the number of SQT tasks subsumed is as follows:

C-1 Operates Unit Tactical Communications Equipment Excluding Use of Morse Code.	5
E-1 Prepares and Employs Maps, Charts and Instruments in Land Navigation.	4
E-2 Engages Enemy with Tank and Armor Vehicle Mounted Assault Weapons.	37
E-3 Drives Tanks and Associated Armor Combat Vehicles.	5
E-4 Places, Reports and Neutralizes Tactical Obstacles.	1
E-5 Performs in Mounted, Dismounted, Airborne or Long Range Patrols.	7
E-7 Participates in Ground Tactical Operations as Member of a Maneuver Unit.	8
F-1 Serves as Combat Operations Sergeant.	2
F-2 Serves as Combat Intelligence Sergeant.	2
G-1 Performs User Maintenance on Individual and Unit Equipment and Weapons.	17

This raises other questions. The test seems to be heavily weighted in favor of gunnery and lightly weighted on tank driving. Is this in accord with the actual job requirements? Should Combat Operations and Combat Intelligence Sergeants be taking this test when only two questions relate directly to their job requirements? Is it worth testing in mines and obstacles if only one question is used?

3. While no data currently exist on the criticality or time spent on individual tasks of Duty Modules in the enlisted area, it might be interesting to gather such data. This would assist in determining whether the SQT is putting the correct emphasis at the Duty Module task level. For example, in Duty Module G-1, which has 8 tasks, two tasks have one SQT item opposite them, one task has 3 SQT items opposite, one task has 12 SQT items opposite it, and the rest have none. Is this the proper emphasis or weighting in the user maintenance area?

4. In spite of the many questions raised by plotting the SQT tasks against the Duty Module tasks, it should be noted that there is a fair conformity. The major emphasis in the Duty Modules is in tank gunnery, tank driving and operation, patrolling, and user maintenance which is in conformance with the emphasis of the SQT.

5. As the training course and the SQT are directly tied together, the same questions as were raised with regard to the SQT can be posed with regard to the training course. Does it have a weighting and emphasis in accord with the actual job requirement? Probably the best way to tell would be through use of a combined Duty Module-SQT-CODAP task instrument in which training course level tasks, obtained from the SQT and CODAP, were used as sub-tasks or elements of Duty Module tasks. Field data could then be gathered in sufficient detail but with sufficient organization so that meaningful training course decisions could be made. The design and testing of such an instrument was, of course, beyond the scope of this research.

CONCLUSIONS.

1. The scope of tasks vary in accord with the program in which they are used.

2. SQT tasks use the SM and the CATB as a source, are relatively narrow in scope and are a work sample of the various job requirements of MOS 11E. They are system specific.

3. CODAP tasks are extremely narrow in scope, and have been applied to job incumbents in active field units. They have not been used to construct or revise training courses, however, they do represent an external criterion for evaluating training. They are highly system specific.

4. Duty Module tasks are broad in scope as befits a personnel classification and assignment tool, and are not system specific.

5. Broad tasks, per se, are not suitable for training information feedback.

6. CODAP tasks are sub-elements of Duty Module tasks and can be grouped and subsumed under appropriate Duty Module tasks.

7. SQT tasks relate to Duty Module tasks rather well, either as a counterpart task or as a sub-element task.

8. Plotting SQT tasks against Duty Module tasks for MOS 11E raises some rather significant questions such as:

- a. Is the SQT fair if three whole Duty Modules are not represented by even a single test item?
- b. The SQT seems to be heavily weighted in favor of gunnery contrary to the evidence in CODAP tasks and Duty Module tasks.
- c. Is the SQT putting the proper emphasis on the more frequently performed tasks of the job?
- d. Is training emphasis in accord with actual job requirements?

9. While Duty Module tasks are too broad for specific use in a training information feedback system, CODAP and SQT tasks often lack sufficient organization or occupational grouping to allow meaningful decisions on training to be made.

10. Based on this preliminary research it appears a combined Duty Module-SQT-CODAP task instrument could easily be constructed, applied to field units and used to provide the basis of a training information feedback system. Such a system would provide sufficient detail for training course use, but would organize the job data in such a manner that more meaningful and efficient decisions could be made by training course designers.

RECOMMENDATION.

It is recommended that future research be directed toward the formulation of a combined Duty Module-SQT-CODAP task system for either MOS 11E or 11D; that such a hierarchical task/module system be validated in field units and then applied to a broad sample of job incumbents. The results could then be presented to training course designers as the basis for a possible training information feedback system.

INCLOSURE 1:

REFERENCES

1. Department of Army Pamphlet No. 11E2177(N) "SQT 2 Notice for MOS 11E Armor Crewman" - 1 January 77.
2. Department of Army Pamphlet No. 11E3177(N) "SQT 3 Notice for MOS 11E Armor Crewman" - 1 January 77.
3. Department of Army Pamphlet No. 11E4177(N) "SQT 4 Notice for MOS 11E Armor Crewman" - 1 January 77.
4. Department of Army Pamphlet No. 11E2177, 11E3177(H) "Manual for the Administration of the Hands-On Component for MOS 11E SQT 2 and 3 Armor Crewman" - 1 January 77.
5. Department of Army Pamphlet No. 11E2177, 11E3177(S) "Scoring Booklet for Hands-On Component for SQT 2 and 3 MOS 11E Armor Crewman" - 1 January 77.
6. Department of Army Pamphlet No. 11E2177, 11E3177, 11E4177(P) "Performance Certification Component" SQT 2/3/4 MOS 11E Armor Crewman - 1 January 1977.
7. United States Army Armor School "Individual Training Plan for MOS 11E Armor Crewman, Skill Levels 1-2-3-4-5" - Fort Knox, Ky.
8. USA FM 17-11E1/2 "Soldier's Manual, Armor Crewman, Skill Levels 1 and 2" - 30 September 1976.
9. USA FM 17-11E3 "Soldier's Manual, Armor Crewman, Skill Level 3 - 30 September 1976.
10. USA FM 17-11E4 "Soldier's Manual, Armor Crewman, Skill Level 4 - 30 September 1976.
11. USA Combat Arms Training Board, "What To Train Task List, Critical and Important Tasks in Eight Combat Arms MOS" - October 74.
12. Stephenson, Robert W. and Fleishman, Edwin A., "A Taxonomic Base on Future Management Information and Decision Systems: A Common Language for Resource and Requirement Planning" USA Behavior and System Research Laboratory Technical Research Note 244 - October 1972.
13. Stephenson, Robert W., Hahn, Clifford P. and Davis, Warren P., "A Taxonomic Base for Future Management Information Decision Systems: Ways of Describing the Effectiveness of Organizational Units", USA Research Institute for the Behavioral and Social Sciences, - April 1973.

INCLOSURE 2: WRITTEN COMPONENT FOR MOS 11E ARMOR CREWMAN (WC)

TASK #	TASK TITLE	SKILL LEVELS		
		<u>2</u>	<u>3</u>	<u>4</u>
	COMMON CORE			
5901	Identify Combat Aircraft	x	x	x
5902	Identify Combat Vehicles & Weapons	x	x	x
0405	Decontaminate Self, Equipment, Weapon, Supplies and Tanks	x	x	x
0407	Administer Atropine Injection	x	x	x
2002	Communicate Using Visual Signal Techniques	x	x	x
1204	Select Temporary Tank Firing Position	x	x	x
6101	Operate Tactical FM Radio & Accessories	x	x	x
0901	Process Known or Suspected Enemy Personnel	x	x	x
5303	Measure Ground Distance Using a Map	x	x	x
6105	Enter/Leave Radio Communications Net Using CEOI	x	x	x
7020	Prepare a Range Card for a Tank	x	x	x
5401	Prepare NBC-1 and NBC-4 Reports		x	x
5101	Prepare a Spot Report		x	x
5304	Conduct a Map Reconnaissance		x	x
5306	Determine Percent of Slope of Terrain Using a Map		x	x
5307	Navigate to a Point on the Ground with a Topo Map (mounted)		x	x
7601	Call for Supporting Fire		x	x
7602	Adjust Supporting Fire		x	x
9701	Prepare a Shell/Bomb/Mortar Report		x	x
9401	Enplace/Recover Early Warning Devices		x	x
6106	Apply Anti-Jamming Procedures		x	x
5402	Direct Unmasking Procedures			x
5403	Direct Radiological Monitoring			x
5311	Prepare a Map Overlay			x
6110	Prepare Speech Security Equipment TSEC/KY 38 for Vehicular Operation			x
6111	Prepare Speech Security Equipment TSEC/KY-8 for Operation			x
7708	Prepare a Platoon Fire Plan			x
7711	Direct Consolidation & Reorganization on the Objective			x
7712	Coordinate Platoon Passage Through a Friendly Unit			x
9601	Prepare & Issue an Oral Operations Order			x

INCLOSURE 2: WRITTEN COMPONENT FOR MOS 11E ARMOR CREWMAN (WC)

