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This study was conducted to determine if skill retention for the unique skills for 94F enlisted personnel is different for soldiers assigned to FORSCOM units comparenter. Thed to those assigned to HSC units. An examination was developed and administered to measure the skill level of each soldier. No significant difference was found between the groups of soldiers. In addition, surveys were administered to measure the attitudes of the soldiers and their supervisors about the training program currently in use. The author recommended greater supervision of the hospital training rotation to provide viable training and institution of training rotation of HSC soldiers to field units to hone the field particular skills.

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A STUDY TO DETERMINE THE EFFECTS OF SUSTAINMENT TRAINING AND UNIT ASSIGNMENT ON SKILL RETENTION

BY

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MAJOR, AMSC

A Graduate Research Project Proposal
Submitted in Partial Fulfillment
of the Requirements for
Health Care Administrative Residency

15 June 1984

TABLE OF CONTENTS

Table of Contents (continued)

LIST OF FIGURES

List of Tables

I. INTRODUCTION

Conditions Which Prompted This Study

"To conserve the fighting strength."
--Army Medical Department Mission

It is well-documented that war produces combat and noncombat casualties. Although tremendous technological strides have been made in equipment and weaponry, the people required to operate them are still vulnerable to injury. To care for these patients, the Army Medical Department (AMEDD) operates a medical treatment system in the theater of operations starting at the battle area and evolving toward higher levels of treatment capability the further the patient is evacuated from the combat zone.

One critical component of integrated patient treatment is the nutritional care provided by the hospital food service specialists (94F) and the dietitians (65C). Based upon projection models, it is estimated that thirty (30) percent of the hospitalized combat and noncombat casualties during wartime will require a therapeutic diet regimen.[1] In the theater of operations, therapeutic nutritional care is first available at the second echelon of medical treatment, the combat support hospital, the mobile Army surgical hospital, or evacuation hospital.

During periods of conflict, it is expected that all active duty Army medical personnel will be assigned to the theater of operations. In peacetime, however, the theater of operations does not exist as a functioning entity and as a consequence, personnel placement is very different. The hospital food service specialists are assigned primarily to fixed medical treatment facilities (MTF), to one of the Forces Command (FORSCOM) field medical units, or to headquarters staff or training positions, with approximately fifty percent (50%) being assigned to

positions outside of the fixed medical treatment facilities. The recent or continued conflicts in Afghanistan, Lebanon, Poland, Honduras, Nicaragua, El Salvador, Grenada and various parts of Asia all serve as a sobering reminder of the constancy of the war threat. Seemingly, with this heightened threat of war, the emphasis upon military readiness has escalated to a new high level.

One extremely important component of military readiness is personnel technical proficiency in both common soldier skills and military occupational specialty (MOS) unique skills. Frequent use of a skill is the preferred way to achieve and maintain proficiency. This becomes of particular concern to planners and strategists for hospital personnel assigned to field hospital units in peace-time because these units do not function as active hospitals with a patient care mission. Rather, they exist as a ready mobilization and training base for the wartime contingency.

Recognizing that use of required skills (particularly technical skills) does not occur on a recurrent basis in field units, provisions have been made for a variety of training programs. First, professional filler dietitian designees have been encouraged to attend field exercises with their parent unit and to assume a more active role in MOS-specific training. As a result dietitians have trained in Europe, the Middle East and Central America as well as the United States in a variety of recent missions. Second, in CONUS (Continental United States), the TRADOC HSC Memorandum of Understanding (MOU) requires that all personnel assigned to field units be trained for a period of ninety days in a fixed medical treatment facility to enhance proficiency in technical skills (Appendix A). Third, the parent field unit is responsible to conduct sustainment training. As job complexity and technology continues to escalate, the need for optimal training increases.

Since training is the principal peacetime activity of combat, combat support, and combat service support units, and their success is dependent on improving that training, then efforts and resources to expand our present management capabilities should be directed at the most serious problem.

A variety of government agencies have focused their attention in recent years on the costs of military training and education to include the Congress, the Government Accounting Office, numerous independent research organizations and the Department of Defense. This interest is not without good reason when one considers the associated costs. In Fiscal Year 1978 for example, it was estimated that over $6 billion and almost 150,000 military and 55,000 civilian personnel were required to support formal training consuming 17% of the military man years.[2] "Little data are available on the cost of individual training conducted on-the-job, or of crew/unit training (whether recognized as training or combined with operations), though some estimates suggest it at least equals the cost of formal individual training."[3] Costs notwithstanding, training is required to build and develop individual and unit proficiency. One method to do this is to make training realistic and challenging to ensure that individuals and units are prepared for the demands of combat. Determining an adequate way to measure the effectiveness and efficiency of military training has proven to be a difficult problem, particularly at the aggregate level.

Training is the second level of instruction in the Army's education hierarchy, and is the process of building on or practicing skills learned in the didactic setting. Individuals are considered trained when they have achieved stated levels of skill, knowledge, and attitude. Units are considered trained when they are capable

of accomplishing assigned missions[4].

To meet contingency and mission requirements, Training Doctrine Command (TRADOC) has contracted with the Army Research Institute (ARI) to conduct a study of Acquisition and Retention of Soldiering Skills. The study's second year's draft progress report was published in June 1983. The underlying premise is that "it is clearly not feasible to test large numbers of soldiers on all Army tasks to find out the different rates of performance decay, individual soldier differences in forgetting and retaining requirements. However, one can use theoretical and empirical research to identify categories of tasks and skills most likely to require frequent or infrequent training to maintain proficiency, the general types of soldiers most likely to require retraining, and the types and amounts of on-the-job practice most likely to maximize combat readiness. Identification of these tasks, soldier and training characteristics is the goal of the Acquisition and Retention Project. The intent is to produce a convenient, practical method that individual unit commanders and training managers can use when deciding how to allocate training resources in order to maximize combat readiness."[5] Essentially this will be accomplished through the Task Classification System that forecasts different skill retention and relearning functions and the development of a "User's Decision Aid" which generates estimates of soldier proficiency levels for specific tasks in specific units. ARI has been able to develop a mathematical model to Predict Performance, task by task in the Soldier's Manuals, considering a variety of factors. The two key considerations are the time since task performance and the computed retention scale score based on factor analysis of availability of job memory aids, quality of aids, number of steps, cueing, mental/cognitive requirements, number of facts, difficulty of remembering, and physical

FIGURE 1

PERFORMANCE PREDICTION TABLE

Months since last performance	Retention Scale Scores								
	12 or less	13	14-15	16-17	18-20	21-25	26-30	31-35	36-40
0 months	100%	100%	100%	100%	100%	100%	100%	100%	100%
1 month	100	98	94	89	83	73	60	48	35
2 months	100	95	88	79	68	53	36	23	12
3 months	100	93	82	70	56	38	22	11	4
4 months	100	90	77	62	46	28	13	5	2
5 months	100	88	72	55	38	20	8	2	1
6 months	100	86	68	49	32	15	5	1	0
7 months	100	83	64	43	26	11	3	1	0
8 months	100	82	60	38	21	8	2	0	0
9 months	100	80	56	34	18	6	1	0	0
10 months	100	78	52	30	15	4	1	0	0
11 months	100	76	49	27	12	3	0	0	0
12 months	100	74	46	24	10	2	0	0	0

SOURCE: MAJ Paul Nichol, INF, Project Officer for Skill Retention, Training Board and Training Analysis Division of Army Training Board, Individual Training Evaluation, US Army Training Support Center, Fort Eustis, Virginia.

requirements. The higher the retention scale score, the greater the difficulty or complexity of the task (See Figure 1). It is proposed that based on the results of the ongoing ARI study, a tasks in the Soldier's Manuals will be categorized by complexity and assigned a retention scale score. Based on this score and use of the performance prediction table, managers can then determine training frequency for various tasks at predetermined levels of performance proficiency.

It is theorized by MAJ Paul Nichol at Training and Doctrine Command (TRADOC) that for the largest enlisted specialties, TRADOC will develop the user's aids, training plans and training models to become decision making tools of the Battalion Training Management System. One essential component of these decision making tools will be the identification of resources (time, personnel, dollars) required to maintain the various proficiency levels. For the smaller specialties, the MOS producing schools are expected to be tasked for development of these tools, with final evaluation to be accomplished by TRADOC.[6]

One extremely important consideration in the development of these plans is the process of identifying combat critical tasks. These tasks will be identified by each MOS proponent school and then compared against the General Defense Plan (GDP) to insure that all required tasks to accomplish the mission of the General Defense Plan are included.

It is believed that armed with this data and decision making strategies, that the unit commander in conjunction with their local assessment of organizational training requirements, can tailor training programs accordingly. He can identify tasks needing emphasis or deemphasis, but more importantly, he can make training

decisions more intelligently knowing resource requirements.[7] These decisions must be left to the commander because it is ultimately his responsibility to insure that his unit is trained to carry out its mission. Mission oriented training insures that a soldier has the skills, knowledge and attitudes required to support the unit mission.

The effectiveness of the current training practices in maintenance of skills for FORSCOM assigned enlisted 94F (hospital food service specialist) personnel in the sustainment of a readiness posture has been questioned by the Chief Dietitian, COL Francis A. Iacoboni, Army Medical Specialist Corps, Office of the Surgeon General. The hospital food service specialists assigned to field units have expressed dissatifaction with the current training system. It is unknown whether this dissatisfaction stems from their belief that their assignment causes a degradation in skill proficiency, or whether it results from the divergence in expectations or desires from the performance requirements of the actual job. COL Iacoboni therefore requested that skill retention and training satisfaction for 94F enlisted soldiers at Skill Level I be examined.

STATEMENT OF THE PROBLEM

The purpose of this study is to determine if skill retention for MOS unique skills for 94F enlisted personnel is different for soldiers assigned to FORSCOM units compared to those assigned to Health Services Command (HSC) units. An examination will be developed by the researcher and administered to Skill Level I 94F enlisted personnel assigned to HSC and FORSCOM units. A survey to examine the following variables will also be developed and administered: satisfaction with sustainment training, the length of sustainment training, skill utilization, the

training variables, time elapsed since graduation from formal schooling, education level and job satisfaction.

OBJECTIVES OF STUDY

Six major objectives were identified for this study:

1. To compare percent of correct answers to examination questions between CONUS based FORSCOM and HSC 94F junior (Skill Level) enlisted personnel.

2. To analyze through survey, FORSCOM and HSC training relationships.

3. To analyze through survey, training provided to FORSCOM 94F enlisted personnel by PROFIS fillers.

4. To analyze through survey, MOS proficiency training provided to FORSCOM 94F enlisted personnel by HSC personnel.

5. To determine through survey, FORSCOM Medical Unit Commander's satisfaction with FORSCOM and HSC training of 94F enlisted personnel.

6. To determine through survey, HSC utilization of CONUS FORSCOM 94F personnel and MOS proficiency training and compliance with directives.

ASSUMPTIONS

The following assumptions are made for the purposes of this study:

1. A valid, reliable test can be devised that will provide examination scores that measure skill proficiency and retention for MOS-specific skills.

2. Basic skills required for performance of duties forming a common skill base were taught in structured didactic settings prior to assignment as 94F hospital food service specialists.

3. Entrance requirements to the 94F MOS which provide uniform personnel of similar apptitude are valid.

4. All 94F personnel are capable of learning and performing MOS-specific skills based on entrance requiements to the 94F MOS.

5. The examination questions draw heavily from material taught in the 94F didactic program at the Academy of Health Sciences and form the Skill Level 1 Soldiers Manual for 94F personnel. Examinations will be closely proctored and all examinations will be completed individually.

6. The use of SQT questions fulfills test validation requirements.

7. Candid, valid responses will be provided to the opinion survey questions.

LIMITATIONS

These primary limitations existed for the researcher:

1. Required statistical data regarding SQT performance from which skill retention could have been readily extrapolated is not in the required report format from Training and Doctrine Command (TRADOC), Ft Eustis, Virginia. This is unfortunate because a special computer program could have rendered the information readily available and produced more valuable information but reprogramming was not possible in the time available.

2. Enlisted soldiers completing the examinations and opinion surveys may become fatigued which may impact on examination and survey accuracy. Additionally, they may not answer opinion surveys truthfully because it is affiliated with the military. Anonymity though guaranteed, may not be believed.

3. TRADOC and FORSCOM Regulations dictate policy for MOS proficiency training for medical personnel.

4. The enthusiam of those persons requested to assist in administration of the instruments may be less than that of the researcher, detracting from rapidity of completion of the task, and through the trickle down effect, diminish respondent's enthusiam to some degree.

5. The mail mode of dissemination of instruments is impersonal and inefficient resulting in lost surveys, times, and interest.

6. One FORSCOM unit commander refused to allow his unit to participate in the study. It was his contention that the researcher violated the survey process delineated in AR 600-46, and was unable to discern that this was student research as opposed to an official Army survey.

REVIEW OF THE LITERATURE

General Background

"A reality that field commanders in the Army constantly face is that all of their soldiers are not able to perform assigned tasks at the desired level of competence. The situation is further complicated by individual differences... the sum of the proficiencies of individual soldiers at any point in time largely defines a unit's operational capability. This, of course, is an issue of great concern to the Army. The Army very likely will not know when they will have to mobilize. Time will not be set aside for the Army to upgrade and refine skills of its units before entering a conflict. The next war may well be what has been termed a come as you are war. Thus, it is crucial that the Army maintain critical skills at an acceptable level of proficiency at all times. But these skills are very difficult for the Army to sustain. All skills deterioate over time. Some are completely forgotten, others only partially so. Tasks vary in how difficult they are to learn and in how quickly

they are forgotten. For some tasks the skills needed are quickly recovered with additional training. For other tasks it takes much longer to relearn. And always, the Army has only limited training resources and time for maintaining proficiency."[7]

For the most part, extensive reviews of the literature for the past ten (10) years could provide very little of direct application to the problem. The emphasis in the literature has been on skill acquisition, not retention. Basic research has been more concerned with memory and forgetting rather than non-utilization of learned behaviors. There is considerable literature on retraining, but its emphasis is on training in a new occupation of persons whose skills are no longer marketable, rather than rehabilitative training of persons who have lost their capabilities and skills. There are several factors that influence the acquisition and retention of skilled task performance. They have been identified by the Army Institute of Research and include:

(1) The individual abilities of incoming soldiers and the effects of these abilities on learning critical skills.

(2) The level of proficiency attained on critical skills at the end of entry level training.

(3) The characteristics of different tasks that are trained during entry level training and that are actually performed in the unit.

(4) The elapsed time interval between training on a task and performing it in the unit.

(5) The nature of assigned duties in the unit following entry level training.

Of most concern "in the field" is the retention of previously taught skills. With approximately fifty percent of the 94F personnel assigned to units that do not routinely utilize their learned MOS skills for extended periods of time, skill deterioration can not be taken lightly by Army dietitians. If one considers skill deterioration a symptom, then the decision maker's problem is in the cure-training or rather retraining to rehabilitate skills that have deteriorated due to nonuse. The problem is demonstrated in Figure 2.

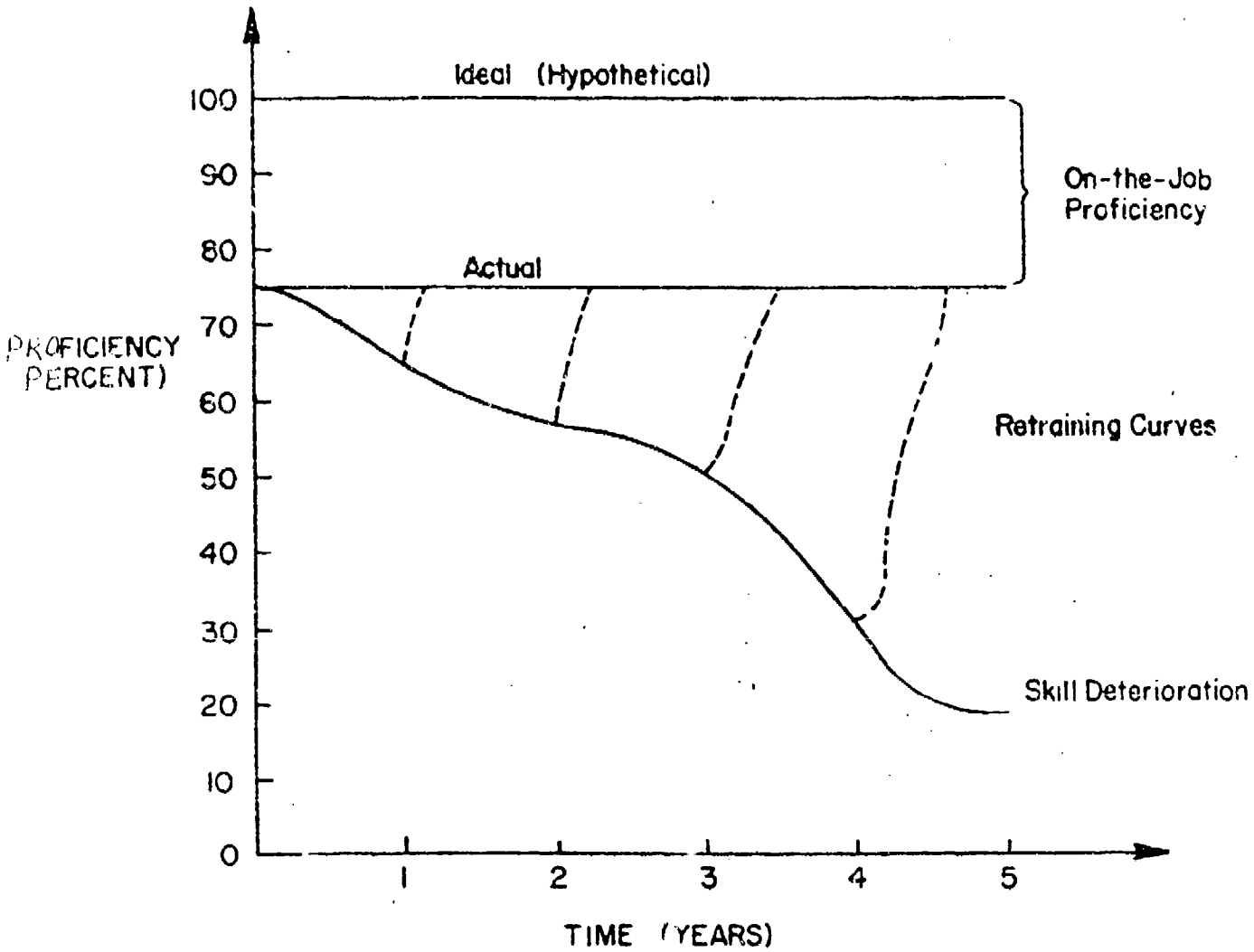
Forgetting/Learning Theory

Rose, McLaughlin, Felker and Hagman state that it is "theoretically possible to predict and control the rate of forgetting, if sufficient information is known and if the Army is willing to make various types of investments. The cost-- in training time, in task design, or in recruitment-- will depend on the method selected." [8]

Figure 3 depicts the three basic approaches for dealing with forgetting, increase task ease (i.e.; automatic procedures, develop task cues), increase abilities of personnel to retain skill (i.e.; invest in recruitment and retention of soldiers with personal characteristics or abilities that reduce forgetting), or increase training (i.e. invest more time and effort).