TASK #	TASK TITLE	SKILL LEVELS		
		<u>2</u>	<u>3</u>	<u>4</u>
TRACK 1 : M60A1 CREWMAN				
0102	Administer Artificial Respiration (Mouth-to-Mouth)	x	x	x
2001	Extinguish a Fire in a Tank	x	x	
7002	Perform Loader Prepare-To-Fire Checks	x	x	
7006	Perform Before, During and After - Operation Maintenance Checks and Services on an M60 Series Tank	x	x	x
7008	Start and Stop a Tank Engine	x	x	
7009	Operate a Tank	x	x	
7011	Recover a Tank by Self-Recovery Means	x	x	x
6709	Engage Targets and Apply Immediate Action to M85 Cal. 50 Machine Gun	x	x	x
7021	Select and Occupy Firing Positions	x	x	x
7022	Perform Prepare-To-Fire Checks	x	x	x
7024	Use Precision Fire	x	x	x
7026	Use Battle Sight	x	x	x
7027	Adjust Fire From a Subsequent Fire Command	x	x	x
7028	Adjust Fire Using Burst on Target	x	x	x
7030	Zero a Main Gun	x	x	x
7031	Use Misfire Procedures for a 105MM Main Gun	x	x	x
7033	Fire from a Range Card	x	x	x
6716	Boresight on M85 Cal. 50 Machine Gun		x	x
6717	Zero an M85 Cal. 50 Machine Gun		x	x
7034	Boresight the Rangefinder with the Main Gun		x	x
7038	Issue a Fire Command for a Tank		x	x
7039	Perform the Tank Commander's Prepare-To-Fire checks		x	x

INCLOSURE 2: WRITTEN COMPONENT FOR MOS 11E ARMOR CREWMAN (WC)

TASK #	TASK TITLE	SKILL LEVELS		
		<u>2</u>	<u>3</u>	<u>4</u>
	TRACK 2: M551 CREWMAN			
0102	Administer Artificial Respiration (mouth-to-mouth)	x	x	x
0903	Use Challenge and Password to Identify Persons	x	x	x
1304	Maintain Operator's Items in Equipment Logbook	x	x	x
7055	Load the Gun/Launcher on M551 AR/AAV	x	x	x
7060	Apply Misfire Procedures for M551 AR/AAV Main Gun/Launcher Conventional Round	x	x	x
7061	Apply Misfire Procedures for M551 AR/AAV Main Gun/Launcher Missile	x	x	x
7063	Perform Loader's Prepare-To-Fire Checks on M551 AR/AAV	x	x	
7064	Perform Driver's Prepare-To-Fire Checks on M551 AR/AAV	x	x	
7065	Perform After-Firing Checks and Services on M551 AR/AAV Gun/Launcher	x	x	x
6503/ 6502	Maintain Cal 50 HB M2 Flex. Machine Gun; Check and Set Head Space and Timing on Cal. 50 HB M2 Flex. Machine Gun	x	x	x
6505	Engage Targets and Apply Immediate Action to Cal. 50 HB2 M2 Flex. Machine Gun	x	x	x
7027	Adjust Fire from a Subsequent Fire Command	x	x	x
7021	Select and Occupy Firing Positions	x	x	x
7087	Zero Gun/Launcher on M551 AR/AAV	x	x	x
7069	Engage Targets with M551 Shillelagh Missile	x	x	x
7068	Engage Targets with M551 Conventional Round	x	x	x
7071	Perform Missile Subsystem Check	x	x	x
6602	Fire M176/226 Grenade Launcher		x	x
7072	Issue a Fire Command for an M551		x	x

INCLOSURE 2: WRITTEN COMPONENT FOR MOS 11E ARMOR CREWMAN (WC)
HANDS-ON COMPONENT (HOC)

TASK #	TASK TITLE	SKILL LEVELS		
		<u>2</u>	<u>3</u>	<u>4</u>
COMMON CORE				
0401	Put on a Protective Mask	x	x	
2501	Prepare an M72A2 LAW for Firing	x	x	
2301	Fire an M18A1 Claymore Mine	x	x	
6703	Maintain a Coaxial Machine Gun	x	x	
6101	Operate Tactual FM Radio and Accessories	x	x	
TRACK 1 : M60A1 CREWMAN				
5401	Prepare a Tank for Nuclear Attack	x	x	
7001	Perform After-Firing Checks and Services on 105 MM Main Gun	x	x	
7004	Perform Loader's Misfire Procedure for 105 MM Main Gun	x	x	
7022	Perform Prepare-To-Fire Checks	x	x	
7029	Boresight Gunner's Telescope and Periscope with Main Gun	x	x	
TRACK 2: M551 CREWMAN				
6503	Maintain Cal. 50 HB M2 Flex. Machine Gun	x	x	
6502	Check and Set Head Space and Timing on a Cal. 50 HB M2 Flex Machine Gun	x	x	
7066	Boresight Gun/Launcher on M551 AR/AAV	x	x	
TRACK 3: M60A2 CREWMAN				
5401	Prepare a Tank for Nuclear Attack	x	x	
7048	Determine Range to Target Using Laser Range-finder	x	x	
7081	Perform Gunner's Prepare-To-Fire Checks on M60A2 Tank	x	x	
PERFORMANCE CERTIFICATION COMPONENT (PCC) FOR MOS 11E				
0501	Pass Advanced Physical Fitness Test	x	x	x
6403	Engage Targets and Apply Immediate Action to Cal. 45 Pistol	x	x	x

INCLOSURE 2: WRITTEN COMPONENT FOR MOS 11E ARMOR CREWMAN (WC)

TASK #	TASK TITLE	SKILL LEVELS		
		<u>2</u>	<u>3</u>	<u>4</u>
	TRACK 3: M60A2 CREWMAN			
2001	Extinguish a Fire in a Tank	x	x	x
7006	Perform Before, During and After - Operation Maintenance Checks and Services on an M60 Series Tank	x	x	x
1304	Maintain Operator/s Items in Equipment Logbook	x	x	x
7008	Start and Stop a Tank Engine	x	x	
7009	Operate a Tank (M60A2)	x	x	
7011	Recover a Tank by Self-Recovery Means	x	x	x
7042	Load the Main Gun Round/Missile on M60A2 Tanks	x	x	x
7043	Apply Misfire Procedures for M60A2 Main Gun Failure to Fire	x	x	x
7054	Perform Driver Prepare-To-Fire Checks on M60A2 Tank	x	x	
7053	Perform Loader's Prepare-To-Fire Checks on M60A2 Tank	x	x	
7026	Use Battlesight	x	x	x
7027	Adjust Fire From a Subsequent Fire Command	x	x	x
7046	Boresight Gun/Launcher on M60A2 Tank	x	x	x
7048	Determine Range to Target Using Laser Rangefinder	x	x	x
7021	Select and Occupy Firing Positions	x	x	x
7000	Perform M60A2 Missile Subsystem Checks	x	x	x
7081	Perform Gunner's Prepare-To-Fire Checks on M60A2 Tank	x	x	x
6717	Zero M85 Cal. 50 Machine Gun		x	x
7093	Perform Tank Commander's Prepare-To-Fire Checks on M60A2 Tank		x	x
7038	Issue a Fire Command for a Tank		x	x
6601	Fire an M226 Grenade Launcher		x	x
7082	Determine Range to Target Using Laser Rangefinder (From TC Position)		x	x

INCLOSURE 3: WRITTEN COMPONENT FOR MOS 11D (WC)

TASK #	TITLE	PASS CRITERION	SKILL LEVELS		
			<u>2</u>	<u>3</u>	<u>4</u>
5903	Identify Threat Aircraft	14/20	x	x	x
5901	Identify Combat Vehicles & Weapons	16/20	x	x	x
5904	Prepare a Spot Report	3/4	x	x	x
0102	Administer Artificial Respiration	3/4	x	x	x
0407	Administer Atropine Injection	3/4	x	x	x
1001	Communicate Using Visual Signal Techniques	6/8	x	x	x
7601	Call for Supporting Fire	1/1	x	x	x
7602	Adjust Supporting Fire	3/3	x	x	x
1203	Conceal Movement by Route Selection	3/3	x	x	x
6501	Maintain M16A1 Rifle	4/5	x	x	x
6711	Engage Targets & Apply Immediate Action to 50 Cal. Machine Gun	3/3	x	x	x
6601	Maintain M203 Grenade Launcher	3/4	x	x	
1304	Maintain Operator's Item in Equipment Logbook	3/3	x	x	x
7005	Operate M113A1 Vehicle in Water	3/3	x	x	x
7006	Prepare M113A1 Vehicle for Towing	2/2	x	x	
0903	Use Challenge & Password to Identify Persons	3/3	x	x	x
0901	Process Known or Suspected Enemy Personnel	4/5	x	x	x
6104	Apply Anti-Jamming Procedures	3/4	x	x	x
5301	Measure Ground Distance Using a Map	3/4	x	x	x
5302	Locate a Point on a Map	3/4	x	x	x
5306	Navigate to a Point on Ground w/Topo Map, Mounted or Dismounted	3/3	x	x	x
5307	Determine Elevation of a Point on Ground Using Map	3/3	x	x	x
5309	Determine Percent of Slope of Terrain Using Map	3/3	x	x	x
6108	Enter/Leave Radio Communication Net Using CEOI	3/4	x	x	x
7309	Destroy a Mine in Place	2/2	x	x	x
7401	Conduct a Dismounted Recon Patrol	3/3	x	x	x
7402	Conduct a Mounted Security Patrol	2/2	x	x	x
7021	Select & Occupy Firing Positions	2/2	x	x	x
9401	Emplace/Recover Early Warning Devices Patrol Seismic Intrusion Detector (PSID)	4/6	x	x	x
6709/6707	Maintain, Set & Check Head Space & Timing on 50 Cal. Machine Gun	3/4	x	x	x

INCLOSURE 3: WRITTEN COMPONENT FOR MOS 11D (WC)

TASK #	TITLE	PASS CRITERION	SKILL LEVELS		
			<u>2</u>	<u>3</u>	<u>4</u>
5312	Conduct a Map Reconnaissance	2/2		x	x
5401	Prepare NBC-1 and NBC-4 Reports	6/8		x	x
7311	Emplace a Hasty Minefield	3/3		x	x
7203	Create an Obstacle Using Demolitions	3/3		x	x
7406	Conduct a Route Reconnaissance	3/3		x	x
7407	Conduct a Zone Reconnaissance	2/2		x	x
7408	Conduct an Area Reconnaissance	3/3		x	x
7409	Conduct Section Security Missions	3/4		x	x
7704	Conduct Mounted Tactical Movement	3/3		x	x
9701	Prepare Shell/Bomb/Mortar Report	2/2		x	x
5404	Direct Unmasking Procedures	4/5			x
5405	Direct Radiological Monitoring	5/7			x
5311	Prepare a Map Overlay	5/6			x
6109	Prepare Speech Security Equipment TSEC/KY-38 for Vehicular Operation	3/4			x
6111	Prepare Speech Security Equipment TSEC/KY-8 for Operation	3/4			x
7711	Prepare a Platoon Fire Plan	3/3			x
7714	Direct Consolidation & Reorganization on the Objective	2/2			x
7715	Coordinate Platoon Passage Thru a Friendly Unit	2/2			x
9601	Prepare & Issue an Oral Operations Order	4/5			x
HANDS-ON COMPONENT (HOC)					
0401	Put on a Protective Mask	9 Sec.		x	x
2501	Prepare an M72A2 LAW for Firing	30 Sec.		x	x
6701	Maintain M60 Machine Gun	5 Min.		x	x
6707/6709	Maintain, Set & Check Head Space & Timing on 50 Cal. M2 Flex Machine Gun	15 Min.		x	x
2301	Fire a Claymore Mine	5 Min.		x	x
7201	Assemble Nonelectric Detonation System	3 Min.		x	x
6105	Install Radio Remote Control Equipment	10 Min.		x	x
6102	Operate Tactical FM Radio & Accessories	5 Min.		x	x
PERFORMANCE CERTIFICATION COMPONENT (PCC)					
0501	Advanced Physical Fitness Test (APFT)	Pass		x	x
6504	Engage Targets & Apply Immediate Action to M16A1 Rifle	Pass		x	x

DUTY JOB DESCRIPTION CASES TASKS DUTIES HRS

658 098 21 249

CUMULATIVE SUM OF AVERAGE PERCENT TIME SPENT BY ALL MEMBERS.....

AVERAGE PERCENT TIME SPENT BY ALL MEMBERS.....

AVERAGE PERCENT TIME SPENT BY MEMBERS PERFORMING.....

PERCENT OF MEMBERS PERFORMING.....

DUTY/TASK TITLE	CASES	TASKS	DUTIES	HRS	PERCENT TIME SPENT BY ALL MEMBERS	PERCENT TIME SPENT BY MEMBERS PERFORMING	PERCENT OF MEMBERS PERFORMING
PERFORM ARMED/TRACK VEHICLE WEAPON SYS OPERATIONAL DUTIES	93.57	10.25	93.57	9.59	10.25	9.59	9.59
PERFORM AUTOMATIC CREW-SERVED WEAPON/ASSOCIATED EQUIP DUTIES	93.57	16.24	93.57	24.78	16.24	24.78	24.78
PERFORM GENERAL MILITARY DUTIES	92.37	12.33	92.37	11.39	12.33	11.39	11.39
PERFORM GENERAL ARMED/TRACK VEHICLE OPERATOR DUTIES	90.36	14.49	90.36	13.09	14.49	13.09	13.09
PERFORM INDIVIDUAL WEAPON/ASSOCIATED EQUIPMENT DUTIES	65.14	10.13	65.14	8.63	10.13	8.63	8.63
PERFORM TANK OPERATION DUTIES	81.12	20.49	81.12	16.62	20.49	16.62	16.62
PERFORM UNIT OFFENSE DUTIES	75.10	4.61	75.10	3.61	4.61	3.61	3.61
PERFORM AMBUSH/ATTACK INVOLVING DUTIES	69.88	6.08	69.88	4.25	6.08	4.25	4.25
PERFORM LAUNCH NAVIGATION DUTIES	58.63	6.81	58.63	4.00	6.81	4.00	4.00
PERFORM TACTICAL UNIT DUTIES	48.19	3.87	48.19	1.87	3.87	1.87	1.87
PERFORM ARMORED VEHICLE OPERATOR DUTIES	30.12	11.83	30.12	3.56	11.83	3.56	3.56
PERFORM WHEELED VEHICLE OPERATOR DUTIES	26.51	10.86	26.51	3.10	10.86	3.10	3.10
PERFORM UNIT MANAGEMENT AND ADMINISTRATIVE DUTIES	28.11	2.00	28.11	.56	2.00	.56	.56
PERFORM ARMED/TRACK VEHICLE SUPERVISORY DUTIES	26.51	3.27	26.51	.87	3.27	.87	.87
PERFORM MASTER GUNNER DUTIES	25.70	3.38	25.70	.87	3.38	.87	.87
PERFORM RECON/SECURITY/COMBAT PATROL DUTIES	20.68	2.30	20.68	.40	2.30	.40	.40
PERFORM COMBAT ENGINEER VEHICLE (CEV) OPERATOR DUTIES	18.83	5.06	18.83	.96	5.06	.96	.96
PERFORM OPERATIONS STAFF SECTION DUTIES	14.85	2.55	14.85	.38	2.55	.38	.38
PERFORM COMBAT ENGINEER/LOGISTICS/TIME WARFARE DUTIES	14.06	2.78	14.06	.39	2.78	.39	.39
PERFORM INTELLIGENCE STAFF SECTION DUTIES	10.04	2.24	10.04	.22	2.24	.22	.22
PERFORM ARMORED VEHICLE LAUNCH BRIGADE (AVLB) OPERATOR DUTIES	6.02	5.45	6.02	.33	5.45	.33	.33

THIS PAGE IS BEST QUALITY PRACTICABLE FROM COPY FURNISHED TO DDC

INCLOSURE 4

NO.	DUTY/TASK TITLE	55-96	59-92	29-66
2	UNLOAD AMMUNITION FROM VEHICLES	56.96	52	29.66
7	FIRE M40/M41 TANK 105MM MAIN GUN	56.53	51	30.17
9	UNLOAD ARMED/TRACK VEHICLE ACCORDING TO LOADING PLAN	56.38	52	30.64
13	REMOVE AMMUNITION FROM CONTAINERS	56.23	54	31.18
14	RELOAD ARMED/TRACK VEHICLE FIRING POSITIONS	56.08	51	31.63
15	IDENTIFY TANK/ARMORIC SYMBOLS ON MAPS	55.78	54	32.05
16	REMOVE M40/M41 FOR NIGHT IMPARED (IR) OPERATIONS	55.47	52	32.50
17	CLEAN M40/M41	55.47	52	33.02
18	LOAD M40/M41	54.71	54	33.49
19	UNLOAD INTERMEDIATE MAPS	54.56	52	33.97
20	REMOVE ARMED/TRACK VEHICLE LOADING PLANS	54.41	52	34.31
21	REMOVE ARMED/TRACK VEHICLE FIRING POSITIONS	53.50	54	34.75
22	REMOVE AIR TARGETS WITH M40/M41 TANK SEARCHLIGHT	53.04	51	35.18
23	REMOVE ELEVATION, USING MAPS	53.04	51	35.55
24	REMOVE AND PUT AWAY COORDINATES	52.74	52	36.47
25	REMOVE FACILITIES FOR COLD WEATHER OPERATIONS	51.98	52	36.95
26	REMOVE MACHINESGUN (FAMILIARIZATION)	51.82	53	37.10
27	REMOVE M40/M41 TANK MAIN GUN	51.52	53	37.47
28	REMOVE GROUND DISTANCES ON MAPS	51.37	52	37.98
29	REMOVE TRACKED CONTAINER VEHICLE CIRCULAR RANGE CARD	51.22	53	38.33
30	REMOVE AMMUNITION FOR SERVICEABILITY	50.30	57	39.14
31	REMOVE M40/M41 TANK MAIN GUN SEARCHLIGHT	50.15	57	39.51
32	REMOVE M40/M41 OVER PAVED SURFACES	49.70	54	39.96
33	REMOVE M40/M41 DURING REDUCED VISIBILITY (DUST/DARKNESS)	49.54	51	40.47
34	REMOVE M40/M41 DURING DARKNESS UNDER BLACKOUT CONDITIONS	49.09	56	40.95
35	REMOVE GROUND LOCATION BY COMPARING MAP/GROUND FEATURES	48.94	53	41.31
36	REMOVE M40/M41 IN COMPANY	48.63	53	41.64
37	REMOVE M40/M41 OVER MUD/SLOPE/DAMP/DICE	48.18	51	42.15
38	REMOVE M40/M41 OVER MUD/SLOPE/DAMP/DICE	47.87	51	42.63
39	REMOVE M40/M41 CROSSING DITCHES/SHELL HOLES/TRENCHES	47.87	53	43.01
40	REMOVE TARGETS DURING STABILIZED ARMED/TRACK VEHICLE ON	47.42	54	43.45
41	REMOVE M40/M41	47.11	53	43.82
42	REMOVE M40/M41	47.11	53	44.20
43	REMOVE M40/M41	47.11	53	44.58
44	REMOVE M40/M41 ASCENDING STEEP GRADES	46.50	53	45.01
45	REMOVE M40/M41	46.35	57	45.38
46	REMOVE M40/M41 DESCENDING STEEP GRADES	46.05	53	45.81
47	REMOVE M40/M41 MAIN GUN ROUND FROM M40/M41 TANK	45.90	53	46.11
48	REMOVE M40/M41	45.90	57	46.46
49	REMOVE STABILIZED TARGET WITH MACHINESGUN	45.59	57	46.81
50	REMOVE TRACKED CONTAINER VEHICLE GROUND TARGETS	45.14	52	47.16
51	REMOVE M40/M41 MACHINESGUN	44.83	58	47.49
52	REMOVE FLAG ONLY	44.83	57	47.84
53	REMOVE M40/M41 MACHINESGUN	44.38	57	48.18
54	REMOVE LOCATION BY MAP INTERSECTION/PRESCTION	44.07	53	48.48
55	REMOVE TYPICAL M40/M41 ACCESSORIES FOR OPERATION	44.07	57	48.84
56	REMOVE M40/M41 TANK FAMILIARIZATION	43.92	53	49.18
57	REMOVE M40/M41 TANK COMPASS	43.47	55	49.40
58	REMOVE ARMED/TRACK VEHICLES BY EXPEDIENT METHODS	43.31	53	49.73
59	REMOVE M40/M41 MACHINESGUN	43.31	57	50.05
60	REMOVE M40/M41 MACHINESGUN	42.55	57	50.36
61	REMOVE M40/M41 MACHINESGUN	42.55	51	50.75
62	REMOVE FIRST AIR TO BE APPLIED TO CASUALTY	42.10	59	51.00