Before attempting to organize a training program, a study of learning and memory characteristics should be undertaken in order to produce the most beneficial program possible. Although little research has been conducted in the field of learning and memory theory, a simple hypothesis can be developed through

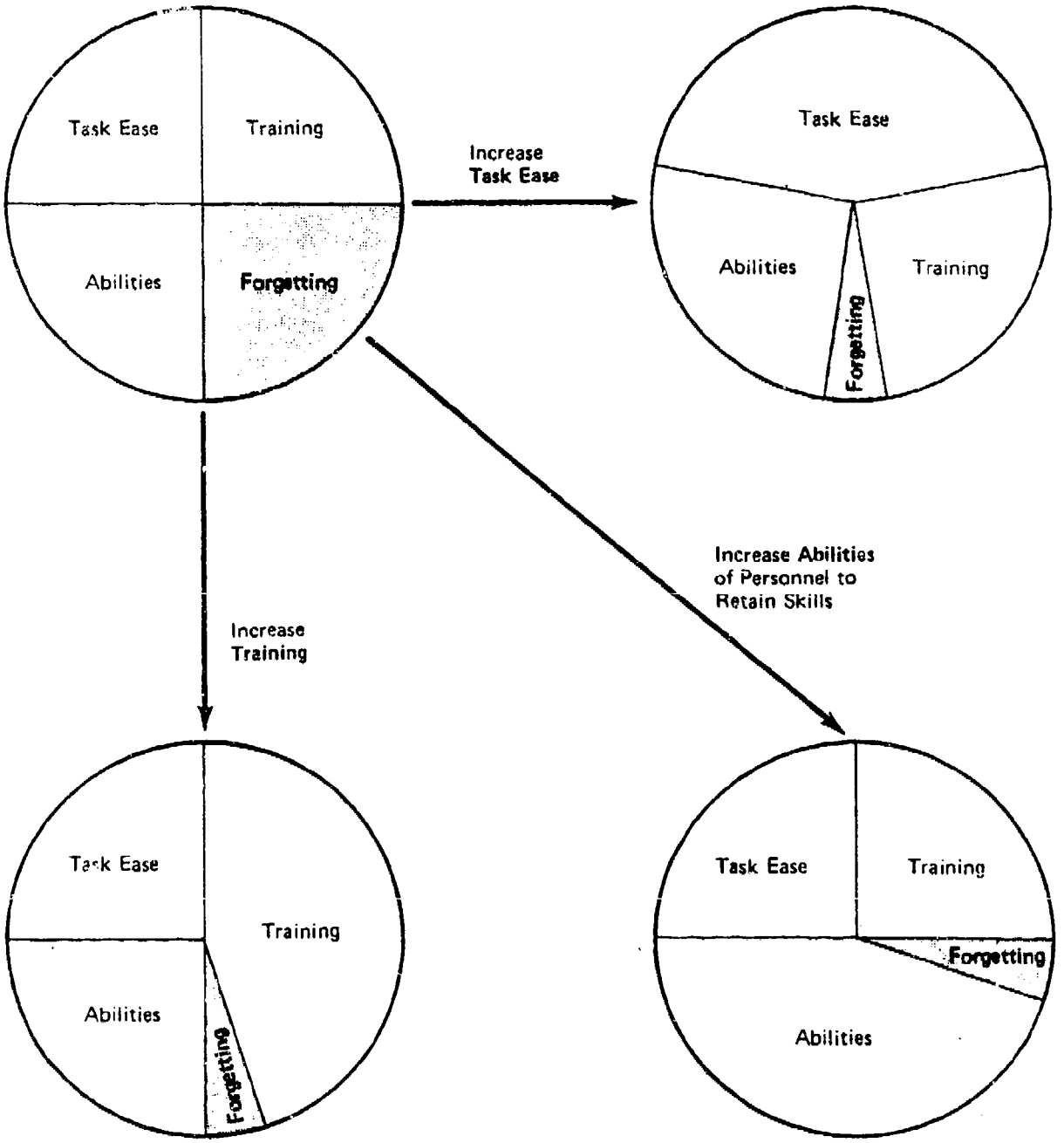
FIGURE 2



Schematic Representation of the Skill Deterioration Problem.

SOURCE: Arima, James K. and Neil, Douglas E. Skill Deterioration and Its Management.
Naval Postgraduate School. Monterey, California. Feb. 1978. Pg. 8.

FIGURE 3



. **Alternatives for Reducing Forgetting**

SOURCE: Rose, Andrew M., McLaughlin, Donald H., Felker, Daniel. Retention of Soldiering Skills: Review of Recent ARI Research. (US Army Research Institute for the Behavioral and Social Sciences, Alexandria, Virginia. March , 1981) Pg 4.

a graphical progression which defines the need for training and continued training.

Skill retention studies have shown that retention variables can be separated into four major categories: (1) amount of training, (2) duration of retention interval, (3) task organization, and (4) task environment. Perhaps the most important factor in the prediction of retention of skills is the final level of skill acquistion prior to non-utilization. Skill deterioration will begin at the level of skill acquisition and continue at an unknown rate that is inversely related to the non-utilization time.

Several researchers have suggested that training/retraining programs should be based on previously identified critical performace dimensions. Therefore, essential task elements which determine success or failure of a mission must be identified and stressed in proficiency analysis, training and/or retraining.

The process of learning is vague and ambigous because every individual learns at a different rate and sequence different from others. Many factors affect the rate of learning and cause a fluctuating progression.

In Figure 4 the trainee begins training at time 0. Because of diversified eduacational backgrounds, it is assumed that there is no knowledge level 0, resulting in the graph displaying a slight positive knowledge level. The curve indicates a rate of learning, with the rate being defined as a total quantity per unit of time. Any point on the rate curve identifies a percentage of ideal knowledge representing 100% of knowledge attainable. As time is invested in training an increase in knowledge is recognized. Note that the initial learning rate is much more rapid and, as time passes, the rate lessens until it becomes a symptotic with the ideal knowledge level. This optimal level will never be reached due to many external contigencies such as trainee peripheral interests, changing state-of-the-

art instructional aids, knowledge of instructors, and other reasons which will be discussed later.

As discussed earlier, the primary factor causing skill deterioration is a function of the final skill level attained prior to non-use as related to an inverse relationship to time, defining deterioration rate. From person to person, the deterioration rate will vary. This deterioration occurs at a fluctuating rate, represented by less than a smooth curve. For simplicity, a smooth graph representing the same average student in figure 4 will be used in Figure 5.

In Figure 5, it is assumed that the trainee has reached the almost ideal knowledge level. Once this level is identified, the student is removed from the training environment permanently. It is important to note the negative direction of the curve. This depicts the loss of knowledge or the deterioration rate.

Recognize that the steepest or fastest rate of forgetting occurs in the initial time frame of the curve. As time passes, the trainee will eventually arrive at a residual knowledge/skill level slightly higher than his original educational base at time 0, as indicated in figure 4. At this undefined point, the knowledge would most likely be obsolete due to changes in technology and state-of-the-art in development.

With time, the reduced skill level that is reached may be countered by retraining that will return the student to his original knowledge level. This relearning curve represents the rate at which the knowledge is regained. The longer the non-use period is, the less knowledge is retained.

FIGURE 4

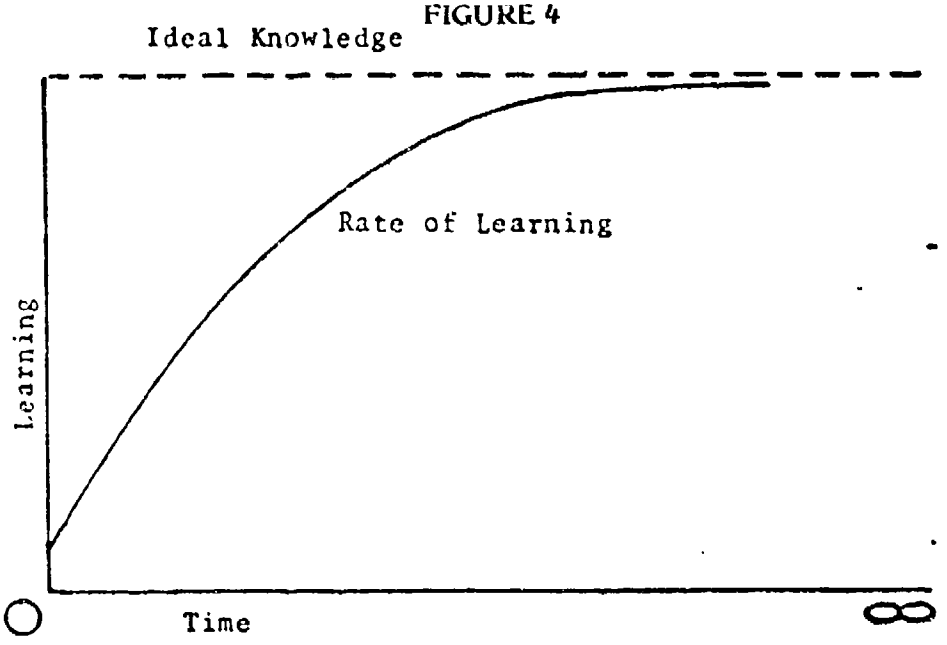
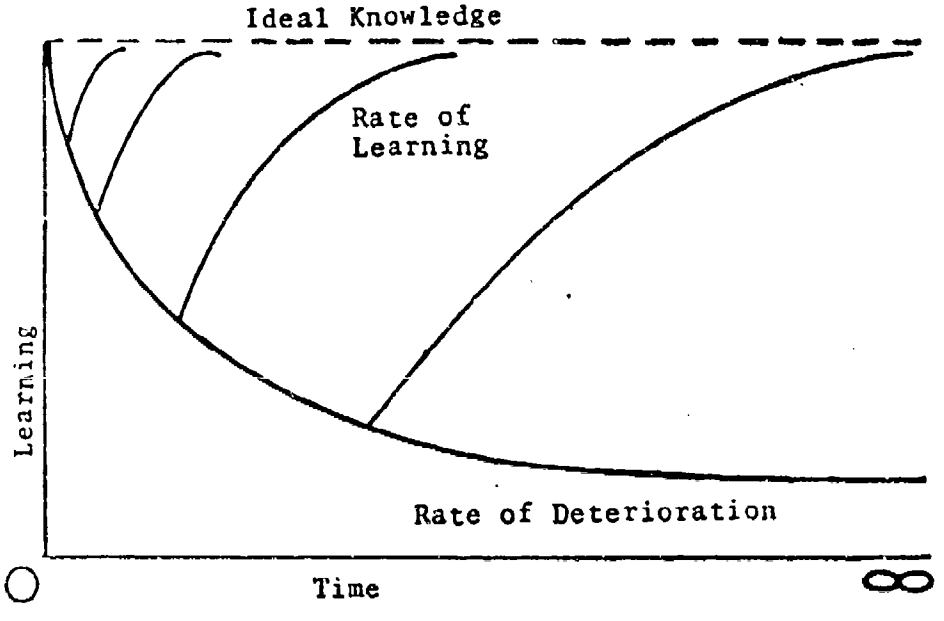


FIGURE 5

A Typical Learning Curve



Skill Deterioration Time.

, the rate of deterioration of knowledge is shown by the solid lines. The rate of re-learning at any given time is expressed by the curve rising from the deterioration curve at that time.

SOURCE: Gibson, Steven B. Skill Development and Its Retention. (Naval Postgraduate School, Monterey, California. Dec. 1979). pp 17 and 19.

Training Considerations

Multiple research efforts have been conducted by the Army Research Institute to determine which methods and conditions of training are associated with stable skill retention. Some of the dimensions of training variations identified are:

- training to "proficiency" or "mastery" criteria
- focusing on presentation or testing activities
- spacing of task repetitions during learning
- additional training (i.e.: refresher)
- use of special training material and methods

In general, as stated earlier, performance loss has been determined to be a function of time with forgetting being more rapid at first but with a rate of loss which typically declines over time. Evidence has shown that a significant improvement in retention can be obtained by training beyond the standard proficiency criterion of one perfect performance (mastery versus proficiency training.) As a rule, the minimum and maximum number of overtraining trials required to reach the specified level of proficiency is three as reported by Rose.[9] When refresher training (sustainment training) is a viable alternative to overtraining, the determination of how much overtraining to give becomes much more complex and includes considerations such as resource allocation and cost-benefits.

Another important training consideration is how to divide the time between presentation of information to the trainee and provision of time for the trainee to practice. Several experiments "taken together indicate that practice, or testing is

very important for retention. Reducing the amount of time in which the trainee has access to training information (presentation trials) is not critical, as long as there is at least some presentation."[10]

"There is substantial literature that suggests that allowing a noticeable interval between repetitions of a task to be learned increases the retention of performance skills."[11] This is important to know because of the impact of spaced training programs on scheduling. In one ARI sponsored study, Hagman explored the effects on retention of one-day spacing of training repetitions of a single task and found that three trials spaced a day apart were dramatically more effective on retention than three consecutive trials without intervening activities. After 14 days, the soldiers taught in the "massed" condition required 50 percent longer to do the task, and made over twice as many errors as they did at the completion of training. Soldiers trained over an interval of time showed only a six percent increase in time and a 15% error rate increase.[12]

Since retention is a function of the time since a task has been practiced, retention will be better for soldiers who have undergone sustainment training or who practice the task in question in the performance of their regular duties. Retention of skills has also been determined to be a function of the training techniques. In one ARI study, the effectiveness of Training Extension Course (TEC) versus conventional instruction on retention of skills was evaluated. In almost every case the results favored the TEC procedures.

In summary, "overall, the most powerful training factor appears to be the level of proficiency or mastery that is set as the criterion for ending training. Clearly, much improvement in retention can be obtained by going beyond the criterion of one perfect performance. Secondly, it is very important to include practice, or

test trials, even at the cost of spending less time on actual presentation of information. Third, although there are advantages of spaced versus massed repetitions during learning, the effect is limited. Fourth, although the results are not conclusive, gains can be obtained in acquiring and retaining domains of tasks by sampling more than one task from the claims during training. Finally the TEC method for training appears to produce higher acquisition and retention levels than conventional training for some tasks."[13]

On-the-Job Training (OJT)

Mounting pressures to obtain the most cost-effective mix of resident school training and OJT make it increasingly important for the services to be able to determine the OJT capacities of its operational units. At its present level of operation, OJT may be less costly or otherwise more efficient than resident school training for some Army specialty code skill categories in some types of Army units. Yet, it would be unreasonable to replace all resident school training with OJT in such situations if doing so would cause the unit's OJT load to exceed capacity. At the extreme, excessive OJT might degrade primary mission performance below acceptable standards. More typically, as training loads increases, OJT costs are likely to rise until the cost-effectiveness of OJT relative to resident school training has been eliminated. Clearly, decision-making concerning all of these would be enhanced by a workable methodology to estimate the capacity of operational units to conduct OJT. Reuter, Bell and Malloy published a report which presents the results of their initial effort to develop such a methodology for the Air Force.

On-the-job training imposes demands upon a unit's resources. Qualified instructors and appropriate equipment must be provided for "hands-on" proficiency training, equipment essential to primary mission performance may on occasion need to be released for use in training, work schedules must be arranged to bring trainees, experienced personnel and suitable equipment together and for certain specialized skills, funds must be budgeted for trainee's participation in field training exercises (FTX).

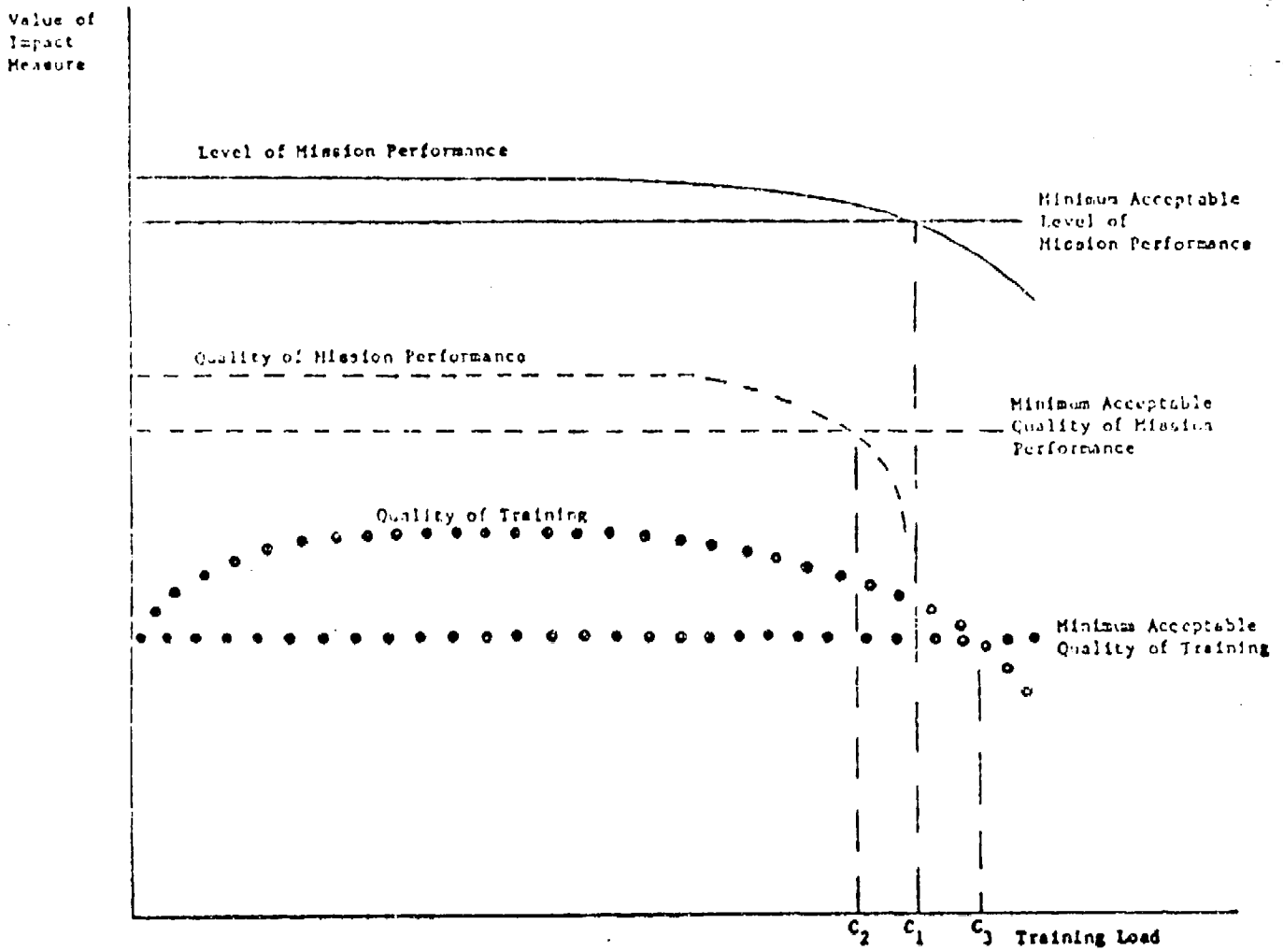
Thus, regardless of the precise form of training provided, the capacity of an operational unit to perform OJT is directly dependent upon the availability of training opportunities. Moreover, these training opportunities, in turn, will depend on the availability of unit resources in excess of those required for primary mission performance. Consequently, the provision of OJT and primary mission performance will typically be interdependent, largely through their competition for available resources. In addition this interdependence generally will involve more than just an interaction between the level of mission performance achieved and the amount of OJT conducted. Rather, both the quality of mission performance attained and the quality of training provided will be affected. Thus, inherent in the nature of OJT is a complex interelationship among the amount of training performed, the quality of training provided, the level of mission performance achieved, the quality of mission performance attained; and the development of a methodology to estimate OJT capacity unaviodability involves analysis of this interelationship.

Very few studies have been done on OJT in the Department of Defense. Most that have been conducted address various elements of the cost-effectiveness of OJT programs, and none has directly examined the concept of the capacity of

operational units to perform OJT. Reuter, Bell and Malloy concluded that "in combination, all of the studies they reviewed clearly indicate both a direct relationship between the current provision of OJT and future mission performance, and an inverse correlation between current OJT activities and current mission performance."[14] Thus, they set out to determine whether or not there was a difference between OJT and formal resident school training. They determined there were no significant differences between the two types of training programs and that post-training performance represents a potentially useful indicator of training quality.

In performing their study, they identified four basic elements of OJT capacity. They were: level of mission performance, quality of mission performance, quality of training provided and the amount of training provided with the predominant concern being the successful performance of its primary mission. Figure 4, graphically demonstrates the relationships among these elements. "C1, C2 and C3 represent the maximum amounts of training sustainable without comprising the established standards for the level of mission performance, the quality of mission performance and the quality of training respectively. Thus the OJT capacity indicated in this figure is C2. This amount of training is the maximum training load for which the level of mission performance, the quality of mission performance and the quality of training all fulfill their minimum standards. Any greater amount of training would cause the quality of mission performance to decline to an unacceptable level. This representation considerably oversimplifies the determination of OJT capacity. However, the level of mission performance, the quality of mission performance, and the quality of training are unlikely to be independent. Rather, training quality and mission performance quality both can

FIGURE 6



Conceptual Model of OJT Capacity

SOURCE: Rueter, Fred H.; Bell, Thomas R.; and Malloy, Edward V. Capacity of Air Force Operational Units to Conduct on the Job Training. (Air Force Human Resources Laboratory. Brooke Air Force Base, Texas. Oct, 1980). p 16.

reasonably be expected to decline as the level of mission performance increases, at least at higher mission performance levels. Moreover, training quality and mission performance quality are also likely to be interrelated, although the nature of the correlation is more complex. Current mission performance quality should be positively influenced by the quality of previous training insofar as training improves productivity. Conversely, current training quality and current mission performance quality may be negatively related, since their provision draws upon a common pool of resources."[15] Table 1 depicts a capsulized summary of the factors influencing OJT capacity.

Reuter, Ball and Malloy learned through research and theoritized mathematical modeling that:

1. "A consistently strong inverse relationship exists between the amount of training conducted by a unit and the quality of mission performance attributable to the unit.

2. A perceptible, but weaker, association in the anticipated direction prevails between the resources available to a unit and the quality of the unit's mission performance.

3. The most robust correlations of training load and resource availability with the quality of mission performance are observed for the indicators of mission performance quality that directly measure the absolute quality of primary mission performance.