THIS PAGE IS BEST QUALITY PRACTICABLE FROM COPY FURNISHED TO DDC

INCLOSURE 6 - 1

DUTY MODULE: A-2 PERFORMS UNIT SUPERVISION AND CONTROL OF PERSONNEL	Supervise	Do and Supervise	Do	Assist
1. Inspect personnel, equipment, and living and dining areas	[]	[]	[]	[]
2. Process incoming and outgoing personnel	[]	[]	[]	[]
3. Establish and post unit files, ARs, and Circulars	[]	[]	[]	[]
4. Prepare unit orders, correspondence, and SOPs	[]	[]	[]	[]
5. Prepare and review work schedules, duty rosters, and administrative and technical reports	[]	[]	[]	[]
6. Prepare recommendations on personnel actions and personnel management at the unit level	[]	[]	[]	[]
7. Form unit for military formations and conduct dismounted drills	[]	[]	[]	[]
8. Schedule leaves and passes	[]	[]	[]	[]
9. Prepare sick slips	[]	[]	[]	[]

Percent of Total Job Time Spent on Entire Duty Module:	0-10%	10-30%	30-50%	50-70%	70-90%	90-100%
Relative Criticality of the Entire Duty Module to My Job:	The Most Critical	Critical	Average	Least Critical		
How Did You Acquire the Skills of this Duty Module?	Civilian Training	BCT or AIT	Service School	Unit Training or School	OJT	

INCLOSURE 6 - 2

DUTY MODULE: B-2 CONDUCTS AND COORDINATES TRAINING IN THE UNIT	Supervise	Do and Supervise	Do	Assist
1. Evaluate personnel and recommend training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Inspect and report on conduct of training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Coordinate unit training schedules and activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Organize unit schools and train instructors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Request, recommend, allocate, and inspect training sites	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Prepare or adapt training plans and programs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Coordinate training support facilities and personnel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Conduct on-the-job training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Conduct unit training and training exercises	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Conduct individual training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Prepare lesson plans and training aids	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Initiate and post training records and reports	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Percent of Total Job Time Spent on Entire Duty Module:	0-10%	10-30%	30-50%	50-70%	70-90%	90-100%
Relative Criticality of the Entire Duty Module to My Job:	The Most Critical	Critical	Average	Least Critical		
How Did You Acquire the Skills of this Duty Module?	Civilian Training	BCT or AIT	Service School	Unit Training or School	OJT	

DUTY MODULE: C-1 OPERATES UNIT TACTICAL COMMUNICATIONS EQUIPMENT EXCLUDING USE OF MORSE CODE	Supervise	Do and Supervise	Do	Assist
1. Install and operate telephone equipment to communicate within armored vehicles	[]	[]	[]	[]
2. Install and operate radio telephone equipment to communicate within platoon and company	[]	[]	[]	[]
3. Install and operate field telephone switchboard	[]	[]	[]	[]
4. Establish and operate radio remote control station	[]	[]	[]	[]
5. Establish and operate field communications relay station	[]	[]	[]	[]
6. Read, interpret, and follow SOI in operating communications equipment	[]	[]	[]	[]
7. Encode and decode messages using simple codes and cipher devices	[]	[]	[]	[]
8. Employ transmission security, authentication procedures and counter countermeasures such as frequency changes against enemy intercepts, false messages, and ECM such as jamming	[]	[]	[]	[]
9. Serve as net control station	[]	[]	[]	[]
10. Connect and disconnect communications equipment	[]	[]	[]	[]
11. Erect radio antennas	[]	[]	[]	[]
12. Lay and maintain field wire lines	[]	[]	[]	[]
13. Serve as mounted or dismounted messenger	[]	[]	[]	[]

Percent of Total Job Time Spent on Entire Duty Module:	0-10%	10-30%	30-50%	50-70%	70-90%	90-100%
Relative Criticality of the Entire Duty Module to My Job:	The Most Critical	Critical	Average	Least Critical		
How Did You Acquire the Skills of this Duty Module?	Civilian Training	BCT or AIT	Service School	Unit Training or School	OJT	

INCLOSURE 6 - 4

DUTY MODULE: D-1 OPERATES UNIT COMBAT SUPPORT VEHICLES	Supervise	Do and Supervise	Do	Assist
1. Spot paint vehicles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Service vehicles with gas, oil, lubricant, coolant, and minor parts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Inspect and maintain gas particulate filter unit . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Remove and install access covers and drain plugs . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Remove and install tracks, track components, or chains	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Remove, install, inspect, and replace fire extinguishers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Drive wheel vehicles and trailers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Drive track vehicles and trailers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Load and unload vehicles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Prepare vehicle records	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Use towing winch	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Mount and dismount vehicle weapons	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Load, inspect, and lash vehicles and equipment for rail and air movement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Perform organizational maintenance on combat support vehicles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Prepare vehicles for specialized operations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Percent of Total Job Time Spent on Entire Duty Module:	0-10%	10-30%	30-50%	50-70%	70-90%	90-100%
Relative Criticality of the Entire Duty Module to My Job:	The Most Critical		Critical	Average	Least Critical	
How Did You Acquire the Skills of this Duty Module?	Civilian Training	BCT or AIT	Service School	Unit Training or School	OJT	

INCLOSURE 6 - 5

DUTY MODULE: E-1 PREPARES AND EMPLOYS MAPS, CHARTS, AND INSTRUMENTS IN LAND NAVIGATION	Supervise	Do and Supervise	Do	Assist
1. Determine scale of aerial photographs and identify ground objects	[]	[]	[]	[]
2. Read maps and aerial photographs	[]	[]	[]	[]
3. Sketch terrain maps from visual data	[]	[]	[]	[]
4. Prepare and employ overlays	[]	[]	[]	[]
5. Control orientation and direction of movement by compass	[]	[]	[]	[]
6. Plot distances and locations and determine elevations by intersection or other techniques	[]	[]	[]	[]
7. Determine course, distance, and location with protractor and map scale	[]	[]	[]	[]
8. Determine approximate azimuth from sun and stars	[]	[]	[]	[]

Percent of Total Job Time Spent on Entire Duty Module:	0-10%	10-30%	30-50%	50-70%	70-90%	90-100%	
Relative Criticality of the Entire Duty Module to My Job:	The Most Critical		Critical		Average		Least Critical
How Did You Acquire the Skills of this Duty Module?	Civilian Training	BCT or AIT	Service School	Unit Training or School	OJT		