4. A possible association exists between the quality of training provided in a unit and the training load and, conceivably, the available resources of the unit. The most persuasive evidence supporting this relationship is obtained when training quality is measured on the basis of assessments of (direct) results... However, due

TABLE 1: Factors Influencing OJT Capacity

- o Resource availability
  - Availability of needed quantity and quality of training facilities and equipment.
  - Presence of professional training personnel.
  - Presence of qualified instructors.
  - Availability of instructor time in excess of that required for non-training responsibilities, including the primary mission, record keeping, and administration.
  - Influence of work shift scheduling and shop manning on the presence of skilled personnel needed for proficiency training within a work center.
  - Budgetary constraints on participation in field training detachment (FTD) programs.
- o Job characteristics
  - Difficulty of tasks to be trained.
  - Frequency of occurrence of tasks requiring proficiency training.
- o Organizational considerations
  - Command emphasis on the importance of training.
  - Morale.
  - Trainee characteristics, such as ability, knowledge, and motivation.
- o External influences
  - Seasonality.
  - Weather conditions, such as temperature and snow.

SOURCE: Rueter, Fred H.; Bell, Thomas R.; and Malloy, Edward V. Capacity of Air Force Operational Units to Conduct on the Job Training. (Air Force Human Resources Laboratory. Brooks Air Force Base, Texas. Oct, 1980). p 18.

largely to limited data availability and ambiguity in the interpretation of the obtainable training quality indicators, the existence of this correlation had not been definitively determined in this study.

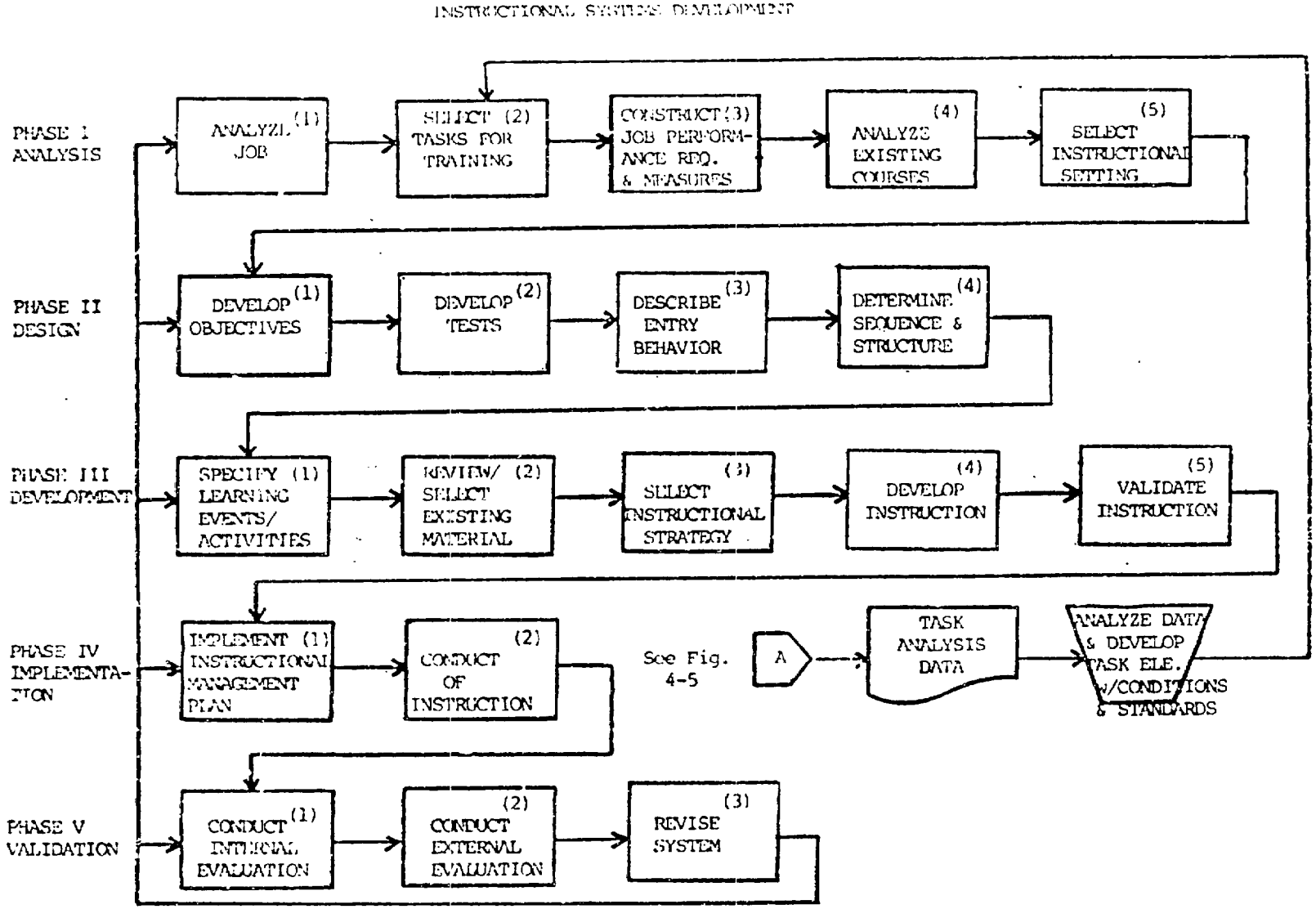
5. At least in the relatively low stress, peacetime situations examined in the study, no persistent interdependency is discernible among the level of mission performance achieved, the amount of training conducted, and the availability of resources in the units studied."[16]

Training Requirements:

Training requirements can be specified in four ways: (1) By subjects or topics to be taught, (2) by the time (hours, days, weeks, etc.) to be devoted to training, (3) by general goals or purposes, and (4) in terms of tasks (objectives) which individuals or units must be capable of performing upon completion of training. "Tasks" have been determined to be the most meaningful way to specify military training requirements. Van Piper, Wydo and Brown identified five phases used by the Marine Corps in comprising 19 steps in the design or development of instruction (Figure #7). A similar process is employed by the United States Army.

Once this process is complete, requirements for individual training must be communicated to subordinates. This often becomes a problem because requirements can be duplicated and thus cause confusion. This plurality of requirements for individual training can provide a striking example of lack of coordination. For example, a conscientious Marine Corps Infantry Commander who

FIGURE 7



SOURCE: Van Riper, Paul K; Wydo, Michael and Brown, Donald. An Analysis of Marine Corps Training. (United States Naval War College, Newport, RI, June 1978). p 68.

followed prescribed training procedures would have to go to six different sources to determine the totality of his training requirement. See figure 8. Again, there exists a similiar situation in the Army.

Van Piper, Wydo and Brown ultimately concluded that "training requirements which are specified in any way other than as tasks or objectives, guide commanders very little in developing their training programs. Those requirements which mandate time often hinder efficient training management since they require the use of resources whether the training is needed or not. (They further concluded that) though commanders are required to provide MOS training, they are not provided with sufficient datail on the performance requirements for each MOS. Moreover, they have no way of determining what requirements they are responsible for and what requirements are met in other settings."[18]

Management of Individual and Unit Training

The responsibility for both individual and unit training is vested in the commander. He is to insure that all training is responsive, practical, and challenging to the individual and unit concerned. Training is to be accomplished primarily by the employment of resources organic to the unit and is accomplished by subordinate personnel, generally non-commissioned officers.

The development, conduct and management of training depends upon the systematic accomplishment of six tasks. How well the commander accomplishes these tasks will determine the efectiveness of his training program. The tasks are: planning, scheduling, directing, conducting, supervising and evaluating with the key process in the training program being the conducting process and consists of a

FIGURE 8

DUPLICATION OF TRAINING REQUIREMENTS

Subjects	Directives
Code of Conduct	MCO 1510.2H para 1.a) MCO P3000.1D. (para 2000.1.i (1)) MCO P5800.8A (para 1003)
Uniform Code of Military Justice	MCO 1510.2H para 1.b and c) MCO 1510.25A (para 5.e)* MCO P1070.12C (para 3010.2m and 4012.3m)
Personnel Conduct	MCO 1510.25A (para 5h)* MCO 3000.1D (para 2000.1.i(4))
Leadership	MCO 1510.2H (para 5.c) MCO 5390.2A

*Compliance with the training requirement contained in any other directive consitutes compliance with the requirement contained in MCO 1510.25A.

SOURCE: Van Riper, Paul, K; Wydo, Michael and Brown, Donald. An Analysis of Marine Corps Training. (United States Naval War College, Newport, RI, June 1978). p 82.

variety of actions to carry out the instructional program. The process includes the preparation of lessons and exercises, the actual instructing, and testing. All other tasks have the objective of supporting the conducting process.

Perception of Training Management

In a comprehensive analysis of Marine Corps Training, the perceptions of training management were obtained by interviewing officers at a wide variety of assignment levels. There was an eagerness shown by all to discuss training and in most cases, particularly at the lower levels, there existed a strong sense of frustration over the state of training. It was the general opinion that as training requirements filter down the chain of command that there is a tendency for them to increase. What may seem to be a modest number of training requirements at the headquarters level frequently grows to an unmanageable burden at the working level as each echelon of command adds to the number of requirements. The reasons most often cited for the problems associated with training management were: (1) tempo of operations, (2) personal turbulence, (3) requirement to train soldiers in basic military occupational specialties, (4) unskilled training managers, (5) training to hourly requirements rather than to achieve objectives. Of the five, however, tempo of operations rather than specific training requirements was the root problem in operational units. Overall, there was a perception that the training managers do not know how to manage and that trainers do not know how to train. Raymond reported that among first line supervisors in the Army, 25% are found to require training to achieve proficiency as expected by BTMS. This has resulted from the lack of unit level training management guidance from headquarters and the lack offormal instruction provided to field and company grade officers

in training management.

Decentralization of training lets differences of opinion and situation alter doctrine. Centrally prepared training packages is one method that can be considered to combat this problem, and may assist retrained managers as well.

Methods of Instructions

Regardless of the type of training or the setting used to train, one or more methods of instruction must be employed to insure that the objectives of a given period of instruction are met. Methods of instruction include lecture, demonstration, guided discussion, performance, conference/seminar, dramatization, case-situation, role-playing, illustrative problem, panel, symposium, field trip, tutoring, and programmed instruction.

Regardless of the mode, however, training should be performance-oriented, training sessions must be well-rehearsed and training plans well prepared. This requires advance notification through long and short-range plans and training schedules. Most importantly schedules should be published far enough in advance for trainers to prepare.

Trainers

It is the philosophy of BTMS that sergeants train individual soldiers. This simultaneously develops the sergeant as a leader. Sergeants keep track of which soldiers need what training, report deficiencies through the chain of command and

make full use of scheduled or unscheduled training time to correct shortcomings.

Evaluation of Training

The evaluation of individual training involves the evaluation of the student, the instructor and the validity of the instruction. The student is evaluated by testing and by his commander who observes his performance. The instruction is evaluated by students, instructors and commanders. The course content is evaluated through feedback information.

There are four types of tests that can be used to evaluate training. They include: performance, written, oral and ratings. Of the four, performance tests are considered the most desirable since they require a student to demostrate a learned behavior.

As part of the supervision of any instructional program, effectiveness can be enhanced by frequent evaluation of instruction as it is being presented. This serves not as a measurement of the effectiveness of the instruction, but rather as a means to insure the efficiency and quality of the instructional techniques. There are four means of evaluating instruction: personnel from the faculty or staff evaluate classes, instructor make surveys made to determine discrepancies, students evaluate blocks of instructions, conduct private interviews with students and instructors. The true measure of the effectiveness of the instruction is whether or not the learning objectives have been achieved. Equally important is course content validation.

The principal purpose of validation is to assure that the course of instruction is effective and that it produces the desired results. In formal schools, the most used

means of course validation is feedback information received from graduates and their supervisors in the form of replies to questionaires. Informally conducted training unfortunately is rarely validated.

Skill Qualification Testing

In 1977, a new method of determining individual soldier proficiency through testing was introduced in the Army. This method centers on the use of Skill Qualification Tests (SQT) as the means of testing. Development of an SQT is the responsibility of the school or other agency that is the proponent for the MOS. There are 34 Test Development Agencies (TDA) under the purview of the Individual Training and Evaluation Directorate (ITED) and Training and Doctrine Command (TRADOC). The TDA for the 94F SQT is located at the Academy of Health Sciences, Fort Sam Houston, Texas.

The SQT tests are used to validate the competence of enlisted personnel at five levels of skill within their MOS and is made up of (a) a written component to verify a soldier's knowledge of the job, (b) a hands-on component that evaluates how well a soldier can perform the job, and (c) a performance certification component that allows the supervisor to declare how well the soldier can perform tasks not covered in the other two components. In order to pass from one skill level to the next higher level a skill qualification test must be passed. The goal of SQT is to accurately identify mastery or non-mastery of critical job tasks.

SQT's are not only performance based but also criterion referenced. The SQTs are performance based in that soldiers are required to demonstrate that they can in fact perform each key task of the job, and criterion referenced in that successful

performance is based on established task standards, not on comparison with other soldiers tested.

Research Methodology

The descriptive examination and survey approach was selected as the method for conducting the research study. One examination and four questionaires were utilized to collect data from CONUS based 94F enlisted personnel, and questionnaires were the data collection vehicle for Chiefs, Nutrition Care Divisions, and FORSCOM Medical Unit Commanders. One hundred percent of the finite population was surveyed, with fifty percent return considered acceptable. The finite enlisted population totaled 106, the Chiefs of Nutrition Care Division 38, and the FORSCOM Medical unit commanders 15.[19]

To safeguard against sample "mortality", all instruments except the PROFIS filler survey were sent as a single packet through the Administrative Residents assigned to the hospitals. When an Administrative Resident was not assigned, the materials were sent directly to the Chief, Nutrition Care Division. In all cases the Chief, Nutrition Care Division was tasked to administer all the instruments. In addition, emphasis on the importance of timely completion was announced at the Course for Administration of Fixed Field Nutrition Care Divisions in March, 1984. Data collection occurred in the months of March and April.

Because the exact assignment distrbution of Skill Level I, 94F personnel was not known, to reach the entire population of 106, 206 surveys were sent out. For the Chiefs, Nutrition Care Divisions and FORSCOM Medical Unit Commanders

the exact number of surveys were mailed since the exact number and location was known.

As identified earlier, five instruments were distributed. The first was a fifteen question "examination" taking questions from the 1983 Skill Qualification Task Test. Three questions from the areas of production and service, four questions from field feeding, and eight questions from clinical dietetics comprised the fifteen question examination. Two demographic questions were also included. Single random questions rather than complete tasks were tested to avoid compromising the SQT test. The test administered to skill level 94F personnel is at Appendix B. The four questionnaires are at Appendices C, D, E, and F. The survey to enlisted personnel was divided into two parts: general demographic information and opinions about various aspects of unit training. Surveys were distributed and administered with the examination. Proctors administering the instruments were instructed to have personnel complete the examination first and then the opinion survey to avoid fatigue from causing incorrect examination question responses. In conjunction with distributing the enlisted personnel instruments, an orientation letter was distributed to inform all participants of the following (see Appendix F).

(1) Purpose of the study.

(2) That candor was particularly important.

(3) That information collected is for "research and development only" and that by privacy would be strictly protected.

The other surveys were preceded by a cover letter with essentially the same information. The cover letters (except 1) indentified a specific date by which the examination and survey responses were to be returned to the investigator.

To facilitate grading, computer gradeable answer sheets were utilized for all examinations and surveys. The date of graduation from 94F school for enlisted personnel respondents was to be furnished directly on the question booklet and returned with the answer sheets.

The spontaneous return rate for examinations and surveys was surprisingly adequate. In no cases was follow-up effort required to achieve the desired return rate. For the 94F skill retention examination and survey, of the 206 instrument sets sent out, a total of ninety-four (94) were returned for a rate of 89% of the finite population of 106 (a set was comprised of the examination and opinion survey). For the surveys of Chiefs of Nutritian Care Division, twenty-three (23) of thirty-eight (38) instruments were returned for a rate of 61%. Another five (5) responded telephonically or through written correspondence that they did not have any 94F personnel assigned to their Division or at their posts, and could not therefore complete the questionnaires. Eleven (11) of the fifteen (15) or 73 percent of the FORSCOM Medical Unit Commanders responded. One unit was assigned to the Honduras during data collection and not available, one unit commander called the researcher and stated he refused to personally participate or to allow his unit to participate because the process violated AR 600-46. No reason or response was able to be obtained for nonresponse of the other two (2) unit commanders.

The questionnaires and examinations were analyzed in the following manner according to the predetermined objectives:

1. The 15 question examinations were graded on a scale of 0 to 100. Each question was given a value of 6.6 points to fall within this range. To facilitate statistical comparison, these groups were established and compared according to test means:

a. MEDDAC vs MEDCEN vs FORSCOM.

b. MEDDAC and MEDCEN (HSC) vs FORSCOM.

Further statistical analysis was deliberately not done by the researcher for two reasons. First, the analysis done accomplished the intended purpose of determining whether in fact there was a difference. Second, computer support to provide additional tests was not available.

The researcher had intended to develop learning decay curves for the enlisted population tested to determine the effect of time on skill retention. This was to be accomplished by matching pre-numbered examinations and pre-numbered survey responses on which soldiers would furnish date of graduation from the 94F school. However, 16 of the enlisted respondents failed to provide the required graduation date so the researcher determined it would be inappropriate to extrapolate learning curves from less than whole population and this process was dropped from the study.

2. To determine FORSCOM and HSC training relationships, the percentage of selection of a particular multiple choice yes-no response related to training issues were reviewed for all categories of surveys. In developing the questionnaires, particular attention was paid to similiarly worded questions and responses to facilitate cross group comparison. For the enlisted personnel surveys, the same three groupings as previously established were utilized.

3. To assess the amount of training provided to FORSCOM 94F Skill Level I enlisted personnel by HSC personnel, all categories of surveys were reviewed to assess the percentage of selection of a particular multiple choice or yes-no response to common questions regarding the training provided by HSC units or personnel.

4. The FORSCOM Medical Unit Commanders surveys were analyzed for questions specifically relating to satisfaction regarding training provided by FORSCOM and HSC units. The percentage of selection of a particular multiple choice or yes-no response related to training issues were reviewed.

5. Finally, the responses to surveys for all categories were compared against the requirements of FORSCOM Regulation 350-1 regarding MOS skill proficiency training to subjectively determine compliance. In particular, FORSCOM Regulation specifies that all personnel assigned to field units be trained for a period of ninety days per year.

6. The last objective to query PROFIS fillers about training provided by them to FORSCOM personnel was attempted but unable to be completed for two reasons. First, the early responses indicated PROFIS fillers were doing absolutely no training to FORSCOM personnel. The second was that, on the cover letter the researcher failed to specify a suspense date for the return of these questionnaires. Telephonic requests for the these questionnaires to provide a fifty percent return were attempted but unsuccessful, so this objective could not be accomplished. Only four surveys were returned. Based on early responses, the information provided would probably not have added to the study in a significant manner anyway.

FOOTNOTES

[1]Irene Begg, LTC, AMSC, Chief, Nutrition Care Division, Health Care Administration Division, Academy of Health Sciences, Fort Sam Houston, Texas. Interview, February 1, 1984.

[2]Paul K. Van Riper, Michael W. Wydo and Donald P. Brown, An Analysis of Marine Corps Training. (Naval War College, Newport, RI, 1978) p3.

[3]Ibid., p3.

[4]James K. Arima and Douglas E. Veil. Skill Deterioration and Its Management. (Naval Postgraduate School. Monterey, CA 1978) p1.

[5]Andrew M. Rose, Donald H. McLaughlin and Daniel B. Felker. Retention of Soldiering Skills: Reviewing of Recent ARI Research. (US Army Research Institute. Alexandria, Virginia, 1981) p1.

[6]Paul Nichol, MAJ, Inf., Project Officer for Skill Retention, Training Board and Training Analysis Division of Army Training Board, Individual Training Evaluation, US Army Training Support Center, Fort Eustis, VA. Interview Nov 9, 1983.

[6]Andrew M. Rose, Donald H. McLaughlin and Daniel B. Felker. Retention of Soldiering Skills: Review of Recent ARI Research. (US Army Research Institute. Alexandria, VA. 1981) p1.

[7]Ibid., p3.

[8]Ibid., p10.

[9]Ibid., p12.

[10]Ibid., p12.

[11]Ibid., p13.

[12]Ibid., p17.

[13]Ibid., p17.

[14]Fred H. Rueter, Thomas R. Bell and Edward V. Malloy. Capacity of Air Force Operational Units to Conduct On-The-Job Training. (Logistics and Technical Training Division. Lowry Airforce Base, CO. 1980) p12.

[15]Ibid., p15, 17.

[16]Ibid., p57-58.

[17] Paul K. Van Riper, Michael W. Wydo and Donald P. Brown, An Analysis of Marine Corps Training. (Naval War College, Newport RI, 1978) p3.

[18] Ibid., p69.

[19] SGM James C. Criss, Hospital Food Service Noncommissioned Officer, Dietitian Section, AMSC Branch, Health Services Command, Fort Sam Houston, Texas. Interview 30 May 1984.