INCLOSURE 6 -6

DUTY MODULE: E-2 ENGAGES ENEMY WITH TANK AND ARMOR VEHICLE MOUNTED ASSAULT WEAPONS	Supervise	Do and Supervise	Do	Assist
1. Employ tank gun	[]	[]	[]	[]
2. Employ tank missiles	[]	[]	[]	[]
3. Employ tank mounted machine gun	[]	[]	[]	[]
4. Employ searchlight for battlefield illumination and target identification	[]	[]	[]	[]
5. Boresight and adjust tank gun and associated fire control equipment	[]	[]	[]	[]
6. Calculate minimum elevation for gun	[]	[]	[]	[]
7. Set out aiming stakes	[]	[]	[]	[]
8. Estimate horizontal and vertical angles	[]	[]	[]	[]
9. Remove misfires	[]	[]	[]	[]
10. Conduct weapons registration	[]	[]	[]	[]
11. Give fire commands	[]	[]	[]	[]
12. Adjust fire by determining and applying range and deflection corrections	[]	[]	[]	[]
13. Uncrate, inspect, inventory, and stow ammunition	[]	[]	[]	[]
14. Employ laser and other range finding equipment	[]	[]	[]	[]
15. Troubleshoot tanks and armor weapons malfunctions	[]	[]	[]	[]

Percent of Total Job Time Spent on Entire Duty Module:	0-10%	10-30%	30-50%	50-70%	70-90%	90-100%
Relative Criticality of the Entire Duty Module to My Job:	The Most Critical		Critical	Average	Least Critical	
How Did You Acquire the Skills of this Duty Module?	Civilian Training	BCT or AIT	Service School	Unit Training or School	OJT	

DUTY MODULE: E-3 DRIVES TANKS AND ASSOCIATED ARMOR COMBAT VEHICLES	Supervise	Do and Supervise	Do	Assist
1. Drive tanks and armored vehicles in combat and non-combat situations	[]	[]	[]	[]
2. Drive amphibious vehicles in combat and non-combat situations	[]	[]	[]	[]
3. Perform field repair of vehicle track system	[]	[]	[]	[]
4. Receive and respond to verbal, hand, light, and flag signals in driving vehicles	[]	[]	[]	[]
5. Stow rations, ammunition, and personal equipment in tanks	[]	[]	[]	[]
6. Perform pioneer work on trails and parking areas	[]	[]	[]	[]
7. Operate tank mounted bulldozer	[]	[]	[]	[]
8. Operate fuel transfer pump, turret seal, and bilge pumps	[]	[]	[]	[]
9. Operate auxiliary generator and engine	[]	[]	[]	[]
10. Install and operate infra-red periscope in night driving	[]	[]	[]	[]
11. Conduct safety checks on tanks and armored vehicles	[]	[]	[]	[]
12. Service armored vehicles	[]	[]	[]	[]
13. Perform organizational maintenance on tanks and armored vehicles	[]	[]	[]	[]
14. Prepare vehicles for specialized operations	[]	[]	[]	[]

Percent of Total Job Time Spent on Entire Duty Module:	0-10%	10-30%	30-50%	50-70%	70-90%	90-100%	
Relative Criticality of the Entire Duty Module to My Job:	The Most Critical		Critical		Average		Least Critical
How Did You Acquire the Skills of this Duty Module?	Civilian Training	BCT or AIT	Service School	Unit Training or School	OJT		

DUTY MODULE: E-4 EMPLACES, REPORTS, AND NEUTRALIZES TACTICAL OBSTACLES	Supervise	Do and Supervise	Do	Assist
1. Prepare obstacles and barriers	[]	[]	[]	[]
2. Lay minefields and emplace booby traps and anti-personnel mines	[]	[]	[]	[]
3. Plot, report, and mark minefields and stream crossing sites	[]	[]	[]	[]
4. Locate and disarm mines using mine detector or by probing	[]	[]	[]	[]
5. Breach minefields and mark routes through them	[]	[]	[]	[]
6. Build roadblocks and dig tank obstacles	[]	[]	[]	[]

Percent of Total Job Time Spent on Entire Duty Module:	0-10%	10-30%	30-50%	50-70%	70-90%	90-100%
Relative Criticality of the Entire Duty Module to My Job:	The Most Critical	Critical	Average	Least Critical		
How Did You Acquire the Skills of this Duty Module?	Civilian Training	BCT or AIT	Service School	Unit Training or School	OJT	

DUTY MODULE: E-5	Supervise	Do and Supervise	Do	Assist
PERFORMS IN MOUNTED, DISMOUNTED, AIRBORNE, OR LONG RANGE PATROLS				
1. Plan patrol operations	[]	[]	[]	[]
2. Assemble, inspect, issue patrol order to, and lead patrol	[]	[]	[]	[]
3. Operate listening or observation post	[]	[]	[]	[]
4. Employ and adjust long range fires	[]	[]	[]	[]
5. Employ long range telescope	[]	[]	[]	[]
6. Scout enemy formations, positions, personnel, vehicles, and equipment	[]	[]	[]	[]
7. Engage and penetrate enemy forces	[]	[]	[]	[]
8. Employ demolitions	[]	[]	[]	[]
9. Inspect, classify, and evaluate terrain, woods, crossing sites, roads, bridges, slopes, curves, tunnels, and obstacles	[]	[]	[]	[]
10. Mark route or serve as guide	[]	[]	[]	[]
11. Report information or observations	[]	[]	[]	[]
12. Employ deceptive measures, e.g., camouflage, cover, and concealment	[]	[]	[]	[]
13. Use passwords and code	[]	[]	[]	[]

Percent of Total Job Time Spent on Entire Duty Module:	0-10%	10-30%	30-50%	50-70%	70-90%	90-100%
Relative Criticality of the Entire Duty Module to My Job:	The Most Critical		Critical	Average	Least Critical	
How Did You Acquire the Skills of this Duty Module?	Civilian Training	BCT or AIT	Service School	Unit Training or School	OJT	

DUTY MODULE: E-7 PARTICIPATES IN GROUND TACTICAL OPERATIONS AS MEMBER OF A MANEUVER UNIT	Supervise	Do and Supervise	Do	Assist
1. Analyze mission, terrain, enemy, own, and supporting units to determine and plan scheme of maneuver	[]	[]	[]	[]
2. Prepare and issue written or verbal operations orders and warning orders	[]	[]	[]	[]
3. Continually analyze situation, make on-the-spot decisions, and issue modifying orders	[]	[]	[]	[]
4. Participate individually in tactical operations as team member or immediate supervisor in establishing bases of fire, advancing to contact, assault, defense, etc.	[]	[]	[]	[]
5. Use camouflage cover, concealment, and/or dispersion	[]	[]	[]	[]
6. Prepare deliberate and hasty defense positions, clear fields of fire and construct obstacles	[]	[]	[]	[]
7. Serve as messenger or liaison agent	[]	[]	[]	[]
8. Keep self, subordinates, superior, and adjacent elements informed of tactical situation	[]	[]	[]	[]
9. Identify and report casualties	[]	[]	[]	[]
10. Employ first aid and establish field sanitation	[]	[]	[]	[]
11. Establish and maintain local security	[]	[]	[]	[]
12. Capture, search, segregate, safeguard, and evacuate POWs	[]	[]	[]	[]
13. Call for and control air strikes and supporting ground fire	[]	[]	[]	[]
14. Utilize enemy equipment and prepared positions	[]	[]	[]	[]
15. Prepare field messages and sketches	[]	[]	[]	[]
16. Coordinate use of electronic surveillance devices	[]	[]	[]	[]

Percent of Total Job Time Spent on Entire Duty Module:	0-10%	10-30%	30-50%	50-70%	70-90%	90-100%	
Relative Criticality of the Entire Duty Module to My Job:	The Most Critical		Critical		Average		Least Critical
How Did You Acquire the Skills of this Duty Module?	Civilian Training	BCT or AIT	Service School	Unit Training or School	OJT		

DUTY MODULE: F-2 SERVES AS COMBAT INTELLIGENCE SERGEANT	Supervise	Do and Supervise	Do	Assist
1. Prepare and distribute intelligence reports and annexes	[]	[]	[]	[]
2. Make and evaluate spot reports	[]	[]	[]	[]
3. Analyze and advise on effects of weather and terrain on military operations	[]	[]	[]	[]
4. Analyze and prepare brief on enemy situation and capabilities	[]	[]	[]	[]
5. Receive, process, and safeguard classified and enemy documents, materials, and equipment	[]	[]	[]	[]
6. Establish and post intelligence journal, logs, SOP, and OB information	[]	[]	[]	[]
7. Coordinate employment of attached intelligence units.	[]	[]	[]	[]
8. Plan and coordinate counterintelligence in subordinate units	[]	[]	[]	[]
9. Prepare and distribute maps to subordinate units	[]	[]	[]	[]
10. Plan and coordinate aerial photography activities and photo interpretation	[]	[]	[]	[]
11. Plan and coordinate electronic battlefield surveillance	[]	[]	[]	[]
12. Inspect subordinate units for compliance with personnel, communications, and physical security	[]	[]	[]	[]

Percent of Total Job Time Spent on Entire Duty Module:	0-10%	10-30%	30-50%	50-70%	70-90%	90-100%
Relative Criticality of the Entire Duty Module to My Job:	The Most Critical		Critical	Average	Least Critical	
How Did You Acquire the Skills of this Duty Module?	Civilian Training	BCT or AIT	Service School	Unit Training or School	OJT	