II. DISCUSSION

General Overview

Enlisted Responses:

For the 94F enlisted personnel skill retention examinations and survey, of the finite population of 106, a total of 95 instrument sets, or a rate of eighty-nine (89) percent were returned. No follow-up efforts were required to achieve the desired fifty percent return. All 95 instruments were able to be utilized, probably due to the researcher's decision to utilize computer gradeable answer sheets. It must be noted, however, that properly completed answer sheets are not necessarily an indication that their answers were necessarily candid, well-considered, or correctly placed on the answer sheet. The researcher also wondered whether the respondents were all skill Level 1 94F personnel. Only 42 respondents provided the date of graduation from 94F graduation school. This information was to be provided directly on the first page of the survey question booklet and returned with the answer sheets. Since a respondent's test score had to be matched to graduation date to develop learning decay curves, all instruments were pre-numbered. There was no way to retroactively obtain the missing information and match it to the test score without completely readministering the examination and the question on date of graduation. Time did not permit this effort. By source of survey response, 31 instruments were returned form the MEDDAC's, 18 from the MEDCEN's, and 45 from the FORSCOM Units. The Composite Tally of responses for all three groups may be found at Appendix G.

Chief, Nutrition Care Division Response:

Twenty-three (23) of the surveys from Chiefs of Nutrition Care Division were

returned for a return rate of 61%. All the surveys returned were able to be utilized. However, in grading, it became apparent that no allowance was made by the researcher in some of the questions where no FORSCOM personnel rotated to the hospital. In these cases (n=5), the Chiefs left those questions blank (unanswered) on the answer sheet and attached a note that no FORSCOM personnel trained at their facilities. In grading, the researcher made allowance for this by adding a "none-assigned" response category when it was appropriate. The composite tally for these intruments is located at Appendix H.

FORSCOM Commander:

Eleven of the fifteen FORSCOM Medical Unit Commanders responded for a return rate of 73 percent. All surveys were correctly completed and useable. The Composite Tally for these instruments is located at Appendix I.

Analysis of Demographic Data

Demographic data analysis of the 94 service members comprising the enlisted sample studied, indicated overall that:

1. 77 percent of the population were male and 23 percent were female. When considering the MEDDAC, MEDCEN and FORSCOM populations as separate groups the picture is quite different as seen in Table 1.

2. Regarding age, overall, 2 percent were age 18, 18 percent age 19, 18 percent age 20, 15 percent age 21 and 47 percent were age 23 and over. Again, this presents quite a different picture in the aggregate than when the separate groups are examined . In general, the FORSCOM population is slightly

younger than the HSC population.

Although the cover letter to Chiefs NCD, and to enlisted survey respondents was very clear that only skill level I personnel were supposed to take the test and survey, the researcher did wonder whether or not some personnel higher than Skill Level I had taken the examination. Without a question on the surveys to determine an individual's rank, it was not possible to discern this information and thus to reject examinations or surveys inappropriately included. The return rate simply seemed "too good" to the researcher.

3. Only 4 percent of the total population had an 11th grade education or below. At 78 percent, the predominant eduactional level was a high school diploma (completion of 12th grade). 14 percent of the soldiers surveyed had completed 1-2 years of college, 3 percent had completed 3-4 years and 1 person for 1% overall had completed a graduate degree program. (see Table 3).

TABLE 2

Demographic Data

	Overall n=94	MEDDAC n=31	MEDCEN n=18	FORSCOM n=45
% Male	77	82	86	72
% Female	23	18	14	28
% of Age 18	2	-	-	4
% of age 19	18	22	28	13
% of age 20	18	22	-	17
% of age 21	15	11	-	21
% of age 22 or older	47	44	72	45

TABLE 3

Educational Data

% 11th grade or below	4	3	14	4
% 12th grade	78	81	72	75
% 1-2 years college	14	13	-	17
% 3-4 years college	3	3	14	2
% graduate level degree	1	-	-	2

Analysis of Objective 1

The hypothesis to be tested was that there was a statistical difference between the mean test scores for the 94F Skill Level HSC population and the FORSCOM population. The statistical analysis revealed that the means of the aggregate population's test scores were: HSC - 61.2 ± 15.1 points and, FORSCOM 60.4 ± 14.2 points. For interest, the HSC units were broken down into MEDDAC and MEDCEN groupings to determine if there was a difference between these two HSC unit's mean test scores. The means of these scores were: MEDDAC 61.9 ± 15.0 points and MEDCEN 60.0 ± 15.6 points.

The test utilized was the two smple "t" test with pooled data, at the 95% confidence level. In testing HSC units versus FORSCOM units, the calculated "t" value was -0.24 with the confidence interval ranging from -6.7 to 5.3, demonstrating there was no statistical difference between mean test scores. The p-value of .81 strengthened the decision that there was no statistical difference. In testing MEDDAC versus MEDCEN units for equality, the same test was utilized. In this case, the calculated "t" value was 0.42 with the confidence interval ranging from -7.2 to 11.0 with a p-value of 0.68. Again, there was no significant difference between the two groups. See Tables 4 and 5 for computer output for statistical analysis.

TABLE 4

HSC versus FORSCOM Test Means
Two Sample T-Test Pooled Data

	N	MEAN	STDEV	SE MEAN
FORSCOM	45	60.4	14.2	2.1
HSC	49	61.2	15.1	2.2

95 PCT CI FOR MU C1 - MU C4: (-6.7, 5.3)
TTEST MU C1 = MU C4 (VS NE): T=0.24 P=0.81 DF=92.0

TABLE 5

MEDDAC versus MEDCEN Test Means
Two Sample T-Test Pooled Data

	N	MEAN	STDEV	SE MEAN
MEDDAC	31	61.9	15.0	2.7
MEDCEN	18	60.0	15.6	3.7

95 PCT CI FOR MU C2 - MU C3: (-7.2, 11.0)
TTEST MU C2 = MU C3 (VS NE): T=0.42 P=0.68 DF=47.0

A listing of all the test scores by major category and the number of incorrect responses by general subject area can be found at Appendix J.

Analysis of Objectives 2, 4 and 6

FORSCOM and HSC training relationships, training issues, and personnel utilization were addressed through a number of questions on each of the different survey instruments. On the enlisted personnel survey questions 10-12, 15, 16, 21-42, and 61-80 queried their opinions on a variety of training and utilization issues, The Chiefs of Nutrition Care Divisions responded to these issues with questions 2, 3, 5, 6, 9, 13-33, and questions 35 and 36 while the FORSCOM Medical Unit Commanders responded through questions 2-4, 8, 11, 15, 17-20, and 24-29.

Enlisted Personnel Responses:

Overall, 21 percent of the combined population surveyed reported that a dietitian conducted MOS-related training. It was believed by the researcher that this may reflect in some measure, the degree of involvement by the HSC dietitians in training of both the FORSCOM and HSC personnel. This aggregate figure was consistent with the involvement of the dietitian at the FORSCOM level, but significantly less than at the MEDDAC (35%) or the MEDCEN (45%) level. The higher value at the MEDCEN levels may reflect dietetic intern involvement in

inservice training which may have been incorrectly reported as MOS-related training.

In a attempt to determine what impact dietitians had on training time, the amount of time dietitians trained was questioned (Table 6).

TABLE 6

Question: If the dietitian conducted training, the percentage of time (s)he taught was reported to be:

TIME	MEDDAC n=25	MEDCEN n=6	FORSCOM n=17
5%	62%	50%	46%
10%	5%	50%	18%
15%	-	-	6%
20%	5%	-	12%
25% or greater	28%	-	18%

The lower dietitian training involvement at the FORSCOM level is undoubtedly a function of the fact that no dietitians are assigned to the FORSCOM units. It is particularly important to note that almost fifty percent of the aggregate population not responding to this question reflects that training was "not conducted" by a dietitian in the previous question.

Questions 61 and 62 were addressed exclusively to FORSCOM assigned soldiers about their MOS proficiency training at the hospital. 54 percent of the respondents replied that they spent 10 days or less assigned to the hospital on rotation, 6 percent 11 to 20 days, 6 percent 21-30 days, 26 percent 31-90 days and 10 percent reported spending 90 days or greater in rotation at the hospital. Based on the enlisted personnel responses, it would seem that compliance with FORSCOM-HSC MOU might be a problem.

When asked if they felt they spent enough time rotating through the Nutrition Care Division at the hospital, an overwhelming majority (94 percent) responded no, meaning that only 6 percent were satisfied. Although it may not be related specifically or exclusively to training dissatisfaction, when compared to responses to the question regarding overall job satisfaction with working in the MOS, only 26 percent of the FORSCOM assigned soldiers reported they strongly agreed that they enjoyed working in the MOS, while 40 percent and 50 percent responded favorably in the MEDDAC and MEDCEN groups respectively. Overall the percentage of soldiers reporting MOS satisfaction was considerably higher in HSC units. (see question 60 -Appendix G).

One factor influencing job satisfaction could be the utilization of 94F soldiers in their MOS. To ascertain utilization, enlisted personnel were questioned as to the skills they utilize in their present assignment. As might be expected, the FORSCOM population reported a generally low rate of MOS-specific skill utilization in their present assignment. In general, the MEDCEN personnel also reported a lower degree of overall skill utilization than did those persons assigned to MEDDAC's. It should also be noted that a minority in all categories report utilization in the Clinical Dietetics related areas. This is expected to be caused by two factors. First, the number of spaces in thse areas is fewer, so opportunities are reduced; secondly, rotation of personnel into these areas may not be occurring. See Table 7 for complete numerical analysis.

When reported utilization is compared against the belief that performance of these skills is important as a Nutrition Care Specialist, one might conclude that in general job expectations are not being met. In most food service skills, the overwhelming majority of all assignment groups strongly agree or disagree that performance of skills is important. (see Table 8).

TABLE 7

Question: Which of these skills do you use in your present assignment?

SKILL	YES(%)			NO(%)		
	MEDDAC n=31	MEDCEN n=18	FORSCOM n=45	MEDDAC n=31	MEDCEN n=18	FORSCOM n=45
Modified Diet Writing	54	57	17	46	43	83
Patient Interviews	47	67	8	53	33	92
Diet Counseling	4[illegible]	33	6	60	67	94
Clinical Dietetics Admin	31	33	12	69	57	88
Regular Food Prep	97	67	98	3	33	2
Modified Diet Food Prep	69	50	35	31	50	65
Nourishment Prep	55	50	33	45	50	67
Special-Tube Formula Prep	26	33	14	74	67	86
Assembly of Patient Trays	60	67	41	40	33	59
Service of Patient Trays	51	50	39	49	50	61
Service of Cafeteria Food	77	50	55	23	50	45
Ingredient Preparation	60	50	78	40	50	22
Baking	51	67	67	49	33	33
Meat Cutting	34	33	56	66	67	44
Receipt, Issue, Store Supplies	43	67	31	57	33	69
Ration Accounting	49	67	25	51	33	75
Pot and Pan or Dishwashing	54	17	55	46	83	45

TABLE 8

Question: I believe performace of these skills is important as a Nutrition Care Specialist.

MEDDAC (MD): n=31
MEDCEN (MC): n=18
FORSCOM (FO): n=45

SKILL	Strongly Agree(%)			Agree(%)			Uncertain(%)			Disagree(%)			Strongly Disagree		
	MD	MN	FO	MD	MN	FO	MD	MN	FO	MD	MN	FO	MD	MN	FO
Modified Diet Writing	71	83	72	24	17	24	-	-	-	-	-	-	5	-	4
Patient Interviews	60	67	67	26	33	29	6	-	-	3	-	-	5	-	4
Diet Counseling	66	83	63	26	17	29	-	-	4	4	-	-	4	-	4
Clinical Dietetics Admin	53	67	73	26	16.5	23	12	16.5	-	3	-	-	6	-	4
Regular Food Prep	54	83	61	23	17	23	9	-	4	5	-	8	9	-	4
Modified Diet Food Prep	69	67	73	20	33	23	6	-	-	-	-	-	6	-	4
Nourishment Prep	66	67	72	29	16.5	24	-	16.5	-	-	-	-	5	-	4
Special Tube/Formula Prep	63	67	69	23	33	25	6	-	2	3	-	-	5	-	4
Assembly of Patient Trays	54	83	63	31	17	31	6	-	2	-	-	2	9	-	2
Service of Patient Trays	49	67	62	32	33	31	8	-	-	3	-	5	8	-	2
Service of Cafeteria Food	34	83	51	34	17	24	12	-	12	6	-	5	14	-	8
Ingredient Preparation	37	67	62	46	16.5	24	6	16.5	8	3	-	4	9	-	2
Baking	34	67	51	45	16.5	29	3	16.5	12	9	-	4	9	-	4
Meat Cutting	29	67	51	31	16.5	29	14	16.5	10	14	-	4	12	-	6
Receipt, Issue, Store Supplies	37	67	59	31	16.5	24	6	16.5	10	14	-	5	11	-	2
Ration Accounting	40	67	53	29	33	25	11	-	10	9	-	10	11	-	2
Pot & Pan or Dishwashing	23	33+	16	17	16+	24	14	-	8	14	33+	25	32	16+	27

Questions 63-79 were addressed only to the FORSCOM personnel, and were intended to determine which specific MOS related skills they practice during the hospital rotation. Generally, it was reported that the majority of personnel are

exposed to production and service functions during MOS proficiency training. About half or less are exposed to clinical dietetics related tasks, special-tube formula preparation (which may reflect heavy use of commercial preparations), receipt, issue and staorage of subsistence and ration accounting (not to be expected at Skill Level I). See Table 9 for the complete analysis of responses to these questions.

TABLE 9

Question: If you are presently assigned to a field unit, select the skills you have practiced or will practice during your hospital rotation. (n=45).

SKILL	YES(%)	NO(%)
Modified Diet Writing	52	48
Patient Interviews	45	55
Diet Counseling	46	54
Clinical Dietetics Admin	56	44
Regular Food Prep	79	21
Modified Diet Food Prep	70	30
Nourishment Prep	70	30
Special-Tube Formula	48	52
Assembly of Patient Trays	77	23
Service of Patient Trays	70	30
Service of Cafeteria Food	70	30
Ingredient Preparation	64	36
Baking	58	42
Meat Cutting	51	49
Receiving, Issuing, Storing Supplies	44	56
Ration Accounting	28	72
Pot & Pan or Dishwashing	25	75

To determine the value of the rotation of duties to the soldier in terms of retention of clinical skills, the respondents were asked "Do you feel the rotation is valuable to the retention of your clinical skills?" An overwhelming 78 percent of the FORSCOM population strongly agreed, with another 8 percent agreeing. Interestingly enough, the majority of MEDDAC and MEDCEN soldiers also overwhelmingly agreed with 67 percent and 83 percent respectively strongly agreeing, and 16 and 17 percent simply agreeing. In keeping with job satisfaction, planners may be advised to consider this opinion. Also, in view of the fact that practice enhances retention, the cumulative impact in decision making is very significant.

Regarding specific training practices and beliefs, several questions were asked to address a variety of issues. The first was to determine the opinion of optimal length of MOS training classes. In general, the soldiers assigned to the MEDDAC's expressed the belief that training sessions should be shorter than those soldiers assigned to the MEDCEN's or to FORSCOM units (see Table 10). The researcher believes this is a function of the actual pratice in the soldier's assigned unit.

TABLE 10

Question: I Believe MOS training sessions should be:

TIME	MEDDAC n=31 %	MEDCEN n=18 %	FORSCOM n=45 %
15 minutes	15	-	-
30 minutes	37	14	3
45 minutes	12	29	5
1 hour	21	57	20
longer than 1 hour	15	-	21

The next question analyzed had to do with the most desired trainer. The MEDDAC and FORSCOM groups responded similarly that the dietitian or a senior 94F Noncommissioned Officer (NCO) would be the most desired trainer. The majority of MEDCEN respondents preferred that the senior 94F NCO be the primary trainer. The researcher believes this attitude is in fact influenced by the actual practices in the Medical Centers where the bulk of the MOS-related training is in fact conducted by senior 94F enlisted personnel. For the complete comparison of responses, see Table 11.

TABLE 11

Question: Who do you think should conduct the majority of your MOS-related Training?

TRAINER	MEDDAC n=31 %	MEDCEN n=18 %	FORSCOM n=45 %
Dietitian	36	-	49
94F Senior NCO	46	71	47
94F Contemporaries	18	29	4

Opinions on training aids as a facilitator to learning were assessed in four questions. The first question asked the opinion about whether or not visual aids speeded the learning process. The overwhelming majority in all three hospital categories either strongly agreed or agreed that they did speed the process. See Table 12. Visual aids must also be considered in terms of making classes more interesting. To sit through a lecture can be quite boring with no handouts or visual stimulation as anyone having sat in a classroom will all too well remember.

TABLE 12

Question: Visual aids help me learn more quickly.

RESPONSE	MEDDAC n=31 %	MEDCEN n=18 %	FORSCOM n=45 %
Strongly agree	35	29	54
Agree	50	57	34
Undecided	9	14	8
Disagree	3	-	2
Strongly disagree	3	-	2

The second question in reference to training tools queried the value to respondents of handouts, particularly in preparation for SQT examinations. The majority of respondents in every hospital classification responded positively that handouts would be useful in studying for SQT examinations. 88 percent of the MEDDAC respondents, 83% of the MEDCEN population, and 95 percent of the FORSCOM population said "yes" to the question "If provided handouts in a class, I would use them in studying for SQT exams." Since the training provided should be geared to MOS proficiency and SQT test preparation, if handouts are provided, the trainers must be certain to insure they provide correct factual information, and that students do not consider handouts to be the exclusive study aid.

The third and fourth questions were designed to determine the value of quizzes or examinations. The majority of enlisted personnel surveyed replied that they strongly agreed, or agreed that they paid better attention and learned more material when they know they would be quizzed or examined after the training session. See Table 13

TABLE 13

Question: I pay attention and learn the material provided in class better when I know I will be quizzed or examined.

RESPONSE	MEDDAC n=31 %	MEDCEN n=18 %	FORSCOM n=45 %
Strongly agree	18	14	37
Agree	52	43	43
Undecided	21	29	7
Disagree	9	-	13
Strongly disagree	-	14	-

Yet, when quizzed about the frequency of examinations or quizzes after training sessions, only 44 percent of the MEDDAC, 50 percent of the MEDCEN, and 50% of the FORSCOM respondents replied affirmatively that the trainer gives a quiz or examination after the class. The researcher wonders what kind of impression this gives the soldiers. Could it say that there was insufficiant concern to develop quizzes or exams? Does it say that SQT preparation is solely an individual responsibility? If the key to retention is practice and repetition, the value of testing can not be overlooked. Additionally, the mere pratice fosters examination taking skills.

Finally, degree of satisfaction with MOS-related training was examined in the three groups. Satisfaction is much higher among enlisted personnel in the HSC units than the FORSCOM units, with almost half the population in HSC units very satisfied or satisfied, while the majority of FORSCOM personnel reported dissatisfaction or they were very dissatisfied (see Table 14). This seems to be a likely subject of serious concern for the dietitians and training planners.

TABLE 14

Question: Regarding MOS-related training in your present assignment what is your degree of satisfaction?

RESPONSE	MEDDAC n=31 %	MEDCEN n=18 %	FORSCOM n=45 %
Very satisfied	21	15	4
Satisfied	32	28	14
Undecided	24	57	14
Dissatisfied	8	-	20
Very dissatisfied	15	-	48

Chiefs, Nutrition Care Divisions (C, NCD) Responses:

The first question addressing training issues and utilization addressed to the C, NCD asked whether or not FORSCOM 94F personnel were invited to attend HSC conducted MOS-related training. 39 percent responded "yes", 36 percent responded "no", and 26 percent reported that no FORSCOM personnel were geographically co-located. By comparison, when asked whether or not FORSCOM personnel attended MOS training sessions on a regular basis, only 36 percent of the Chiefs responding "yes" in the previous question answered, and 64 percent responded "no". Since the training is provided by the HSC unit routinely, it would seem to foster good working relationships as well as benefit enlisted soldiers to have FORSCOM personnel attend HSC provided SQT training.

Regarding the length of MOS proficiency training, for the HSC units providing training to FORSCOM personnel, 7 percent reported that personnl rotated through the hospital Nutrition Care Division for four weeks, 14 percent reported training of two months and the remaning 79 percent reported that personnel received proficiency training for 3 months or more. When comparing this data to the information provided by the enlisted personnel, a very interesting discrepancy is noted. See Table 7.

TABLE 15

How much time in days is spent in MOS proficiency training at the hospital?

DAYS	FORSCOM(%) n=45	Chiefs, NCD(%) n=18
10 or below	54	-
11 - 20	6	-
21 - 30	6	7
31 - 90	26	14
90 or greater	10	79

Another interesting comparison is that of the duties performed during MOS profeciency training. Clearly, the Chiefs of NCD believe the rotations include more emphasis on clinical dietetics aspects of food service operations than the enlisted personnel (see Table 16). In gerneral, the Chiefs present a more optimistic picture than the soldiers actually receiving the training.

One consideration must be that for the Chiefs, NCD question, it was not stated to answer it as if for 94F trainees at the the skill level I, and this must be acknowledged by the researcher. However, concurrent with that consideration, is the knowledge of the Chiefs that much of the MOS proficiency training is conducted to skill level I FORSCOM personnel.

It was interesting to compare the responses of the Chiefs, NCD about the length of the MOS training sessions, as compared to the enlisted personnel assigned to the MEDDAC's and MEDCEN's. Clearly the Chiefs believe the sessions last longer than the MEDDAC enlisted personnel as a general rule (see Table 17).

TABLE 16

Duties Performed During Hospital Rotation

SKILL	YES FORSCOM(%) n=45	NO	YES C, NCD(%) n=18	NO
Patient Interviews	45	55	87	13
Modified Diet Writing	52	48	100	-
Diet Counseling	46	64	50	50
Clinical Dietetics Admin	56	44	60	40
Regular Food Preparation	79	21	86	14
Modified Diet Preparation	70	30	100	-
Nourishment Preparation	70	30	93	7
Special Formula-Tube Feeding Preparation	48	52	73	27
Assembly of Patient Trays	77	23	100	-
Service of Cafeteria Food	70	30	77	27
Ingredient Preparation	64	36	73	27
Baking	58	42	60	40
Meat Cutting	51	49	58	42
Receiving, Issuing, Storing Supplies	44	56	75	25
Ration Accounting	28	72	75	25
Pots & Pans or Dishwashing	25	75	21	79

TABLE 17

Question: MOS training session last:

TIME	Chiefs NCD n=23 %	MEDDAC n=31 %	MEDCEN n=18 %
15 minutes	-	31	-
30 minutes	68	27	16
45 minutes	10.63+	10	16
1 hour	10.63+	18	52
Longer than 1 hour	10.63+	14	16

It is useful to note the variance of training session length between the MEDDAC's and MEDCEN's. Several factors may contribute to this. First, personnel dedicated to training efforts exist in some MEDCEN's, but not at the MEDDAC's. This may elongate training sessions by virtue of the additional resources available. Second, MEDCEN's have a larger number of people assigned overall and may be able to sustain personnel absences due to training more readily than the MEDDAC's.

When questioned about optimal training session length, 74 percent of the Chiefs responded that the average training session should be 30 minutes, and 22 percent reported a desire for sessions of 1 hour. Again, note the extreme variance in the Chief's preference and that of the customer (enlisted personnel trainees). Table 18. One would almost wonder if the motivations might not be opposite. The Chiefs motive might be to provide training in minimal time to maximize worker availability, and the soldiers to maximize training time as a break from work. It is interesting to note that MEDDAC enlisted personnel tend to desire shorter classes, which may be a reflection of their perception that their actual classes are shorter than the other two groups. It may also reflect the knowledge that training detracts from the day to day patient care mission, and that the work must be done regardless of training.

TABLE 18

Question: I believe the average length of each MOS training session should be:

TIME	Chief, NCD N=23 %	MEDDAC n=31 %	MEDCEN n=18 %	FORSCOM n=45 %
15 minutes	-	15	-	-
30 minutes	74	37	14	6
45 minutes	4	12	29	10
1 hour	22	21	57	41
Longer than 1 hour	-	15	-	43

Finally, the Chief's satisfaction with the quality of MOS-related training was evaluated. Slightly better than half strongly agreed (5 percent), or agreed (52 percent) that they were satisfied, with 22 percent stating they were unsure, 16 percent disagreeing and 5 percent strongly disagreeing. Note the comparison of the Chief's and the Enlisted Personnel responses. (Table 19). We are pleasing the Chiefs and MEDDAC personel regarding training, while, FORSCOM and MEDCEN personnel report a much higher degree of dissatisfaction or uncertainty.

TABLE 19

Question: I am satisfied with the quality of the MOS-related training conducted.

	Chief, NCD n=23 %	MEDDAC n=31 %	MEDCEN n=18 %	FORSCOM n=45 %
Strongly agree	5	21	15	4
Agree	52	32	28	14
Unsure	22	24	57	14
Dissatisfied	16	8	-	20
Very dissatisfied	5	15	-	48

FORSCOM Medical Unit Commander

Let us first compare enlisted personnel and Commander's answers as to whether or not MOS-related training is conducted in the FORSCOM units:

TABLE 20

Question: Is 94F MOS-related training conducted?

RESPONDENT	YES(%)	NO(%)
Commanders, FORSCOM (n=11)	80	20
Enlisted Personnel, FORSCOM (n=45)	39	61

It is obvious that a credibility problem exists somewhere regarding the conduct of MOS-related training. Either the Commanders are assuming something that is not correct, the enlisted personnel do not recognize MOS training, or both factors are at play. At any rate, this is a serious problem that must be recognized.

55 percent of the Commander's reported that MOS training sessions are conducted primarily by the hospital unit with 33 percent being

conducted in a garrison situation by the uint, and another 11% by the unit in the field. A significant number of the Comanders obviously rely very heavily on the MOS proficiency rotations for MOS training which emphasizes even further the need to do complete skill rotations.

When asked about the frequency of MOS-related training, almost half (44 percent) of the commanders reported they conducted 30 or greater training sessions in the period of June 1982 - June 1983 for 94F personnel. Ten sessions were conducted 22 percent of the time. Specific frequency was reported as: daily - 37.5 percent, weekly - 25 percent, every other week - 12.5 percent and monthly - 25 percent.

The length of the training sessions desired by Commanders was suprisingly consistent within the range of 45 minutes to longer than one hour. Ten percent reported a preference for 45 minutes, 70 percent for one hour and 20 percent for longer than one hour. This provides an interesting contrast to the other groups previously analyzed, but is more consistent with the answers provided by the FORSCOM respondents. See Table 21.

TABLE 21

estion: I believe the average length of each MOS training session should be.

TIME	Chief, NCD n=23 %	FORSCOM, CDR n=11 %	MEDDAC n=31 %	MEDCEN n=18 %	FORSCOM n=45 %
15 minutes	-	-	15	-	-
30 minutes	74	-	37	14	6
45 minutes	4	10	12	29	10
1 hour	22	70	21	57	41
Longer than 1 hour	-	20	15	-	43

As with the enlisted personnel analysis, the question about whether dietitians conduct MOS training to FORSCOM units, the Commander was also asked this

question as a barometer of HSC involvement. (see Table 22).

TABLE 22

Question: Does the dietitian conduct MOS-related training?

RESPONDENT	YES(%)	NO(%)
Commanders, FORSCOM (n=11)	71	29
Enlisted Personnel, FORSCOM (n=45)	53	47

One factor skewing the answers lower for the enlisted personnel could be the the fact that skill level I respondents had been recently assigned to the units, and had not yet experienced MOS training sessions by a dietitian.

It was also interesting to compare the amount of time the dietitian conducted training as reported by the Commanders and trainees (Table 23). The Commanders give obviously more credit to the dietitian's training effort than do the enlisted personnel.

TABLE 23

Question: If dietitians conduct training, what percent of the training do they conduct?

	Enlisted(%) n=45	Commanders(%) n=11
5%	46	62½
10%	18	12½
15%	6	-
20%	12	12½
25% or greater	18	12½

The trainer's value in the overall training process can not be overlooked. Thirty percent of the commanders believe that the dietitian should conduct the training,

with the remaining seventy percent believing that the primary trainer should be the 94F senior NCO (E-6 or above). This is consistent with the philosophy of BTMS in that training is sergeant's work. The cross group comparison on this question is at Table 24. In the case of the enlisted personnel the preference may reflect, to some degree the actual practice, and thus in fact be what the personnel have come to accept as the norm.

TABLE 24

Question: Who do you think should conduct the majority of MOS training?

TRAINER	FORSCOM, CDR C, NCD n=11 %	MEDDAC n=18 %	MEDCEN n=31 %	FORSCOM n=18 %	FORSCOM n=45 %
Dietitian	30	9	36	-	49
94F Senior NCO	70	86	46	71	47
94F Junior NCO	-	5	18	29	4

A related question to the Commanders specifically asked if it would be helpful to have a dietitian at the post level to be more involved in training. The vast majority at 80 percent said yes, with the remaining 20 percent responding no.

One hundred percent of the FORSCOM hospital commanders reported that their personnel rotated to the hospital for MOS proficiency training. Yet, when trying to determine a clear picture of the amount of time enlisted personnl rotated to the hoepital for MOS proficiency training, the situation became much more cloudy, although the picture is much more consistent when considering only the commander's and Chief's, NCD answers (See Table 25).

TABLE 25

Question: How much time in days is spent in MOS proficiency training at the hospital?

DAYS	FORSCOM Enlisted(%) n=45	Chief NCD(%) n=18	FORSCOM Commander(%) n=11
10 or below	54	-	-
11-20	6	-	10
21-30	6	7	-
31-90	26	14	10
90 or greater	10	79	80

Perhaps the argument used earlier, that enlisted personnel may be newly assigned and not have had a full opportunity to complete the requisite hospital rotation applies here also and an additional question should have been asked of enlisted personnel regarding the unit policy about MOS proficiency training length. If one disregards the responses from the enlisted personnel and accepts the responses of the Chiefs, NCD and the FORSCOM Commanders, it would appear that the majority of the respondents are well within the FORSCOM guidance established for MOS proficiency training for FORSCOM personnel.

A closely associated question examined the belief about the desirable length of MOS proficiency training. Fifty percent of the commanders reported that the training should last 2 months, while the other fifty percent preferred 3 months or greater. Note the relative consistency between the Commander's responses and the Chiefs of Nutrition Care Division. (Table 26). In view of the fact that MOS proficiency training is prescribed by FORSCOM regulation, it is recognized that the question is a moot one in actuality.

TABLE 26

Question: I believe the MOS proficiency training should comprise this amount of each year:

TIME	Chief n=18	FORSCOM, CDR n=11
2 weeks	-	-
4 weeks	-	-
6 weeks	11	-
2 months	47	50
3 months or greater	42	50

In other questions related to specific training issues, all responding FORSCOM Commanders (100 percent) replied that it would be helpful to them to have centrally developed training modules for 94F personnel distributed to their unit to assist in training efforts. The majority also replied favorably (80 percent) that a piont of contact at a higher headquarters on 94F training issues would be desirable. The predominant level the Commanders preferred was the FORSCOM level with 67 percent selection, while 11 percent preferred the Department of the Army level and 22 percent preferred no point of contact at a higher headquarters level.

By comparison, the majority of Chiefs of the Nutrition Care Divisions believed that the point of contact on 94F training issues should be at the Post level (57 percent), with the remainder 33 percent responding that the FORSCOM level was more appropriate and 10 percent that it should be at the Department of Army level.

The desired specific point of contact among FORSCOM commanders on 94F training issues was slightly more favorable toward dietitians (60 percent) with 40 percent in favor of having a senior 94F NCO as the point of contact.

The dietitians responded very differently from the FORSCOM Commanders regarding the point of contact on training issues. Clearly, they prefer the contact to be the senior 94F NCO at 73 percent, with the remaining 27 percent believing a dietitian should be the point of contact.

Analysis of Objective 3

Objective three, as previously reported, was unable to be completed. (See page 39).

Analysis of Objective 5

Questions 1,6,16, and 19 related to the FORSCOM Medical Commander's satisfaction with the training of 94F enlisted personnel by the FORSCOM and HSC units.

81 percent of the commanders reported they conducted MOS-related training, in their units while 19 percent reported there was no MOS-related training conducted in their unit. It is interesting, once again to compare the responds provided by the enlisted personnel to exactly the same question. (See Table 27).

TABLE 27

Question: Is MOS-related training conducted in your unit?

RESPONDENT	YES %	NO %
FORSCOM Commanders (n=11)	81	19
FORSCOM 94F (n=45)	39	61

Overall, commander's satisfaction with unit MOS training is high. 20 percent of the respondents were very satisfied, 50 percent satisfied, 10 percent dissatisfied and 20 percent very dissatisfied. As with previous questions, it useful to cross

compare responses to the same question by different groups. (Table 28). Clearly, the officers and enlisted personnel have extremely different opinions regarding their satisfaction, with officers being generally satisfied and enlisted personnel much more dissatisfied.

TABLE 28

Question: I am satified with the quality of MOS-related training.

RESPONSE	Commander n=11 %	C, NCD n=23 %	MEDDAC n=31 %	MEDCEN n=18 %	FORSCOM n=45 %
Strongly agree	20	5	21	15	4
Agree	50	52	32	28	14
Unsure	-	22	24	57	14
Dissatisfied	10	16	8	-	20
Very dissatisfied	20	5	15	-	48

In general, the Commanders are satisfied with the quality of the MOS proficiency training rotations. 40 percent strongly agreed, and 40 percent agreed that they were satisfied with the quality of the MOS proficiency training programs; 10 percent reported they were unsure, and only 10 percent strongly dissagreed. This large degree of satisfaction may be related to the overall perception of the close working relationship between the hospital and the FORSCOM unit commander. 70 percent stated they strongly agreed that there was a close working relationship with the hospital, 10 percent agreed, 10 percent were unsure, while 10 percent disagreed.

III CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The purpose of this study was to determine if skill retention for MOS unique skills for 94F Skill Level I enlisted personnel is different for soldiers assigned to FORSCOM units compared to those assigned to Health Services Command (HSC) units. The analysis was accomplished by administering an examination and then performing a statistical comparison of the two population test score means. For interest, the Health Services Command units were broken down into MEDDAC and MEDCEN units to determine if their was a difference in the retention between these units. In no instance was there a statistical difference between mean test scores. Keywords: Performance human; skills; 94F (Hospital food service specialists); dietitians; (KT)

In addition, four surveys were administered during the months of March and April. The surveys were sent to the skill level 1 enlisted population, the Chiefs, Nutrition Care Divisions in the HSC units, the FORSCOM Medical Unit Commanders and the PROFIS fillers. The PROFIS filler surveys were dropped from the research project because the researcher was unable to achieve a satisfactory return on the questionnaires. A number of questions on a wide variety of training related issues were asked on the three other questionnaires. One technique utilized in the analysis was to compare the responses to like questions between the groups when more than one group was asked the same question.

The questions were numerous, so the responses to all the questions are intentionally not going to be repeated in the conclusion. The reader is referred back to the discussion. However, those responses deemed by the researcher to be highly important, and worthy of further consideration by planners will be mentioned. In general, there is a current of dissatisfaction among enlisted personnel about MOS specific training. Ninety-four percent of the FORSCOM

personnel reported that they did not feel that they spent enough time rotating through the Nutrition Care Division at the Hospital. Along these same lines, more than half the population is undecided or dissatisfied to some degree with present MOS training. The overall satisfaction in working in the 94F MOS was about half as prevalent among the FORSCOM soldiers as the HSC soldiers which may or may not be related to training and utilization, but which factors certainly should not be discounted. Regarding skill utilization, which is closely related to retention, the FORSCOM soldiers report a sinigficantly lower skill utilization in their present assignment, a fact which is not surprising when considering that in peacetime these units do not have a patient care mission which permits utilization of these skills. To permit some measure of retention and provide practical skill experience, FORSCOM personnel are supposed to rotate to the hospital for MOS proficiency training. An overwhelming 86 percent of the FORSCOM population believed that job rotation was valuable to the retention of clincal skills. A variety of questions addressed the preferred trainers and training methods. The Dietetian and senior 94F NCO's are the preferred trainer among all enlisted personnel, and visual aids, handouts, and quizzes or examinations were felt to be facilitators to the learning process.

Several responses of the Chiefs, of the Nutrition Care Divisions were cause for concern. Almost half of the respondents reported that FORSCOM personnel geographically co-located on the Post were not invited to attend HSC conducted MOS-related training. Of more concern is that even when invited to attend MOS proficiency training, almost two thirds of the Chiefs reported that the FORSCOM units do not attend.

Another area that warrants further consideration is the actual duties performed by FORSCOM soldiers in their MOS proficiency hospital rotation. There

was rather wide disparity between the responses of the soldiers experiencing the training and the Chiefs "sponsoring" the training. In almost all instances the enlisted personnel reported a much lower affirmative answer to rotations than did the Chiefs.

Regarding the length of training sessions, the majority of the FORSCOM and MEDCEN soldiers and the FORSCOM commanders believed the classes should last forty-five minutes to one hour. Personnel assigned to MEDDAC's and the Chiefs of Nutirtion Care Divisions generally believed the classes should be shorter (45 minutes or less).

Whether or not MOS-related training is conducted in the FORSCOM units is another area where a perception problem exists at a minimum. Eighty percent of the FORSCOM unit commanders reported that MOS-related training was conducted in the unit while less than forty percent of the soldiers reported that MOS-related training was conducted.

If one accepts the reports of the Chiefs of NCD and the FORSCOM Medical Unit Commanders, the FORSCOM enlisted personnel are rotating to the hospital for MOS specific training in accordance with regulations and directives. As with some previous questions, however, the soldiers report a different picture which may be because at the skill level one rating, personnel may be newly asigned, or not yet been presented with the opportunity to rotate.

In all groups except the FORSCOM enlisted population, the 94F Senior NCO was the preferred trainer. In the FORSCOM population the preference was split almost equally between the dietetian and the 94F senior NCO. The belief that the 94F NCO should be the primary trainer is consistent with the overall Army philosophy that SQT training "is sergeant's business".

Some specific aspects of the training process were explored. Both commanders and chiefs fo the NCD's believed MOS proficiency training should last two months or greater. One hundred percent of the FORSCOM Medical Unit Commanders replied it would be useful to have centrally developed 94F MOS training modules distributed to their units. They also responded that it would be useful to have a point of contact on 94F issues at a higher level with the majority (67 percent) believing it should be at the FORSCOM level.

Finally, the FORSCOM Medical Unit Commanders were surveyed about their overall satisfaction with MOS training. 70 percent of the Commanders responded they were either very satisfied or satisfied with the quality of unit conducted MOS training. Likewise 80 percent either strongly agreed or agreed that they were satified with the quality of the MOS proficiency training programs.

Recommendations

Based on the results of the study and the experience gained in conducting this investigation several recommendations are identified.

1. This study should be considered a preliminary research effort, and form the basis for a detailed follow-up study and more sophisticated statistical analysis. The study should include input from senior 94F personnel. Also questions on all surveys not adding any revelance to the study should be deleted in subsequent efforts.

2. Training and Doctrine Command (TRADOC) should be requested to develop a computer program to provide 94F SQT task performance data for the separate commands for comparison of statistical differences in knowledge retention overall, as well as by specific subject area (Production and Service, Clinical Dietetics, Field Feeding Skills, etc.) This more comprehensive statistical

study would yield more beneficial as well as more complete information regarding skill retention as measured by the SQT test.

3. Exportable training packages for 94F skills should be developed centrally for distribution to the FORSCOM medical units. Visual aids and examinations or quizzes to supplement the packages should be developed as part of these packages.

4. Training techniques and practices for 94F training should be reviewed, and written recommedations be developed for trainers so that training efforts are maximized. Evaluation of training should be conducted by the next higher headquarters.

5. Skill rotation for 94F personnel assigned to MEDDAC's and MEDCEN's should be more strongly encouraged. It should also become a matter of interest of inspection in HSC staff visits.

6. Standardized 94F skill proficiency rotation plans should be developed and distributed to the field for use by Chiefs, NCD to insure personnel are trained in all the requisite areas.

7. Techniques to foster greater job and training satisfaction among 94F personnel should be developed and implemented.

8. FORSCOM personnel (94F) should be invited and encouraged to attend HSC conducted MOS proficiency training. Likewise, for retention of field skills, HSC personnel should attend FORSCOM conducted MOS proficiency training on appropriate subjects.

SELECTED BIBLIOGRAPHY

Government Documents

American Institute of Research. Development of Task Level Job Performance Criteria. Silver Spring, Maryland. 1975.

American Institue of Research. Development of Task Level Job Performance Criteria. Appendix C to Final Report. Silver Spring, Maryland. 1975.

Arima, James K. and Neil, Douglas E. Skill Deterioration and Its Management. Naval Postgraduate School. Monterey, California. 1978.

Ash, Robert K. The CONUS-Oversea Imbalanced Specialty: Environmental Captive or Management Offspring. Air Command and Staff College. Maxwell AFB, Alabama. 1978.

Bessemer, David W.; Kraemer, Ronald E.; Kristiansen, Donald M. The Development and Validation of Audiovisual Simulated Performance Tests Using 35mm Slides. Air Field Unit. Fort Knox, Kentucky. 1979.

Bialek, Hilton M.: Taylor, John E.; Melching, William H. Continuation of Development of an Individual Extension Training System for Managing and Conducting Training in the Army Unit. US Army Research Institute. Alexandria, Virginia. 1978.

Campbell, Roy C.; Ford, Patrick; Campbell, Charlotte H. Development of a Workshop on Construction and Validation of Skill Qualification Tests. US Army Research Institute. Alexandria, Virginia. 1978.

Clements, Michael R. Qualified Aircraft Handlers: A Study of the Utilization and Placement of Trained Personnel in Naval Aviation Units. Naval Post Graduate School. Monterey, California. 1980.

Cory, Charles H. An Evaluation of Computerized Tests as Predictors of Job Performance in Three Navy Ratings: I. Development of the Instuments. Navy Personnel Research and Development Center. San Diego, California. 1974.