DUTY MODULE: G-1 PERFORMS USER MAINTENANCE ON INDIVIDUAL AND UNIT EQUIPMENT AND WEAPONS	Supervise	Do and Supervise	Do	Assist
1. Clean equipment and weapons	[]	[]	[]	[]
2. Service equipment and weapons with lubricants, fuels, coolants and fluids	[]	[]	[]	[]
3. Waterproof, fungi-proof and otherwise prepare equipment and weapons for unusual climatic conditions	[]	[]	[]	[]
4. Replace lamps, wiper blades, firing pins and similar minor parts	[]	[]	[]	[]
5. Conduct pre-operation and post-operation visual and manual inspection	[]	[]	[]	[]
6. Identify and report malfunctions and defects in weapons and equipment	[]	[]	[]	[]
7. Make entries in weapon and equipment log books	[]	[]	[]	[]
8. Use simple hand tools	[]	[]	[]	[]

Percent of Total Job Time Spent on Entire Duty Module:	0-10%	10-30%	30-50%	50-70%	70-90%	90-100%
Relative Criticality of the Entire Duty Module to My Job:	The Most Critical		Critical	Average	Least Critical	
How Did You Acquire the Skills of this Duty Module?	Civilian Training	BCT or AIT	Service School	Unit Training or School	OJT	

INCLOSURE 7: WRITTEN COMPONENT FOR MOS 11E ARMOR CREWMEN (WC)

DUTY MODULES TASK #	SQT TASK TITLE	SKILL LEVELS		
		<u>2</u>	<u>3</u>	<u>4</u>
COMMON CORE				
E-5(3)	Identify Combat Aircraft	x	x	x
E-5(3)	Identify Combat Vehicles & Weapons	x	x	x
G-1(1)	Decontaminate Self, Equipment, Weapon, Supplies & Tanks	x	x	x
E-7(10)	Administer Atropine Injection	x	x	x
E-3(4)	Communicate Using Visual Signal Techniques	x	x	x
E-2(1)	Select Temporary Tank Firing Positions	x	x	x
C-1(2)	Operate Tactical FM Radio & Accessories	x	x	x
E-7(12)	Process Known or Suspected Enemy Personnel	x	x	x
E-1(6)	Measure Ground Distance Using a Map	x	x	x
C-1(6)	Enter/Leave Radio Communications Net Using CEOI	x	x	x
E-2(1)	Prepare a Range Card for a Tank	x	x	x
E-5(6)	Prepare NBC-1 and NBC-4 Reports		x	x
F-2(2) E-5(6)	Prepare a Spot Report		x	x
E-5(9)	Conduct a Map Reconnaissance		x	x
E-1(6)	Determine Percent of Slope of Terrain Using a Map		x	x
E-1(7)	Navigate to a Point on the Ground with a Topo Map (Mounted)		x	x
E-7(13)	Call for Supporting Fire		x	x
E-2(12) E-5(4)	Adjust Supporting Fire		x	x
E-7(15)	Prepare a Shell/Bomb/Mortar Report		x	x
F-2(11)	Enplace/Recover Early Warning Devices		x	x
C-1(8)	Apply Anti Jamming Procedures		x	x
	Direct Unmasking Procedures			x
	Direct Radiological Monitoring			x
E-1(4)	Prepare a Map Overlay			x
G-1(7)	Prepare Speech Security Equipment TSEC/KY-38 for Vehicular Operation			x
C-1(7)	Prepare Speech Security Equipment TSEC/KY-8 for Operation			x
E-7(1) F-1(1)	Prepare a Platoon Fire Plan			x
E-7(3)	Direct Consolidation & Reorganization on the Objective			x
F-1(1)	Coordinate Platoon Passage Through a Friendly Unit			x
E-7(2)	Prepare & Issue an Oral Operations Order			x

INCLOSURE 7:

WRITTEN COMPONENT FOR MOS 11E

DUTY MODULES TASK #	SQT TASK TITLE	SKILL LEVELS		
		<u>2</u>	<u>3</u>	<u>4</u>
TRACK 1: M60A1 CREWMAN				
E-7(10)	Administer Artificial Respiration (Mouth-to-Mouth)	x	x	x
	Extinguish a Fire in a Tank	x	x	
E-2(1)	Perform Loader Prepare-To-Fire Checks	x	x	
G-1(2) G-1(5)	Perform Before, During and After-Operation Maintenance Checks and Services on an M60 Series Tank	x	x	x
E-3(1)	Start & Stop a Tank Engine	x	x	
E-3(1)	Operate a Tank	x	x	
E-3(13)	Recover a Tank by Self-Recovery Means	x	x	x
E-2(3)	Engage Targets & Apply Immediate Action to M85 Cal. 50 Machine Gun	x	x	x
E-2(1)	Select & Occupy Firing Positions	x	x	x
F-1(5)	Perform Prepare-To-Fire Checks	x	x	x
E-2(12)	Use Precision Fire	x	x	x
E-2(12)	Use Battle Sight	x	x	x
E-2(12)	Adjust Fire from a Subsequent Fire Command	x	x	x
E-2(12)	Adjust Fire Using Burst on Target	x	x	x
E-2(5)	Zero a Main Gun	x	x	x
E-2(9)	Use Misfire Procedures for a 105-mm Main Gun	x	x	x
E-2(1)	Fire from a Range Card	x	x	x
E-2(5)	Boresight an M85 Cal. 50 Machine Gun		x	x
E-2(5)	Zero an M85 Cal. 50 Machine Gun		x	x
E-2(5)	Boresight the Rangefinder with the Main Gun		x	x
E-2(11)	Issue a Fire Command for a Tank		x	x
G-1(5)	Perform the Tank Commander's Prepare-To-Fire Checks		x	x

INCLOSURE 7:

WRITTEN COMPONENT FOR MOS 11E

DUTY MODULES		SKILL LEVELS		
TASK #	SQT TASK TITLE	<u>2</u>	<u>3</u>	<u>4</u>
TRACK 2: M551 CREWMAN				
E-7(10)	Administer Artificial Respiration (Mouth-to-Mouth)	x	x	x
E-5(13)	Use Challenge & Password to Identify Persons	x	x	x
G-1(7)	Maintain Operator's Items in Equipment Logbook	x	x	x
E-2(1)	Load the Gun/Launcher on M551 AT/AAV	x	x	x
E-2(9)	Apply Misfire Procedures for M551 AR/AAV Main Gun/Launcher Conventional Round	x	x	x
E-2(9)	Apply Misfire Procedures for M551 AR/AAV Main Gun/Launcher Missile	x	x	x
G-1(5)	Perform Loader's Prepare-To-Fire Checks on M551 AR/AAV	x	x	
G-1(5)	Perform Driver's Prepare-To-Fire Checks on M551 AR/AAV	x	x	
G-1(2) G-1(5)	Perform After-Firing Checks & Services on M551 AR/AAV Gun/Launcher	x	x	x
E-2(15)	Maintain Cal. 50 HBM2 Flex Machine Gun; Check & Set Head Space & Timing on Cal. 50 HBM2 Flex Machine Gun	x	x	x
E-2(3)	Engage Targets & Apply Immediate Action to Cal. 50 HBM2 M2 Flex Machine Gun	x	x	x
E-2(12)	Adjust Fire from a Subsequent Fire Command	x	x	x
E-2(1)	Select & Occupy Firing Positions	x	x	x
E-2(5)	Zero Gun/Launcher on M551 AR/AAV	x	x	x
E-2(2)	Engage Targets with M551 Shillelagh Missile	x	x	x
E-2(1)	Engage Targets with M551 Conventional Round	x	x	x
G-1(5)	Perform Missile Subsystem Check	x	x	x
	Fire M176/226 Grenade Launcher		x	x
E-2(11)	Issue a Fire Command for an M551		x	x

INCLOSURE 7:

WRITTEN COMPONENT MOS 11E

DUTY MODULES TASK #	SQT TASK TITLE	SKILL LEVELS		
		<u>2</u>	<u>3</u>	<u>4</u>
TRACK 3: M60A2 CREWMAN				
	Extinguish a Fire in a Tank	x	x	x
G-1(2) G-1(5)	Perform Before, During and After Operation Maintenance Checks and Services on an M-60 Series Tank	x	x	x
G-1(7)	Maintain Operator's Items in Equipment Logbook	x	x	x
E-3(1)	Start & Stop a Tank Engine	x	x	
E-3(1)	Operate a Tank (M60A2)	x	x	
E-3(13)	Recover a Tank by Self-Recovery Means	x	x	x
E-2(1)	Load the Main Gun Round/Missile on M60A2 Tank	x	x	x
E-2(9)	Apply Misfire Procedures for M60A2 Main Gun Failure to Fire	x	x	x
G-1(5)	Perform Driver Prepare-To-Fire Checks on M60A2 Tank	x	x	
G-1(5)	Perform Loader's Prepare-To-Fire Checks on M60A2 Tank	x	x	
E-2(12)	Use Battlesight	x	x	x
E-2(12)	Adjust Fire from a Subsequent Fire Command	x	x	x
E-2(5)	Boresight Gun/Launcher on M60A2 Tank	x	x	x
E-2(14)	Determine Range to Target Using Laser Rangefinder	x	x	x
E-2(1)	Select & Occupy Firing Positions	x	x	x
G-1(5)	Perform M60A2 Missile Subsystem Check	x	x	x
G-1(5)	Perform Gunner's Prepare-To-Fire Checks on M60A2 Tank	x	x	x
E-2(5)	Zero M85 Cal. 50 Machine Gun		x	x
E-2(11)	Perform Tank Commander's Prepare-To-Fire Checks on M60A2 Tank		x	x
E-2(11)	Issue a Fire Command for a Tank		x	x
	Fire an M226 Grenade Launcher		x	x
E-2(14)	Determine Range to Target Using Laser Rangefinder (From TC Position)		x	x