Gibson, Steven B. Skill Development and Its Retention. Naval Postgraduate School. Monterey, California. 1979.

Johnson, Duane M. Navy Job-Related Male-Female Differences: Annotated Bibliography. Navy Personnel Research and Development Center. San Diego, California. 1982.

Maier, Milton H.; and Hirshfield, Stephen F. Criterion - Referenced Job Proficiency Testing: A Large Scale Application. US Army Research Institute. Alexandria, Virginia. 1978.

Maier, Milton H.; Young, Douglas L.; and Hirshfeld. Implementing the Skill Qualification Testing System. US Army Research Institute. Alexandria, Virginia. 1976.

Osborn, William C.; Campbell, Roy C.; and Ford, J. Patrick. Handbook for the Development of Skill Qualification Tests. US Army Research Institute. Alexandria, Virginia. 1977.

Raymond, Stephan C. A Strategy to Sustain Battalion Training Management System Instruction in Army Units. Maxwell, AFB, Alabama. 1982.

Rose, Andrew M.; McLaughlin, Donald H., and Felker, Daniel B. Retention of Soldiering Skills: Review of Recent ARI Research. US Army Research Institute. Alexandria, Virginia. 1981.

Rueter, Fred H.; Bell, Thomas R.; and Mallory, Edward V. Capacity of Air Force Operational Units to Conduct On-the-Job Training. Logistics and Technical Training Division. Lowry Air Force Base, Colorado. 1980.

Ryan, James M. NCO Supervisor Training (Phase III). Air War College. Maxwell AFB, Alabama. 1977.

Sticht, Thomas G.; and Hooke, Lydia R. Instructional Systems Design for the Army's On-Duty Educational Program. Human Resources Research Organization. Alexandria, Virginia. 1982.

Temkin, Sanford; Conolly, Marvin; Valdes, A.L. A Cost Assessment of Army Training Alternatives. US Army Research Institute. Alexandria, Virginia. 1975.

Van Piper, Paul K.; Wydo, Michael W., and Brown, Donald P. An Analysis of Marine Corps Training. Naval War College. Newport, Rhode Island. 1978.

US Army Training and Doctrine Command. Final Report of the Board for Dynamic Training. Fort Monroe, Virginia. 1972.

US Army Training and Doctrine Command. The German Army Training Philosophy. Cologne, Germany. 1971.

US Department of the Army. The Study of Army Logistics. Deputy Chief of Staff for Logistics. Washington, DC. 1981.

Other Sources

Begg, Irene, LTC, AMSC, Chief, Nutrition Care Division, Health Care Division, Academy of Health Sciences, Fort Sam Houston, Texas. Interview, February 1, 1984.

Criss, James C., SGM, Hospital Food Service Noncommissioned Officer, Dietitian Section, AMSC Branch, Health Services Command, Fort Sam Houston, Texas. Interview 30 May 1984.

Frietag, Mel, 94F MOS Project Officer - Liason, Plans and Evaluation Branch, US ArmyTraining and Doctrine Command, Fort Eustis, Virginia. Interview, November 9. 1983.

Nichol, Paul, MAJ, INF, Project Officer for Skill Retention, Training Board and Training Analysis Division of Army Training Board, Individual Training Evaluation, US Army Training Support Center, Fort Eustis, Virginia. Interview November 9. 1983.

APPENDIX A

FORSCOM, HSC Memorandum of Understanding

DEPARTMENT OF THE ARMY
HEADQUARTERS, UNITED STATES ARMY HEALTH SERVICES COMMAND
FORT SAM HOUSTON, TEXAS 78234

REPLY TO
ATTENTION OF:

HSCO-R

18 NOV 1982

SUBJECT: Memorandum of Understanding - FORSCOM, TRADOC, HSC

SEE DISTRIBUTION

1. The attached Memorandum of Understanding (MOU) supersedes 7 July 1977 edition.

2. The MOU covers many functional areas in addition to items of medical importance.

3. Suggestions for change amendments should be forwarded on DA Form 2028 to HQ, HSC, ATTN: HSCO-R. POC HQ HSC is MAJ Turner (AV 471-3065/6507).

FOR THE COMMANDER:

1 Incl
as

R. O. GRAY
Colonel, AGC
Adjutant General

DISTRIBUTION:

CDR HSC ACTIVITIES/INSTALLATIONS

23 September 1982

MEMORANDUM OF UNDERSTANDING AMONG THE COMMANDER, US ARMY FORCES COMMAND COMMANDER, US ARMY TRAINING AND DOCTRINE COMMAND AND COMMANDER, US ARMY HEALTH SERVICES COMMAND

1. PURPOSE. To provide an agreed upon basis for the relationship among the Commander, US Army Forces Command (FORSCOM), Commander, US Army Training and Doctrine Command (TRADOC), and the Commander, US Army Health Services Command (HSC) concerning elements of their respective command at the installation level.

2. RESPONSIBILITIES. Nothing in this agreement will be construed as relieving the Commanders of FORSCOM, TRADOC, or HSC of their respective responsibilities as outlined in ARs 10-41, 10-42, and 10-43.

3. OBJECTIVES. The objectives of this memorandum are to:

a. Identify responsibilities and establish relationship applicable to the Commander, FORSCOM, and Commander, TRADOC, as major commanders of installations and units/activities in their respective areas of responsibility, and Commander, HSC, as a major commander of medical activities tenanted on FORSCOM and TRADOC installations, and as the single manager for the health care delivery system in his specified geographical areas of responsibility.

b. Provide policies governing respective intercommand agreement on matters of mutual interest.

c. Standardize command relationships between host installations and HSC tenant elements.

4. GENERAL POLICIES.

a. Commander, FORSCOM, will command all Active Component Army Medical Department Medical Activity Table of Organization and Equipment (TOE) and United States Army Reserve (USAR) AMEDD TOE/Tables of Distribution and Allowances (TDA) units, and supervise the training of all Army National Guard (ARNG) AMEDD units within FORSCOM's geographical areas of responsibility.

b. Commander, HSC, will command all Active Component AMEDD TDA activities and AMEDD assets in active TDAs within HSC's geographical area of responsibility except those field operating agencies of The Surgeon General, DA. Commander, HSC, also commands nondeploying Reserve Component (RC) AMEDD units upon mobilization; the numbered Armies in the Continental United States (CONUSA) retain operational control (OPCON) for purposes of movement.

c. A tenant unit will not be stationed on the installation of a host major command without the written concurrence of the major commands concerned.

d. The policies contained herein will govern FORSCOM/TRADOC/HSC command relationships which will be executed at the lowest command level practicable. Except for unusual circumstances, this memorandum will serve to standardize command and support agreements between host installations and tenant units. The installation commander will be responsible for the development and accomplishment of support agreements (DD Form 1144) when required to document mission unique support.

e. Base operations support furnished to the tenant/satellite(s) on a common-service basis need not be supported by negotiated written agreements. The host is responsible for programming, budgeting, and funding the level of support required and will solicit necessary budget input from the tenant/satellite(s). Supported activities will advise the host of changing requirements to permit the required support to be programmed in sufficient time and detail to be included in appropriate MACOM budgets and/or unfinanced items included in MACOM budgets but not recognized by DA will be supported on a reimbursable basis only.

f. Memorandums of Understanding (MOU), or other documents of agreement generated at the installation and addressing subjects of this MOU, will be forwarded to FORSCOM, HSC, and/or TRADOC for review/comment prior to implementation.

g. Installation services outlined in Section XII, Base Operations AR 37-100-XX (except medical materiel/medical equipment maintenance support at medical treatment facilities (MTFs) and procurement of medical materiel and services at William Beaumont Army Medical Center (WBAMC), Letterman Army Medical Center (LAMC), Madigan Army Medical Center (MAMC), and Brooke Army Medical Center (BAMC)),will be provided by the host installation IAW AR 210-10. Reimbursement for such support will be governed by the provisions of AR 37-49.

5. OPERATING PROCEDURES.

a. The Commanders, FORSCOM and TRADOC, have the ultimate responsibility for the health and welfare of all personnel within their respective commands. Commander, Health Services Command, IAW AR 5-9, AR 10-43, AR 40-3, and AR 40-5, will provide for complete health services within his geographic area of responsibility.

(1) To the maximum extent possible, subject to the priorities listed in Figure 2-1, AR 40-3, United States Army Medical Center (MEDCEN)/Medical Department Activity (MEDDAC)/Dental Activity (DENTAC) will provide or arrange for health care services authorized by AR 40-3 and AR 40-5 to all eligible personnel. (Some categories of care, such as inpatient care for dependents, have reimbursable portion.) These services are provided IAW existing laws and implementing regulations which state that the degree of medical care delivered to certain beneficiaries is subject to the MTF Commander's conclusive determination as to the availability of space and facilities, the capabilities of the medical and/or dental staff and the provision of such services cannot interfere with the primary

mission of the facility concerned. Whenever it is necessary to deny care to any category of beneficiary, the MTF Commander will inform the local installation commander and HQ, HSC.

(2) HSC is the executive agent for allocation of medical mission manpower and funds.

(3) MEDCEN/MEDDAC/DENTAC Commanders will advise the host installation of changing requirements to permit required support to be programmed into the budget review cycle of the host installation. Supported activities will provide required budget program feeder information to the host. Host installation commanders will advise MEDCEN/MEDDAC/DENTAC Commanders of changes in the supported population or missions to provide for budget resource programming.

(4) Installation Health Care Services provided by HSC in fixed AMEDD facilities are defined in Section II, AR 40-4. Installation medical service does not include nonfixed medical treatment facilities identified in Section III, AR 40-4.

(5) The commander of the installation MEDDAC or MEDCEN will have a dual role.

(a) To command assigned HSC TDA medical unit/activity, and

(b) To serve as, or designate, the installation Director of Health Services (DHS). At locations where an Army Health Clinic or Civilian Employee Health Clinic provides health services, the commander or chief of that clinic will serve as the DHS.

(6) The commander of the installation DENTAC is a dental officer with a dual role.

(a) To command the assigned HSC TDA Dental Activity with specific responsibility for the provision of oral health services to the supported patient community and the management of resources allocated to the Activity/ Department.

(b) To serve as the installation Director of Dental Services (DDS). The DDS is the principal staff advisor to the installation commander and the staff concerning the oral health status of military personnel and the delivery of oral health services to the supported patient community.

(7) The Director of Veterinary Services, HQ HSC, will be allowed the flexibility of directing issues of medical and administration expedience to local veterinary activities. It is recognized that virtually any directive given to an installation veterinary activity either directly or indirectly impacts on the administration of local veterinary Nonappropriated Fund Instrumentalities (NAFI).

(8) Commander, HSC, has established a rating scheme for MEDCEN/MEDDAC/DENTAC Commanders; DHS; and DDS IAW AR 623-105.

(9) The MEDCEN/MEDDAC Commander will designate a senior MEDCEN/MEDDAC Army Nurse Corps (ANC) officer to serve as Nurse Consultant to the Chief Nurse of Active Component TOE hospitals on FORSCOM/TRADOC installations. Duties and responsibilities are identified in FORSCOM letter, AFMO-PC, 7 May 1976, subject: ANC Designee for Additional Duty at Selected MEDCEN/MEDDAC.

(10) The MEDCEN/MEDDAC Commander will designate a Medical Equipment Maintenance Technician (MOS 202A) to serve as an advisor on medical equipment maintenance policies and procedures to the commanders of Active Component medical organizations, both FORSCOM and HSC, located within their Health Service Area (HSA). When an HSA contains a MEDSOM or Medical Maintenance Detachment, the Maintenance Technician assigned to those units will function as the advisor to all FORSCOM medical organizations. The advisor's responsibilities shall include:

(a) Scheduled/unscheduled service procedures.

(b) Records administration.

(c) Provide technically qualified personnel for maintenance inspections upon request.

(d) Utilization of MOS 35G and 35U personnel and establish technical training program(s) to insure their technical proficiency.

(e) Manage PLLs for medical equipment.

b. Active Component (AC) TOE unit resource utilization.

(1) TOE medical/dental units are required to maintain combat readiness for Return of Forces to Germany (REFORGER), Rapid Deployment Forces (RDF), Special Mission Forces, and other contingency missions. In addition to unit training, TOE medical/dental units and individual personnel will assist in and provide support to the local MEDCEN/MEDDAC. The installation commander is ultimately responsible for the readiness of the units as well as the health of his command, with the attendant responsibility of determining the appropriate magnitude of the TOE Army Medical Department (AMEDD) resources which can be committed to supplemental support of the MEDCEN/MEDDAC/DENTAC mission; however, the following provisions apply:

(a) TOE units will not establish any fixed treatment facilities on an installation. Medical screening and dispensing of nonprescription drugs may be performed by Aid Stations when approved by and under the supervision of the DHS or his designated representative.

(b) TOE units may staff HSC fixed Medical Treatment Facilities (MTF) but this staffing will not exceed the MTFs TDA structured strength for

military personnel. For manpower accounting purposes, such support will be identified and defined as "others" requirements as prescribed in HSC Manpower Documents and approved by the installation commander concerned and then by HQ FORSCOM. Identification of "others" personnel and manpower documents will be in terms of equivalent man-year commitments.

(c) "Others" personnel will not be rotated prior to 90 days (± 5 days) of duty with the MTF. TOE unit commanders may withdraw necessary personnel for the following reasons: Army Training and Evaluation Program (ARTEP) exercises, Emergency Deployment Exercises (EDRE), preparation for and participation in Annual General Inspections (AGI), real world contingency operations, and operational requirements which take "others" away from their home station. Notice of release of personnel for ARTEP evaluations, AGI preparation, and conduct of AGI will be submitted to the MTF 30 days prior. EDREs are unannounced. Every effort will be made to place "others" personnel in duty positions at the MTF so that the tasks they perform are as close as possible to the tasks their parent TOE unit is required to do (emergency medicine, trauma management, OR/CMS duties, nursing ward duties are examples of desirable duties; tasks in pediatrics and obstetrics are examples to be avoided). Further, every effort will be made to provide "others" with duties which they can perform as a group/unit to enhance TOE unit cohesiveness.

(d) A written Letter of Agreement (LOA) will be established between the MEDCEN/MEDDAC and the FORSCOM preventive medicine unit collocated on an installation. The LOA will depict the functional mission responsibilities for the TOE units for accomplishment within their operational constraints with copies of all reports provided to the MEDCEN/MEDDAC. The LOA should be signed by the MEDCEN/MEDDAC Commander and the Division Commander or his designated representative. For a nondivisional unit the immediate Unit Commander above the TOE preventive medicine unit may sign. It must be emphasized that the overall installation preventive medicine responsibility remains with the MEDCEN/MEDDAC.

(2) Troop Medical Clinics (TMC) are operated on an installation IAW Section II, paragraph 14a, AR 40-4.

(a) TOE "others" personnel will be technically supervised by the MEDCEN/MEDDAC/DENTAC.

(b) AR 40-48 and AR 40-66 establishes credential criteria for health care extenders.

(c) Patient Administration. MEDCEN/MEDDAC/DENTAC Commander or designated representative will:

1 Serve as custodian of health and dental records which will be processed, filed, and maintained at activities designated by the installation commander with the concurrence of the installation Director of Health Services.

2 Be the release authority for all medical information from health/dental records.

3 Provide administrative management of Reserve Component personnel hospitalized, including requests for follow-up care, medical fitness determination, and medical board processing and pr ide supervision of RC medical records administration at AT sites.

4 Assure that all medical treatment provided on an installation is accounted for and included in the consolidated MEDCEN/MEDDAC/TDA medical statistical reports.

(d) Funding and equipment support requirements for all installation TMCs are the responsibility of the MEDCEN/MEDDAC.

(e) AMEDD TOE units establishing medical treatment facilities during Field Training Exercises (FTXs), Joint Readiness Exercises (JRXs), etc., will utilize FORSCOM professional assets where feasible. If organic professional assets are inadequate, units will request supplemental AMEDD professional fillers IAW FORSCOM Reg 40-3, and letter, HQ FORSCOM, subject: Active Component Support Procedures, 15 Sep 78. Non-AMEDD units desiring "required but not authorized" AMEDD professional augmentation will also submit requirements IAW FORSCOM Reg 40-3. FORSCOM will consolidate professional augmentation requirements and submit them to Health Services Command IAW HSC Reg 40-9.

(3) Under conditions of local civil disaster or medical emergency, installation commander(s) may task the MEDCEN/MEDDAC for professional assistance necessary to accomplish the disaster/emergency relief mission. At the earliest practicable time the installation commander will notify HQ FORSCOM, ATTN: AFOP-CO and AFMD-OT, Health Services Command, ATTN: HSOP-S, and HQ TRADOC, ATTN: ATCS-PO and ATMD, of actions taken.

(4) Emergency Medical Team (EMT) support to Nuclear/Chemical Accident and Incident Control (NCAIC) guidance is contained in AR 40-13. The MEDCEN/MEDDAC Commander, acting in his capacity as installation Director of Health Services, will be responsible for establishment of EMT to support contingency NCAIC missions. TOE AMEDD unit personnel resources at the installation may be used in formation of EMT; however, when the primary EMT is structured mainly from the TOE unit(s), a back-up team will be formed from MEDCEN/MEDDAC personnel resources.

(5) Nondivisional AMEDD TOE units will normally be commanded by a non-divisional AMEDD TOE Command and Control Unit or AMEDD unit with similar capability, e.g., TOE hospitals (Combat Support Hospitals, Evacuation Hospitals, Field Hospitals) which are battalion-equivalent sized units. When such AMEDD command and control is not available, the installation commander may elect to subordinate the nondivisional TOE unit to a division medical battalion or another FORSCOM/TRADOC unit/activity capable of command and control. AMEDD TOE units will not be attached or placed under the operational control of the MEDCEN/MEDDAC/DENTAC without the prior ritten concurrence of FORSCOM and HSC.

(6) Utilization of TOE air ambulance elements.

(a) To insure medical missions responsiveness, installation commanders having assigned air ambulance units will place such units in direct support of the MEDCEN/MEDDAC Commander for medical evacuation and related medical missions.

(b) Implementation and operation of military aspects of the Military Assistance to Safety and Traffic Program (MAST) at an installation will be the responsibility of the installation commander. The DHS will provide technical medical control to the MAST Program as needed. The FORSCOM Command Surgeon monitors the program's overall staffing and operation. Technical medical surveillance of the overall MAST Program is retained in the Office of The Surgeon General, DA.

(c) Priorities for utilization of FORSCOM air ambulance resources are, in descending order:

1 Readiness.

2 Support to field exercises/installation requirements, to include MEDCEN/MEDDAC support.

3 MAST.

(7) Selected TOE units may be involved in the multi-Health Service Area (HSA) optical fabrication missions. Consumable supplies, and non-TOE standard and non-standard equipment required to insure mission success, will be provided on a nonreimbursable basis by the MEDCEN/MEDDAC/DENTAC operating the HSA in which the Optical Fabrication Facility is located. Assignment of such missions will have written approval of FORSCOM, HSC, and TRADOC (for TRADOC installations). This mission will not interfere with the Unit's TOE mission/readiness requirements.

(8) Manpower survey of HSC medical activities will be made by HQ HSC. Utilization of AMEDD/non-AMEDD TOE personnel will be reflected in the section titled "others" on manpower authorization documents after coordination with FORSCOM/TRADOC.

c. Training Support.

(1) The MEDCEN/MEDDAC/DENTAC Commander will provide MOS proficiency training for TOE/nonmedical TDA unit medical personnel when requested by the appropriate unit commander IAW FORSCOM Reg 350-1. The formal training program should be for specific time periods not to exceed 90 days. Formal instruction, supervision, and medical [illegible]S to be trained will be the joint responsibility of the appropriate unit commander and the commander of the respective MTF.

(2) MEDCEN/MEDDAC/DENTAC Commanders should coordinate with collocated FORSCOM/TRADOC medical or nonmedical units to provide a three-day field training

experience each year for assigned HSC personnel. The field training will be provided on a nonreimbursable basis by FORSCOM/TRADOC units in conjunction with their regularly scheduled FTX/ARTEP. Local memorandums of understanding may be developed in support of field training requirements.

(3) MEDCEN/MEDDAC/DENTAC Commanders on installations without appropriate TOE units stationed nearby, may request a TOE medical unit be moved temporarily to their location for the purposes of field training. The request will be sent to HQ HSC, ATTN: HSOP-SP, for approval and then forwarded to HQ FORSCOM for appropriate actions.

(4) For short t m training, FORSCOM/TRADOC installations/units will provide equipment (CTA 50-900, weapons, etc.) to HSC activities on a nonreimbursable or reimbursable/return credit basis. Using units will be responsible for returning equipment in a serviceable condition based on standards established by the supporting installation/unit. The using unit will be responsible for initiating property adjustment documents when damage is not attributable to fair wear and tear. Intra-service Support Agreements between HSC activities and FORSCOM/TRADOC installations should include provisions for training support requirements.

d. RC resource utilization and support.

(1) Medical augmentation to support RC Annual Training (AT) activities at:

(a) Active or semi-active US Army installations.