INCLOSURE 7:

NON WRITTEN COMPONENTS MOS 11E

Hands-On Component (HOC)

DUTY MODULES TASK #	SQT TASK TITLE	SKILL LEVELS		
		<u>2</u>	<u>3</u>	<u>4</u>
COMMON CORE				
	Put On a Protective Mask	x	x	
E-2(2)	Prepare an M72A2 LAW for Firing	x	x	
E-4(2)	Fire an M18A1 Claymore Mine	x	x	
E-2(15)	Maintain a Coaxial Machine Gun	x	x	
C-1(2)	Operate Tactical FM Radio & Accessories	x	x	
TRACK 1: M60A1 CREWMAN				
E-3(14)	Prepare a Tank for Nuclear Attack	x	x	
G-1(2) G-1(5)	Perform After-Firing Checks & Services on 105 mm Main Gun	x	x	
E-2(9)	Perform Loader's Misfire Procedures for 105 mm Main Gun	x	x	
G-1(5)	Perform Prepare-To-Fire Checks	x	x	
E-2(5)	Boresight Gunner's Telescope & Periscope with Main Gun	x	x	
TRACK 2: M551 CREWMAN				
E-2(15)	Maintain Cal. 50 NBM2 Flex Machine Gun	x	x	
E-2(15)	Check & Set Head Space & Timing on a Cal. 50 HBM2 Flex Machine Gun	x	x	
E-2(5)	Boresight Gun/Launcher on M551 AR/AAV	x	x	
TRACK 3: M60A2 CREWMAN				
E-3(14)	Prepare a Tank for Nuclear Attack	x	x	
E-2(14)	Determine Range to Target Using Laser Rangefinder	x	x	
G-1(5)	Perform Gunner's Prepare-To-Fire Checks on M6-A2 Tanks	x	x	
<u>Performance Certification Component (PCC) for MOS 11E</u>				
	Pass Advanced Physical Fitness Test	x	x	x
	Engage Targets & Apply Immediate Action to Cal. 45 Pistol	x	x	x

DUTY MODULE: A-2

PERFORMS UNIT SUPERVISION AND CONTROL OF PERSONNEL

Related SQT
Tasks

1. Inspect personnel, equipment, and living and dining areas
2. Process incoming and outgoing personnel
3. Establish and post unit files, ARs, and Circulars
4. Prepare unit orders, correspondence, and SOPs
5. Prepare and review work schedules, duty rosters, and administrative and technical reports
6. Prepare recommendations on personnel actions and personnel management at the unit level
7. Form unit for military formations and conduct dismounted drills
8. Schedule leaves and passes
9. Prepare sick slips

Percent of Total Job Time Spent on Entire Duty Module:	0-10%	10-30%	30-50%	50-70%	70-90%	90-100%
Relative Criticality of the Entire Duty Module to My Job:	The Most Critical	Critical	Average	Least Critical		
How Did You Acquire the Skills of this Duty Module?	Civilian Training	BCT or AIT	Service School	Unit Training or School	OJT	

DUTY MODULE: B-2

Related SQT
Tasks

CONDUCTS AND COORDINATES TRAINING IN THE UNIT

1. Evaluate personnel and recommend training
2. Inspect and report on conduct of training
3. Coordinate unit training schedules and activities
4. Organize unit schools and train instructors
5. Request, recommend, allocate, and inspect training sites
6. Prepare or adapt training plans and programs
7. Coordinate training support facilities and personnel
8. Conduct on-the-job training
9. Conduct unit training and training exercises
10. Conduct individual training
11. Prepare lesson plans and training aids
12. Initiate and post training records and reports

Percent of Total Job Time Spent on Entire Duty Module:	0-10%	10-30%	30-50%	50-70%	70-90%	90-100%
Relative Criticality of the Entire Duty Module to My Job:	The Most Critical	Critical	Average	Least Critical		
How Did You Acquire the Skills of this Duty Module?	Civilian Training	BCT or AIT	Service School	Unit Training or School	OJT	

DUTY MODULE: C-1

OPERATES UNIT TACTICAL COMMUNICATIONS EQUIPMENT EXCLUDING USE OF MORSE CODE

Related SQT Tasks

1. Install and operate telephone equipment to communicate within armored vehicles
2. Install and operate radio telephone equipment to communicate within platoon and company 6101
3. Install and operate field telephone switchboard
4. Establish and operate radio remote control station
5. Establish and operate field communications relay station
6. Read, interpret, and follow SOI in operating communications equipment 6105
7. Encode and decode messages using simple codes and cipher devices 6110,6111
8. Employ transmission security, authentication procedures and counter countermeasures such as frequency changes against enemy intercepts, false messages, and ECM such as jamming 6106
9. Serve as net control station
10. Connect and disconnect communications equipment
11. Erect radio antennas
12. Lay and maintain field wire lines
13. Serve as mounted or dismounted messenger

Percent of Total Job Time Spent on Entire Duty Module:	0-10%	10-30%	30-50%	50-70%	70-90%	90-100%
Relative Criticality of the Entire Duty Module to My Job:	The Most Critical	Critical	Average	Least Critical		
How Did You Acquire the Skills of this Duty Module?	Civilian Training	BCT or AIT	Service School	Unit Training or School	OJT	

DUTY MODULE: D-1
OPERATES UNIT COMBAT SUPPORT VEHICLES

**Related SQT
 Tasks**

1. Spot paint vehicles
2. Service vehicles with gas, oil, lubricant, coolant, and minor parts
3. Inspect and maintain gas particulate filter unit . . .
4. Remove and install access covers and drain plugs . . .
5. Remove and install tracks, track components, or chains
6. Remove, install, inspect, and replace fire extinguishers
7. Drive wheel vehicles and trailers
8. Drive track vehicles and trailers
9. Load and unload vehicles
10. Prepare vehicle records
11. Use towing winch
12. Mount and dismount vehicle weapons
13. Load, inspect, and lash vehicles and equipment for rail and air movement
14. Perform organizational maintenance on combat support vehicles
15. Prepare vehicles for specialized operations

Percent of Total Job Time Spent on Entire Duty Module:	0-10%	10-30%	30-50%	50-70%	70-90%	90-100%
Relative Criticality of the Entire Duty Module to My Job:	The Most Critical	Critical	Average	Least Critical		
How Did You Acquire the Skills of this Duty Module?	Civilian Training	BCT or AIT	Service School	Unit Training or School	OJT	

DUTY MODULE: E-1

**Related SQT
Tasks**

**PREPARES AND EMPLOYS MAPS, CHARTS, AND INSTRUMENTS
IN LAND NAVIGATION**

- 1. Determine scale of aerial photographs and identify ground objects
- 2. Read maps and aerial photographs
- 3. Sketch terrain maps from visual data
- 4. Prepare and employ overlays 5311
- 5. Control orientation and direction of movement by compass
- 6. Plot distances and locations and determine elevations by intersection or other techniques 5306,5303
- 7. Determine course, distance, and location with protractor and map scale 5307
- 8. Determine approximate azimuth from sun and stars

Percent of Total Job Time Spent on Entire Duty Module:	0-10%	10-30%	30-50%	50-70%	70-90%	90-100%	
Relative Criticality of the Entire Duty Module to My Job:	The Most Critical		Critical		Average		Least Critical
How Did You Acquire the Skills of this Duty Module?	Civilian Training	BCT or AIT	Service School	Unit Training or School	OJT		

DUTY MODULE: E-2
ENGAGES ENEMY WITH TANK AND ARMOR VEHICLE MOUNTED ASSAULT WEAPONS

Related SQT
Tasks

- | | |
|---|--|
| 1. Employ tank gun | 1204,7020,7002,
7021,7033,7055
7042,7068 |
| 2. Employ tank missiles | 7069,250i |
| 3. Employ tank mounted machine gun | 6709,6505 |
| 4. Employ searchlight for battlefield illumination
and target identification | |
| 5. Boresight and adjust tank gun and associated
fire control equipment | 7030,6716,6717
7034,7087,7046
7029,7066 |
| 6. Calculate minimum elevation for gun | |
| 7. Set out aiming stakes | |
| 8. Estimate horizontal and vertical angles | |
| 9. Remove misfires | 7031,7060,7061
7043,7004 |
| 10. Conduct weapons registration | |
| 11. Give fire commands | 7038,7072,7093 |
| 12. Adjust fire by determining and applying range
and deflection corrections | 7024,7026,7027
7028 |
| 13. Uncrate, inspect, inventory, and stow ammunition | |
| 14. Employ laser and other range finding equipment | 7048,7082 |
| 15. Troubleshoot tanks and armor weapons malfunctions | 6503,6502,6703 |