1 A medical-dental support plan will be developed by the MEDCEN/MEDDAC/DENTAC and coordinated with HQ HSC and the appropriate CONUSA Medical Advisor. Included will be a time-phased staffing plan based on population to be supported, level of medical and dental support to be furnished, and medical support available in the area, including Active Component and Reserve Component resources. Evacuation means will be included in the support plan.

2 Essential minimal personnel augmentation requirements to support Reserve Component AT will be documented by the MEDCEN/MEDDAC/DENTAC in conjunction with the appropriate RC medical unit and the Army Readiness Region Area Coordinator, submitted through the host installation commander, and referred to the appropriate CONUSA with information copy to HQ HSC. This package will distinguish those positions that must be filled by Active Component personnel and those that should be filled by Reserve Component personnel. The CONUSA will designate Reserve Component AMEDD assets to support AT at an installation. Those requirements that cannot be filled by the CONUSA will be forwarded to HQ FORSCOM with information copies to Health Services Command. HQ FORSCOM will reevaluate requirements and in concert with Health Services Command designate Active Component resources to satisfy the shortfall.

3 IAW Appendix C, FORSCOM Reg 350-2, funding for Active Component augmentees in support of Reserve Component AT will be furnished by the host installation.

4 CONUSA will determine RC AMEDD assets available to support AT sites in consideration of medical unit/personnel training objectives. When such objectives cannot be concurrently satisfied through AT site support duty, accomplishment of medical training objectives will take priority.

5 The entire support plan will be completed in sufficient time to allow requirements not filled by CONUSA to be forwarded to HQ FORSCOM NLT 1 December.

6 The MEDCEN/MEDDAC/DENTAC will maintain technical supervision over the operation of the Health Clinic(s) or other fixed installation medical activities at the AT site; and will be responsible for the evaluation as appropriate of those RC AMEDD units augmenting the clinics and/or other HSC activity.

(b) ARNG state-owned and operated sites, e.g., Camp Shelby, MS, and Camp San Luis Obispo, CA, to include federally-owned sites leased to, or otherwise controlled/operated by ARNG, e.g., Gowen Field, Idaho.

1 Medical support will be planned by the State ARNG Headquarters responsible for the installations operation, or determined by the State Adjutant General.

2 Essential medical support beyond the capability of the ARNG will be referred with justification to the appropriate CONUSA for assistance from USAR AMEDD resources. Those requirements not filled by the CONUSA will be forwarded to HQ FORSCOM NLT 1 December.

3 Technical medical support such as medical maintenance, health and environment, etc., which is beyond the State's capability will be requested from the supporting MEDCEN/MEDDAC on a reimbursable basis. If the MEDCEN/MEDDAC is unable to provide the support, it should be obtained by the ARNG from commercial sources. Preventive medicine services available from USAEHA may be requested through command channels from HQ HSC (HSPA-P). USAEHA support will be provided on a reimbursable basis if adequate resources are available without a major impact on existing mission services.

4 Funding for AC unit or individual augmentees is outlined in Appendix C, FORSCOM Reg 350-2.

5 Problems will be referred to HQ FORSCOM, ATTN: AFMD-OT, for resolution.

(c) RC training evaluation.

1 RC MTOE/MTDA AMEDD unit performing AT at an active HSC treatment facility will be formally evaluated by appropriate MEDCEN/MEDDAC/ DENTAC utilizing FORSCOM Form 1-R.

2 Units on year-round modular training will be evaluated on a single Form 1-R when all modules have completed AT. The MEDCEN/MEDDAC/DENTAC will evaluate (as appropriate) RC AMEDD units augmenting semi-active installations when such MTFs are operated on a year-round basis by HSC.

(d) HQ FORSCOM, upon request, will provide HSC with two printed copies of the current TDA for all peacetime USAR AMEDD units/activities once a year. Documents will be used in the preparation and planning of HSC Mobilization TDA.

e. AMEDD Professional Officer Filler System.

(1) The AMEDD Professional Officer Filler System is designed to provide officers of the AMEDD Corps (MC, DC, ANC, VC, AMSC, MSC) to fill TOE unit positions which are not routinely staffed during peacetime, but are necessary to fulfill contingency and other emergency deployment requirements on short notice. Procedures outlined herein apply equally for designation of professional fillers for exercises (such as REFORGER) except for names selection by quarterly roster; exercise selections are handled individually. The AMEDD Professional Officer Filler System is operated and managed by the Office of The Surgeon General (OTSG). Filler personnel will be named on quarterly rosters published and distributed by OTSG.

(a) US Army Health Services Command (HSC) responsibilities delineated in HSC Reg 40-25 include:

1 Designating filler personnel IAW requirements furnished by OTSG. Designation of Unit Commanders, Chief Nurses, Chiefs Food Service, and other key officer filler personnel requirements will be accomplished by OTSG for each specified unit in the following category:

a Forward deployed units in Europe and Korea.

b Rapid Deployment Force (RDF).

c Units deploying during the D-D+30 time frame in support of a NATO contingency.

2 Notifies designated filler personnel of their assignment and ensures that each will be in compliance with AR 612-2 (POR qualification) except for issue of CTA 50 clothing and equipment.

3 Upon notification from OTSG/AMEDDPERSA movement of fillers will be directed to insure arrival at gaining FORSCOM unit NLT 72 hours, or as required, prior to scheduled deployment or movement to contingency operation.

(b) HQ FORSCOM responsibilities:

1 Notifies OTSG and HSC of actual requirement for professional filler personnel after designation of units selected for participation.

2 Informs HSC of specific requirements for special training, clothing, immunization needs, and other orientation matters of interest to the professional designee and his commander. Ensures that organizational clothing and equipment CTA 50 (AR 710-2) is provided to fillers upon arrival.

3 Provides travel and TDY fund cite for movement of professional officer fillers from installation level FORSCOM funds (or reimbursable funds at non-FORSCOM installations).

f. Facilities Engineering Support.

(1) Medical construction projects.

(a) In accordance with AR 37-49, tenant will budget, fund, and reimburse the host for all minor construction (.z Account .L1000) when the tenant's peculiar mission generates and, therefore, justifies the project. This policy applies only to real property facilities assigned to the tenant for its exclusive use. The MEDCEN/MEDDAC/DENTAC Commanders, through coordination with FORSCOM/TRADOC installation commanders, will insure that minor construction projects which require completion for accreditation of the health care delivery facility, will receive the highest priority rating among those projects submitted by the MEDCEN/MEDDAC/DENTAC Commanders.

(b) HSC tenant activities will obtain project approval from the host installation/MACOM for all OMA funded minor construction projects. Funded costs of such minor construction projects will not exceed $100,000. Projects with a unit cost of $10,000 or more, determined to be mission peculiar and requiring HSC funding, will be submitted through medical channels to the US Army Health Services Command, ATTN: HSLO-F, when approval has been obtained and design completed.

(c) Exigent minor construction projects developed in accordance with AR 415-35 related to construction category 500 will be forwarded from installations to HSC for medical technical review and approval. HSC will forward the project to the appropriate operating agency (FORSCOM/TRADOC) for engineering, technical review, and approval. Upon receipt of HSC comments and completion of their technical review, FORSCOM/TRADOC will forward to HQDA for approval.

(d) Major medical MCA projects, construction category 500, will be forwarded by MEDCEN/MEDDAC/DENTAC Commander with concurrence of installation commanders to Commander, HSC for validation of the project and establishment of priorities. Category 500 projects will not be included within nonmedical command priority list or in other submissions of medical projects.

(e) In accordance with AR 420-10, FORSCOM/TRADOC Facilities Engineers will provide MEDCEN/MEDDAC/DENTAC staff assistance and other services normally provided its own units. This includes pre aration of program (project) documentation including cost estimates. MEDCEN/MEDDAC/DENTAC are responsible for providing Facilities Engineers with unique criteria and justification.

(2) Maintenance and repair. The Facilities Engineer provides engineering support to accomplish medical facility maintenance and repair to insure that the MEDCEN/MEDDAC/DENTAC is in compliance with standards promulgated under the Occupational Safety and Health Act (OSHA); the Joint Commission on Accreditation of Hospitals (JCAH); other applicable federal, state, and local safety and health standards; and safety and health directives of HQDA. Compliance with OSHA standards by facilities which are owned by the host, but occupied by tenant HSC MEDCEN/MEDDAC/DENTAC will be the responsibility of the host on an equal priority with all other OSHA compliance actions.

(3) Environmental Program.

(a) HSC environmental policies and regulations will apply concerning operation of the MEDCEN/MEDDAC/DENTAC. Host installation environmental policies and regulations normally associated with the command and operation of an Army installation will govern except in operation of the MEDCEN/MEDDAC/DENTAC, itself, and where HSC regulations are more stringent. US Army Environmental Hygiene Agency (USAEHA) sponsored environmental field monitoring and special studies programs will be coordinated with host installation environmental coordinators. HSC/MEDCEN/MEDDAC/DHS/DENTAC/DDS will provide installation environmental coordinators data for input to reports required by AR 200-1. Host installation environmental office personnel will provide technical assistance to tenant HSC/MEDCEN/MEDDAC/DHS/DENTAC/DDS in preparation, review, and coordination of environmental assessments and environmental impact statements, in accordance with AR 200-2, for which the HSC activity is the proponent.

(b) Environmental programs (air, water, solid waste, pest control, hazardous/toxic materials, environmental noise) at FORSCOM/TRADOC activities and installations will be evaluated for completeness, effectiveness, and appropriateness by FORSCOM/TRADOC and by HSC representatives when mutually agreed upon by FORSCOM/TRADOC and HSC. Requests for HSC environmental support originated by DFE at FORSCOM/TRADOC installations/activities will be forwarded through HQ FORSCOM/TRADOC to HQ HSC (HSPA-P). The installation DHS will first determine if requested services can be provided by the supporting MEDCEN/MEDDAC. Commander, USAEHA (in coordination with HQ FORSCOM/TRADOC and HQ HSC (HSPA-P)) will prepare an annual environmental support program.

g. Preventive Medicine Programs.

(1) Preventive medicine programs of FORSCOM/TRADOC activities and installations will be evaluated for completeness, effectiveness, and appropriateness by FORSCOM/TRADOC and HSC representatives, to include mutually agreed

upon support by the USAEHA. Requests for support from USAEHA at FORSCOM/TRADOC installations/activities will be originated by or coordinated with the local installation DHS (paragraph 1-3, AR 40-5) and forwarded through HQ FORSCOM (AFMD) or HQ TRADOC (ATMD) for approval prior to forwarding to HQ HSC (HSPA-P). The FORSCOM/TRADOC installation's DHS will first determine if requested services can be provided by the supporting MEDCEN/MEDDAC. Commander, USAEHA (in coordination with FORSCOM/TRADOC and HSC (HSPA-P)) will prepare an annual support plan for FORSCOM/TRADOC each fiscal year, and update it quarterly. Support to the USAR, to include Area Maintenance Support Activities (AMSA), Aviation Support Facilities (ASF), Aviation Flight Activities (AFA), and Equipment Concentration Sites (ECS), will be provided by the supporting MEDCEN/MEDDAC. USAR requests for services from USAEHA will be coordinated with the supporting installation DHS and forwarded through HQ FORSCOM (AFMD), HQ TRADOC (ATMD) to HQ HSC (HSPA-P). This plan and its quarterly revisions will be furnished by HSC to FORSCOM and TRADOC for review and comment.

(2) HSC/MEDCEN/MEDDAC/DHS/DENTAC/DDS will provide consultation to FORSCOM/TRADOC commanders relative to healthful working conditions for military personnel, DA civilian employees, and other eligible civilian personnel IAW Chapter 4, AR 40-5; conduct field monitoring and special studies to evaluate potential health hazards to insure that places and conditions of employment are consistent with the health standards promulgated under the provisions of Section 6, Occupational Safety and Health Act (OSHA) (PL 91-596) and with good occupational health practice; and will provide other medical support as indicated by same. In addition, HSC/MEDCEN/MEDDAC/DHS/DENTAC/DDS will provide the data required for OSHA reports, regarding OSHA accidental injury, illness, and loss to local safety personnel, as directed and required by HQDA. In accordance with AR 385-10, OSHA is part of the safety program, however, it is the responsibility of HSC/MEDCEN/MEDDAC to evaluate all suspected and actual cases of occupational illnesses and recommend necessary corrective action. HSC Medical units will work closely and cooperate fully with FORSCOM/TRADOC safety personnel at all levels and insure that the Army's Occupational Safety and Health Programs, directives, or regulations will be referred by FORSCOM (AFMD) or TRADOC (ATMD) to HSC (HSOP) for approval prior to commitment of HSC resources.

(3) To minimize potential for health hazards in materiel development, HSC and USAEHA will provide mutually agreed upon support to TRADOC Test Board activities.

(4) Proposed provisions in locally negotiated labor agreements relating to occupational health and safety will be referred prior to final agreement with the union concerned to the MTF commander for review as to availability of resources to provide the proposed services.

h. Medical Materiel.

(1) Medical materiel requirements of MEDCEN/MEDDAC/DENTAC located on FORSCOM/TRADOC installations will be supported by the FORSCOM/TRADOC Army

Fund as appropriate. Responsibility for budgeting, programming, and reporting, regarding support of HSC activities, is vested in the Chief, FORSCOM/TRADOC Division, Army Stock Fund. Responsibility for development of medical materiel data for inclusion in FORSCOM/TRADOC stock fund budgets is vested in the Commander, HSC. At installation level, this responsibility will be exercised by the MEDCEN/MEDDAC. HSC activities located on FORSCOM/TRADOC installations may prepare the medical materiel portion of the installations stock fund program/budget based upon guidance furnished by the installation. The Medical Materials Activities will forward copies of the medical portion of the installation program/budget to Commander, HSC, ATTN: HSLO-M, Fort Sam Houston, Texas 78234, at the same time that the total installation program/budget is forwarded to FORSCOM/TRADOC. HSC will review, analyze, and evaluate the medical-dental category submissions individually, from the standpoint of mission responsibilities, and provide evaluation, rationale, and recommendations to FORSCOM/TRADOC, as required or appropriate. Upon receipt of HSC stock fund program/budget evaluation, FORSCOM/TRADOC will prepare consolidated stock fund program/budgets with recognition given to HSC recommendations. FORSCOM/TRADOC will request HSC representation at budget hearings when appropriate. FORSCOM/TRADOC will provide copies of the medical-dental materiel segment of each installations approved program to Commander, HSC, ATTN: HSLO-M. Medical Materials Activities will provide monthly stock fund and quarterly inventory management reports, including narrative analyses, to Commander, HSC, ATTN: HSLO-M, in the same manner as prescribed for the submission of programs/budgets.

(2) Host installations will provide sufficient personnel resources to assure the timely procurement of materiel and services in support of the MEDCEN/MEDDAC/DENTAC mission requirements. Personnel may be designated as Ordering Officers and/or may be authorized to place calls under Blanket Purchase Agreements (BPA) if determined essential to meet mission requirements. This determination is the responsibility of the Chief, Contracting Office.

(3) Medical materiel storage and maintenance facilities are essential components of a modern health care delivery system. FORSCOM/TRADOC will provide facilities which are proximal to the medical treatment facility and permit storage of medical materiel requiring special handling security and protection from the elements, and allow for the proper and safe use of materiel handling equipment.

(4) Standard Army Intermediate Level Supply System (SAILS).

(a) Director of Industrial Operations (DIO) Systems Analyst will provide support at those installations where the Medical Supply Activity operates under SAILS PLUS.

(b) The Medical Supply Activity Systems Analyst is responsible at those installations using Line Item Accounting. The DIO SAILS Systems Analyst will provide assistance upon request.

(5) Medical equipment maintenance support will be provided as follows:

(a) Active Component: TOE medical equipment will be repaired at HSC maintenance activities on a nonreimbursable basis when requested or when a maintenance capability does not exist in the FORSCOM unit.

(b) Reserve Component:

1 Upon request, HSC maintenance activities will repair RC medical equipment.

2 Repair parts costing $100 or less per work order will be nonreimbursable.

3 Repair parts costing more than $100 per work order will be reimbursable.

4 Travel and per diem for on-site repair of RC medical equipment will be funded by the unit requesting the support.

i. Personnel Support.

(1) AMEDD officer personnel will not be diverted or reassigned to the activity of another major command except by direction of The Surgeon General, DA. AMEDD enlisted personnel will not be reassigned to the activity of another major command except by approval of the Military Personnel Center (MILPERCEN), DA.

(2) FORSCOM/TRADOC and HSC will enter into separate master civilian personnel servicing agreements covering civilian personnel services to be provided the Commander of HSC activities which do not have operating civilian personnel offices. FORSCOM/TRADOC and HSC will enter into separate support agreements for military personnel service support under the provisions of AR 600-8. Such agreements will conform to the assignment of responsibilities as contained in that reference and will be subject to administrative review and approval by HQ HSC.

(3) FORSCOM/TRADOC and HSC will enter into separate master equal employment opportunity servicing agreements covering equal employment opportunity services to be provided the Commander of HSC activities which do not have operating equal employment opportunity offices. FORSCOM/TRADOC and HSC will enter into separate support agreements for equal opportunity service support under the provisions of AR 5-8. Such agreements will conform to the assignment of responsibilities as contained in that reference and will be subject to administrative review and approval by HQ HSC.

(4) Army Blood Program: The Army Blood Program encompasses all aspects of the installation blood program referred to in Chapter 12, AR 40-2. Commanders are responsible as indicated below:

(a) Commander, FORSCOM, TRADOC, and Commander, HSC, will promote participation in and support of the Army and Military Blood Programs.

(b) Installation commander will establish an installation blood program to provide command support of the Army Blood Program. The installation blood program will be responsible for furnishing blood donors in support of the Army and/or Military Blood Programs.

(5) The Drug and Alcohol Abuse Control Program, an installation commander's responsibility, is directly supported by the MEDCEN/MEDDAC Commander IAW AR 40-5 and AR 600-85. HSC allocates sufficient resources to the MEDCEN/MEDDAC to insure mission accomplishment.

(6) Host installation commander will provide support for the Army reenlistment program as follows:

(a) Provide records and administrative support as needed to promote an aggressive enlistment program.

(b) Provide access to the RETAIN System at the Military Personnel Center (MILPERCEN) for the purpose of obtaining reenlistment control numbers, geographical and school assignments.

(c) Provide SIDPERS support to insure timely submission of reenlistment transactions and follow-up to insure that all transactions have been properly processed.

(d) Provide the MEDCEN/MEDDAC/DENTAC reenlistment office with copies of the Personnel Transaction Register by Originator (PIRO) on all reenlistment transactions.

(e) Provide a quarterly inspection of reenlistment activities to insure proper administration of the program.

j. Military Police Support.

(1) Host installation commander is responsible for operational law enforcement and police investigative activities within MEDCEN/MEDDAC/DENTAC. Commander, MEDCEN/MEDDAC/DENTAC is responsible for the establishment of internal crime prevention and physical security programs.

(2) Host installation commander will provide all protective and reactive police and physical security services to MEDCEN/MEDDAC/DENTAC which are normally provided to tenant activities on a nonreimbursable BASOPS basis. These services include armed guard, escort patrol, surveillance, physical security surveys, and inspections.

(3) Commander, MEDCEN/MEDDAC/DENTAC is responsible for crime prevention and physical security policy within that activity.

(4) HSC crime prevention and physical security policies and contingency plans applicable to MEDCEN/MEDDAC/DENTAC operations will be coordinated with the host installations.

(5) If a conflict occurs between FORSCOM, TRADOC, or host installation regulations and policies and those of HSC, HSC security policies and regulations will take precedence at the MEDCEN/MEDDAC.

(6) Known or suspected criminal offenses, including child abuse and sexual assult cases will be promptly reported to the installation provost marshal in accordance with pertinent Army Regulations. Crime surveys, other than those requested by the host installation, will be based on separate agreements between HSC and USACIDC in coordination with local provost marshals to insure an integrated crime prevention effort.

(7) Specific support requirements needed to implement the provisions of this MOU will be established in separate policy letters effected between the MEDCEN/MEDDAC and host installation.

.k. Inspector General Support.

(1) Commander, HSC, through his Inspector General staff will be responsible for general and special inspections of all activities under his command jurisdiction. Corrective action on HSC Inspector General findings against a FORSCOM/TRADOC installation will be coordinated by the MEDCEN/MEDDAC/DENTAC commander with the installation commander. Unresolved findings will be referred to the FORSCOM/TRADOC Inspector General for resolution. TRADOC or installation Inspectors General findings written against the MEDCEN/MEDDAC/DENTAC activities located on TRADOC installations will be provided to the HSC Inspector General and the MEDCEN/MEDDAC/DENTAC Commander for corrective action at the level they deem appropriate.

(2) Inspector General investigations and inquiries will normally be conducted by the HSC Inspector General.

(3) Inquiries into matters pertaining to HSC elements not authorized an Inspector General may be made by non-HSC Inspectors General, after mutual agreement between the HSC Inspector General and the installation Inspector General.