Percent of Total Job Time Spent on Entire Duty Module:	0-10%	10-30%	30-50%	50-70%	70-90%	90-100%	
Relative Criticality of the Entire Duty Module to My Job:	The Most Critical		Critical		Average		Least Critical
How Did You Acquire the Skills of this Duty Module?	Civilian Training	BCT or AIT	Service School	Unit Training or School	OJT		

DUTY MODULE: E-3

**Related SQT
Tasks**

DRIVES TANKS AND ASSOCIATED ARMOR COMBAT VEHICLES

- 1. Drive tanks and armored vehicles in combat and non-combat situations 7008,7009
- 2. Drive amphibious vehicles in combat and non-combat situations
- 3. Perform field repair of vehicle track system
- 4. Receive and respond to verbal, hand, light, and flag signals in driving vehicles 2002
- 5. Stow rations, ammunition, and personal equipment in tanks
- 6. Perform pioneer work on trails and parking areas
- 7. Operate tank mounted bulldozer
- 8. Operate fuel transfer pump, turret seal, and bilge pumps
- 9. Operate auxiliary generator and engine
- 10. Install and operate infra-red periscope in night driving
- 11. Conduct safty checks on tanks and armored vehicles
- 12. Service armored vehicles
- 13. Perform organizational maintenance on tanks and armored vehicles 7011
- 14. Prepare vehicles for specialized operations 5401

Percent of Total Job Time Spent on Entire Duty Module:	0-10%	10-30%	30-50%	50-70%	70-90%	90-100%	
Relative Criticality of the Entire Duty Module to My Job:	The Most Critical		Critical		Average		Least Critical
How Did You Acquire the Skills of this Duty Module?	Civilian Training	BCT or AIT	Service School	Unit Training or School	OJT		

DUTY MODULE: E-4

EMPLACES, REPORTS, AND NEUTRALIZES TACTICAL OBSTACLES

**Related SQT
Tasks**

1. Prepare obstacles and barriers
2. Lay minefields and emplace booby traps and anti-personnel mines 2301
3. Plot, report, and mark minefields and stream crossing sites
4. Locate and disarm mines using mine detector or by probing
5. Breach minefields and mark routes through them
6. Build roadblocks and dig tank obstacles

Percent of Total Job Time Spent on Entire Duty Module:

0-10%	10-30%	30-50%	50-70%	70-90%	90-100%

Relative Criticality of the Entire Duty Module to My Job:

The Most Critical	Critical	Average	Least Critical

How Did You Acquire the Skills of this Duty Module?

Civilian Training	BCT or AIT	Service School	Unit Training or School	OJT

DUTY MODULE: E-5
PERFORMS IN MOUNTED, DISMOUNTED, AIRBORNE, OR LONG RANGE PATROLS

**Related SQT
 Tasks**

- 1. Plan patrol operations
- 2. Assemble, inspect, issue patrol order to, and lead patrol
- 3. Operate listening or observation post 5901,5902
- 4. Employ and adjust long range fires 7602
- 5. Employ long range telescope
- 6. Scout enemy formations, positions, personnel, vehicles, and equipment 5401,5101
- 7. Engage and penetrate enemy forces
- 8. Employ demolitions
- 9. Inspect, classify, and evaluate terrain, woods, crossing sites, roads, bridges, slopes, curves, tunnels, and obstacles 5304
- 10. Mark route or serve as guide
- 11. Report information or observations
- 12. Employ deceptive measures, e.g., camouflage, cover, and concealment
- 13. Use passwords and code 0903

Percent of Total Job Time Spent on Entire Duty Module:	0-10%	10-30%	30-50%	50-70%	70-90%	90-100%	
Relative Criticality of the Entire Duty Module to My Job:	The Most Critical		Critical		Average		Least Critical
How Did You Acquire the Skills of this Duty Module?	Civilian Training	BCT or AIT	Service School	Unit Training or School	OJT		

DUTY MODULE: E-7

PARTICIPATES IN GROUND TACTICAL OPERATIONS AS MEMBER OF A MANEUVER UNIT

**Related SQT
Tasks**

- | | |
|---|-----------|
| 1. Analyze mission, terrain, enemy, own, and supporting units to determine and plan scheme of maneuver | 7708 |
| 2. Prepare and issue written or verbal operations orders and warning orders | 9601 |
| 3. Continually analyze situation, make on-the-spot decisions, and issue modifying orders | 7711 |
| 4. Participate individually in tactical operations as team member or immediate supervisor in establishing bases of fire, advancing to contact, assault, defense, etc. | |
| 5. Use camouflage cover, concealment, and/or dispersion | |
| 6. Prepare deliberate and hasty defense positions, clear fields of fire and construct obstacles | |
| 7. Serve as messenger or liaison agent | |
| 8. Keep self, subordinates, superior, and adjacent elements informed of tactical situation | |
| 9. Identify and report casualties | |
| 10. Employ first aid and establish field sanitation | 0407,0102 |
| 11. Establish and maintain local security | |
| 12. Capture, search, segregate, safeguard, and evacuate POWs | 0901 |
| 13. Call for and control air strikes and supporting ground fire | 7601 |
| 14. Utilize enemy equipment and prepared positions | |
| 15. Prepare field messages and sketches | 9701 |
| 16. Coordinate use of electronic surveillance devices | |

Percent of Total Job Time Spent on Entire Duty Module:	0-10%	10-30%	30-50%	50-70%	70-90%	90-100%
Relative Criticality of the Entire Duty Module to My Job:	The Most Critical	Critical	Average	Least Critical		
How Did You Acquire the Skills of this Duty Module?	Civilian Training	BCT or AIT	Service School	Unit Training or School	OJT	

DUTY MODULE: F-1

SERVES AS COMBAT OPERATIONS SERGEANT

Related SQT
Tasks

1. Prepare and distribute tactical plans, orders, and maps 7712,7708
2. Plan aerial and ground operations and CPX
3. Issue and control air-ground recognition procedures . .
4. Establish and update a situation map and overlap
5. Establish and post an operations journal and SOP
6. Prepare after-action reports and participate in critique of tactical operations
7. Coordinate logistics, personnel, and intelligence support of tactical operations
8. Gather data for, and prepare tactical operations reports
9. Coordinate fire control facilities for subordinate and attached units
10. Receive, log, and distribute tactical messages and orders
11. Coordinate operations section activities
12. Coordinate liaison agents' activities

Percent of Total Job Time Spent on Entire Duty Module:	0-10%	10-30%	30-50%	50-70%	70-90%	90-100%
Relative Criticality of the Entire Duty Module to My Job:	The Most Critical	Critical	Average	Least Critical		
How Did You Acquire the Skills of this Duty Module?	Civilian Training	BCT or AIT	Service School	Unit Training or School	OJT	

DUTY MODULE: F-2
SERVES AS COMBAT INTELLIGENCE SERGEANT

Related SQT
 Tasks

1. Prepare and distribute intelligence reports and annexes
2. Make and evaluate spot reports 5101
3. Analyze and advise on effects of weather and terrain on military operations
4. Analyze and prepare brief on enemy situation and capabilities
5. Receive, process, and safeguard classified and enemy documents, materials, and equipment
6. Establish and post intelligence journal, logs, SOP, and OB information
7. Coordinate employment of attached intelligence units.
8. Plan and coordinate counterintelligence in subordinate units
9. Prepare and distribute maps to subordinate units
10. Plan and coordinate aerial photography activities and photo interpretation
11. Plan and coordinate electronic battlefield surveillance 9401
12. Inspect subordinate units for compliance with personnel, communications, and physical security

Percent of Total Job Time Spent on Entire Duty Module:	0-10%	10-30%	30-50%	50-70%	70-90%	90-100%
Relative Criticality of the Entire Duty Module to My Job:	The Most Critical		Critical	Average		Least Critical
How Did You Acquire the Skills of this Duty Module?	Civilian Training	BCT or AIT	Service School	Unit Training or School	OJT	

DUTY MODULE: G-1

PERFORMS USER MAINTENANCE ON INDIVIDUAL AND UNIT EQUIPMENT AND WEAPONS

Related SQT Tasks

- | | |
|--|--|
| 1. Clean equipment and weapons | 0405 |
| 2. Service equipment and weapons with lubricants, fuels, coolants and fluids | 7006,7065,7001 |
| 3. Waterproof, fungi-proof and otherwise prepare equipment and weapons for unusual climatic conditions | |
| 4. Replace lamps, wiper blades, firing pins and similar minor parts | |
| 5. Conduct pre-operation and post-operation visual and manual inspection | 7071,7000,7054
7006,7022,7039
7063,7001,7081
7053,7064,7065 |
| 6. Identify and report malfunctions and defects in weapons and equipment | |
| 7. Make entries in weapon and equipment log books | 1304 |
| 8. Use simple hand tools | |

Percent of Total Job Time Spent on Entire Duty Module:	0-10%	10-30%	30-50%	50-70%	70-90%	90-100%	
Relative Criticality of the Entire Duty Module to My Job:	The Most Critical		Critical		Average		Least Critical
How Did You Acquire the Skills of this Duty Module?	Civilian Training	BCI or AIT	Service School	Unit Training or School	OJT		