(4) Complaints and allegations concerning MEDCEN/MEDDAC/DENTAC facilities/medical services, received by the installation Inspector General, will be forwarded to the MEDCEN/MEDDAC/DENTAC Commander for appropriate action. Matters pertaining to installation support, which are brought to the attention of the MEDCEN/MEDDAC/DENTAC Commander, will be forwarded to the installation commander for appropriate action. Unresolved issues will be referred to the HSC IG with copy to the FORSCOM/TRADOC IG.

l. Management Information System Support.

(1) FORSCOM/TRADOC host Data Processing Installations (DPI) will provide the tenant MEDCEN/MEDDAC/DENTAC with Automatic Data Processing (ADP) support for Standard Army Multi-Command Management Information Systems (STAMMIS),

and DA approved interim systems (Medical Stock Control (MEDSTOC)). Any additional ADP support for HQ HSC approved command-unique and AMEDD installation-unique systems will be contingent on the availability of DPI resources and will be negotiated with HQ FORSCOM and TRADOC.

(2) FORSCOM/TRADOC installations will provide timely ADP support to the MEDCEN/MEDDAC/DENTAC within Systems Classification priority Classes I, II, III, IV, and V. Special considerations are indicated below:

(a) Army Medical Department Property Accounting System (AMEDDPAS).

(b) DA approved Interim System (MEDSTOC).

(c) Standard Army Intermediate Level Supply Subsystem (SAILS). Five basic cycles per week is the goal for MEDSTOC/SAILS ABX subsystems. Three basic cycles per week is the minimum number acceptable to provide responsive medical material support.

(d) FORSCOM/TRADOC managed system controls impacting on MEDCEN/MEDDAC medical stock record accounts will be coordinated with HSC.

(e) Installation managed code tables and system controls impacting on the medical stock record account will be coordinated with the MEDCEN/MEDDAC.

(3) The MACOM host installation MISO will perform ancillary functions associated with the operation of HSC standard systems designed to operate on host installation Automatic Data Processing Equipment (ADPE); e.g., incident reporting to the assigned responsible agency (ARA), loading systems change packages decolating, bursting, etc.

m. Judge Advocate Support. The commander of the local HSC tenant activity will exercise Article 15 authority, subject to any limitation imposed by superior authority, over all personnel of his command. The host installation is superior authority for Article 15 purposes, to include action on appeals. The host installation will exercise court-martial jurisdiction over all personnel assigned or attached to the tenant HSC activity. The installation will also provide legal support to the MEDCEN/MEDDAC/DENTAC when the latter has no judge advocate or legal support personnel on his staff.

n. Security and Intelligence Support.

(1) The MEDCEN/MEDDAC Commanders will be responsible for information security, foreign liaison, automated systems security, personnel security, and intelligence, to include those staff and operational functions governed by the AR 380-Series, AR-381 Series, and AR 604-Series. Functions relating to these activities will be performed by all HSC installations and activities.

(2) Host commanders will provide administrative security support services as requested by MEDCEN/MEDDAC/DENTAC Commanders. Such support services include repairing security containers; training in changing combinations to security containers; reproducing classified material; providing classified mail service; and taking fingerprints of personnel requiring security clearances.

o. Chaplain Support.

(1) HSC chaplains assigned to MEDDAC facilities on host installations will:

(a) Be under technical supervision of HSC staff chaplain.

(b) Be a member of the host installation chaplain team.

(c) Serve on the host installation chaplain duty roster.

(d) Coordinate all religious services with host installation chaplain.

(e) Attend monthly training conferences conducted by host installation chaplain.

(f) Coordinate all absences, such as leave and TDY, with host installation chaplain.

(2) HSC chaplains assigned to MEDCEN facilities on host installations will maintain close liaison and active cooperation with host installation chaplain.

(3) FORSCOM/TRADOC host installation chaplain will:

(a) Provide after-duty hours chaplain coverage by installation duty chaplain roster for MEDDAC.

(b) Furnish denominational coverage as requested by individuals when such is not available at MEDDAC.

(c) Make available chaplain coverage on an emergency basis when MEDDAC chaplain is on leave, TDY, or other absences.

p. Public Affairs Support. Host installation Public Affairs Officers will:

(1) When requested, provide public information and command information support to HSC tenant units.

(2) Coordinate with Chief, Public Affairs, HSC, through Chief, Public Affairs, FORSCOM/TRADOC, those conflicts concerning public affairs matters which cannot be resolved at the local level.

(3) Coordinate with MEDCEN/MEDDAC/DENTAC command information personnel to provide closed circuit radio/television command information programming to MEDCEN/MEDDAC/DENTAC facilities when and where feasible.

q. Reports: Host installation finance and accounting offices will furnish required fiscal and other reports to HSC activities or HQ HSC. HSC activities and the installation commander will interchange appropriate reports and information as required.

r. Administrative Services Support. HSC activities are normally responsible for all elements of the records management program, and are supervised by HQ HSC. Where activities are too small to be staffed to perform forms management or publications and blank forms supply functions, local formalized agreements (host-tenant agreements or memorandums of understanding) may be established with the installations to provide this support. This also applies when an element (such as a clinic) is located on a separate installation or site too distant for the parent organization to adequately support, and in these instances may also include records management support.

s. Accident prevention and Safety Management Support. Host commanders will provide safety services to HSC activities when specifically requested; however, normal tenant services prescribed in AR 385-10 and not specifically medical unique will be routinely provided.

t. Mobilization Requirements. Compliance with mobilization mission requirements outlined in the Health Services Command Mobilization Plan (U) is essential to providing required health services within the HSC command in support of the expanded Army for partial or full mobilization. FORSCOM and TRADOC commanders at active and at other than active installations will, upon request of MEDCEN/MEDDAC Commanders or the Commandant, Academy of Health Sciences, US Army:

(1) Provide adequate sites for the construction of mobilization hospitals.

(2) Provide building space, subject to availability, for temporary AMEDD use, to include patient care, storage of prepositioned war reserve stocks for medical facilities and student classrooms for specialist training.

(3) Insure that all requests for alteration, modification, or diversion of buildings constructed to house health services facilities or AMEDD personnel are forwarded to HQ HSC, ATTN: HSLO-F, in accordance with the provisions of paragraph 1-10b, AR 40-2.

u. Audiovisual Support.

(1) Based on HSC letter, HSTV, 3 November 1976, subject: Request for Exception to AR 108-2, paragraph 2-2, with HQDA answer by 1st Indorsement, DAMO-ODU, 2 December 1976, the Academy of Health Sciences, US Army, was authorized

MEMORANDUM OF UNDERSTANDING - FORSCOM, TRADOC, HSC

an exception to AR 108-2 to maintain command and control of its audiovisual facility. Commander, FORSCOM/Commander, Fort Sam Houston, will not provide audiovisual support as defined in AR 108-2 to the Academy of Health Sciences. The Academy of Health Sciences will provide all graphic arts support to Brooke Army Medical Center..

(2) Based on HSC letter, HSTV, 7 January 1977, subject: Request for exception to AR 108-2, paragraph 2-2, with HQDA answer by message, DAMO-ODU, 041428Z FEB 77, same subject, the Commander, HSC, was authorized an exception to AR 108-2 to maintain command and control of dedicated medical audiovisual support within the command, however, general audiovisual support activities belonging to HSC were to be consolidated with the installation TASC under the management of the Training Aids Service Officer (TASO).

(3) The following definitions apply:

(a) Dedicated Medical Audiovisual Support is defined as those products and services listed in paragraph 2-3, AR 108-2, required to support the following full-time HSC functions:

1 Patient care and education.

2 Medical classroom instruction.

3 Operating room.

4 Medical laboratories.

5 Direct support of doctor or nurse.

(b) General Audiovisual Support is defined as those products and services listed in paragraph 2-3, AR 108-2, required to support:

1 Short term requirements of user operated audiovisual equipment.

2 Requirements for DA adopted media.

3 Briefings, conferences, and workshops.

4 Public affairs photography.

5 Photographic laboratory color processing (film and prints) as required.

6 Fabrication and loan of training aids and devices.

(4) Commander, HSC, agrees to document, program, budget, and fund for dedicated audiovisual support required for all HSC activities/units as defined in paragraph 6u(3)(a) above.

(5) Commander, FORSCOM, agrees to document, program, budget, and fund for general audiovisual support required for all HSC activities/units (except the Academy of Health Sciences) as defined in paragraph 6u(3)(b) above. It is agreed that this support will be provided on a nonreimbursable basis. DA adopted training support materials reflected in DA Pamphlet 108-1, Index of Army Motion Pictures and Related Audiovisual Aids, and DA Pamphlet 310-2, Index and Description of Army Training Devices, will be provided by Commander, FORSCOM, as part of the general audiovisual support provided to all customers IAW AR 5-9.

v. Problems unresolved at installation level will be referred to the next higher echelon for resolution.

6. EFFECTIVE DATES AND TERMINATION.

a. This agreement becomes effective upon signature of all Parties and supersedes Memorandum of Understanding, with addendae, of 5 July 1977.

b. This Memorandum of Understanding continues to remain in effect after mobilization.

c. This Memorandum of Understanding will be reviewed annually, during the fourth quarter of the fiscal year, or updated at any time a major policy change affects the provisions of this document.

d. This Memorandum of Understanding may be terminated upon the mutual agreement of all signatories or 90 days following the receipt of written notice of withdrawal by one of the signatories.

Charles P. Graham	John B. Blount	D H Triano
CHARLES P. GRAHAM Major General, GS Chief of Staff US Army Forces Command	JOHN B. BLOUNT Major General, GS Chief of Staff US Army Training and Doctrine Command	DONALD H. TRIANO Colonel, MSC Chief of Staff US Army Health Services Command
26 August 1982 DATE	23 August 1982 DATE	3 September 1982 DATE

Army Ft McPherson Ga 1975/82

APPENDIX B

Skill Level 1 Examination

MOS SKILL RETENTION SURVEY

Instructions:

This survey and "quiz" are being administered as part of a study for the Chief Dietitian, Office of the Surgeon General. Your concern and assistance are appreciated. Answers to the "quiz" questions will be used only for this study and will not be graded. The responses you give to the questions should be based on information you were taught at the Academy of Health Sciences and that contained in the Soldier's Manual for the Hospital Food Service Specialist Skill Level 1 and 2.

1. What rank are you?

   a. E-1

   b. E-2

   c. E-3

   d. E-4

2. Are you:

   a. Male

   b. Female

3. A new shipment of nonperishable items has been receive ' and checked. What is the proper storage location for the new stock? (Select one)

   a. Place new stock in front of old stock

   b. Place old stock in front of new stock

   c. Place new stock on the bottom shelves and place old stock on the top shelves

   d. Place old stock on the bottom shelves and place new stock on the top shelves

   e. Leave it in the aisle until old stock is gone

4. What is the correct temperature range for a frozen food cabinet in use? (Select one)

a. 15 degrees F to 20 degrees F

b. 10 degrees F to 15 degrees F

c. 0 degrees F to 10 degrees F

d. -10 degrees F to 0 degrees F

e. -20 degrees F to -10 degrees F

5. You are performing routine refrigerator temperature checks and you notice it is registering in the danger zone. To whom will you report this? (Select one)

a. A co-worker

b. Post Food Advisor

c. Class I Supply Point

d. First Cook

e. Dietitian

6. Which task will you NOT perform during the inspection before operating the M-2 Burner Unit? (Select one)

a. Check fuel tank for leaks

b. Clean the preheater orifice

c. Make sure preheater and generator valves turn easily and are closed

d. Check burner unit for sign of damage

e. Make sure burner slots are not damaged or clogged

7. When the M-2 burner unit is being used, what is the correct amount of pressure to maintain? (Select one)

a. 3 to 8 pounds

b. 10 to 20 pounds

c. 15 to 25 pounds

d. 20 to 30 pounds

e. 30 to 40 pounds

8. When using the M-59 range outfit, where must the baking and roasting pan be placed for roasting? (Select one)

a. On top of pot cradle

b. On top of baking rack set

c. On top of cooking position

d. In bottom cooking position of range

e. On griddle supports

9. When setting up serving lines in a forward or rear area, how far apart should you put the tables? (Select one)

a. Approximately 5 yards apart

b. As far apart as possible

c. Approximately 10 feet apart

d. As close together as possible

e. As directed by the First Cook

10. The name of the patient, his or her ward, room or bed number and the type diet should be recorded on the bottom of the Dietary History Record (DA Form 2924). When should the top portion and date be filled out? (Select one)

a. The top is never used

b. When the dietitian tells you to

c. When initiating the card

d. If the Dietary History Record is to be kept

e. When the patient is discharged

11. Many foods are made up of combinations of food groups. What combination is pizza? (Select one)

a. Meat and fats, sweets, alcohol, fruit and vegetables

b. Meat, fruits and vegetables

c. Sweets, meat, bread and cereal, fruit and vegetables

d. Alcohol, meat, fruit and vegetables, milk

e. Meat, fats, breads and cereals, fruits and vegetables

12. What food items should be listed on a Special Tally? (Select one)

a. An item not appearing on a food code worksheet

b. Any item which is a write-in on a menu

c. An item with a nonstandard portion size

d. Any item the dietitian tells you to add

e. A nurse's request in behalf of a patient

13. Mrs. Jones is on a Calorie Restricted Diet and dislikes peas and tomatoes. The Food Code Worksheet for the meal has no acceptable substitutes. What should you do? (Select one)

a. Cross the code out on the menu pattern

b. Visit the patient and ask him for another choice

c. Find an acceptable substitute in the Food List of TM 8-500

d. Ask the dietitian

e. Call the ward nurse

14. You are a cook in a Combat Hospital Nutrition Care Division. You have been assigned preparation for modified diets. Braised Beef Cubes are on the menu and you will use the TM 10-412 recipe for reference. Canned diced beef will be used to prepare this food item. Which code lines can the product be used on? (Select one)

a. 1M, 2M

b. 3M, 4M

c. 5M, 6M

15. Which process showed NOT be used in preparing meat for calorie-restricted diets? (Select one)

a. Broiling

b. Baking

c. Braising

d. Frying

e. Charbroiling

16. Which technique can not be used in preparing foods for consistency diets? (Select one)

a. Grinding

b. Slicing

c. Thinning

d. Blending

e. Straining

17. You have just received a call from the ward. Mrs. Smith is now NPO according to the ward clerk. What should you do first? (Select one)

a. Update the patient's Dietary History Record

b. Delete any Special Tally Items

c. Remove the patient's menu pattern from the sequence.

d. Prepare a new nourishment level

e. Check with the dietitian

APPENDIX C

94F Skill Level 1 Opinion Survey

Orientation For Profis Fillers- Skill Level 1 Retention Survey

You are being asked to participate in a research project aimed at comparing MOS skill retention between 94F skill level 1 soldiers assigned to Health Services Command and Forces Command. The project is attempting to do this by collecting information from soldiers, supervisors, Commanders or Chiefs, Nutrition Care Divisions and you the profis filler.

So that you may understand why you are being asked for help, the long range objectives of the project are presented. The Chief Dietitian, Office of the Surgeon General continues to be concerned with skill retention and the factors that may impact on that. If skill degradation is identified, the responses to the surveys will be evaluated in an effort to determine the contributing factors so that corrective actions can be formulated. Information is being gathered for this project in two ways. Skill level one enlisted personnel will be given a brief quiz comprised of questions covering a wide gamut of MOS specific knowledge. To supplement the quiz, they will be asked to complete an opinion survey.

Your survey is part of the study to determine the influence you may have on skill retention of the 94F at skill level one assigned to the field unit to which you are assigned, particularly regarding training.

Please complete the survey, placing your answers on the answer sheet using a #2 pencil. Leave the student/respondent identification side blank. Be sure you return the survey in a **FLAT** envelope to permit computer grading.

Giving the kind of detailed information requested will mean a considerable effort on your part. Unless this kind of detailed data is collected, however, there can be no good way of finding out how different factors influence skill retention/degradation. Such information is needed if changes are to be made effectively. Remember, your answers will only be used to support this research project and not for individual evaluation, so please "tell it like it is."

Thank you in advance for your assistance.

Sincerely,

Carol P. Mouritsen
MAJ, AMSC
Administrative Resident
DeWitt Army Community Hospital
Fort Belvoir, VA 22060
AV 354-2987

94 F ENLISTED PERSONNEL SURVEY

Retention of MOS-related skills that you learned at the Academy of Health Sciences is of major concern to personnel at the Office of the Surgeon General. Your assistance by completing this survey will help planners determine your opinion about the MOS training you receive early in your career. This survey is interested in your opinion of training in your present assignment. Since your answers will help shape the training programs of the future, your honest answers are appreciated. Mark the answer sheet to match the letter of the answer or fill in the blanks on this form. **Select only one answer per question.** Return both the questionnaire and answer sheet.

1. Are you:

   a. Male

   b. Female.

2. How old are you?

   a. 18

   b. 19

   c. 20

   d. 21

   e. 22 or older.

3. What is the highest level of education you have completed?

   a. 11th grade or below

   b. 12th grade(high school)

   c. 1-2 years college

   d. 3-4 years college

   e. graduate level degree.

4. When did you graduate from 94F10 school? Month_____ Year_____.

5. When did you graduate from 94B school at Ft Jackson? Month_____ Year_____.

6. Please list your assignment history since graduation to the present.

POST, ADDRESS	MEDCEN	MEDDAC	COMBAT SUPPORT HOSPITAL OR EVAC HOSPITAL

7. Is MOS-related training conducted in your unit?

   a. Yes

   b. No.

8. If MOS training is conducted in your unit, what is the frequency?

   a. Not conducted

   b. Weekly

   c. Every other week

   d. Monthly

   e. Quarterly

9. MOS training sessions generally lasted:

   a. 15 minutes

   b. 30 minutes

   c. 45 minutes

   d. 1 hour

   e. Longer than 1 hr.

10. I believe MOS training sessions should be:

a. 15 minutes

b. 30 minutes

c. 45 minutes

d. 1 hour

e. Longer than 1 hr.

11. Regarding MOS-related training in your present assignment what is your degree of satisfaction?

a. Very Satisfied

b. Satisfied

c. Undecided

d. Dissatisfied

e. Very Dissatisfied

12-14. Who conducts your MOS-related training if conducted?

TRAINER			
12. Dietitian	a. Yes	b. No	c. Not conducted
13. Senior 94 F NCO	a. Yes	b. No	c. Not conducted
14. 94 F Junior personnel	a. Yes	b. No	c. Not conducted

15. If the dietitian conducts training, what percent of the time does (s)he teach?

a. 5%

b. 10%

c. 15%

d. 20%

e. 25% or greater

16. If 94F Senior(E6 or above) personnel conduct training, what percent of the time do they teach?

a. 5%

b. 10%

c. 15%

d. 20%

e. 25% or greater

17. If 94F Junior personnel conduct training, what percent of the time do they teach?

a. 5%

b. 10%

c. 15%

d. 20%

e. 25% or greater

18. Who do you think should conduct the majority of your MOS-related training?

a. Dietitian

b. 94 F Senior NCO

c. 94 F contemporaries

19. The trainers usually seem prepared to teach the class.

a. Strongly Agree

b. Agree

c. Undecided

d. Disagree

e. Strongly Disagree

20. The trainers usually use visual aids.

a. Yes

b. No

21. Visual aids help me learn more quickly:

a. Strongly Agree

b. Agree

c. Undecided

d. Disagree

e. Strongly Disagree

22. The trainer usually provides handouts:

a. Yes

b. No

23. If provided handouts in a class, I would use them in studying for SQT exams.

a. Yes

b. No

24. I pay attention and learn the material provided in class better when I know I will be quizzed or examined.

a. Strongly Agree

b. Agree

c. Undecided

d. Disagree

e. Strongly Disagree

25. The trainer usually gives a quiz or exam after the class.

a. Yes

b. No

26-40. Which of these skills did you use in your present assignment?

SKILL		
26. Modified Diet Writing	a. Yes	b. No
27. Patient Interviews	a. Yes	b. No
28. Diet Counseling	a. Yes	b. No
29. Clinical Dietetics Admin	a. Yes	b. No
30. Regular Food Prep	a. Yes	b. No
31. Modified Diet Food Prep	a. Yes	b. No
32. Nourishment Prep	a. Yes	b. No
33. Special-Tube Formula Prep	a. Yes	b. No
34. Assembly of Patient Trays	a. Yes	b. No
35. Service of Patient Trays	a. Yes	b. No
36. Service of Cafeteria Food	a. Yes	b. No
37. Ingredient Preparation	a. Yes	b. No
38. Baking	a. Yes	b. No
39. Meat Cutting	a. Yes	b. No
40. Receiving, Issuing, Storing Supplies	a. Yes	b. No
41. Ration Accounting	a. Yes	b. No
42. Pot and Pan or Dishwashing	a. Yes	b. No

43-60. I believe performance of these skills is important as a Nutrition Care Specialist? The following abbreviations should be used for questions 43-60:

Strongly Agree (SA) - Select Answer A

Agree (A) - Select Answer B

Undecided (U) - Select Answer C

Disagree (D) - Select Answer D

Strongly Disagree (SD) - Select Answer E

SEE PREVIOUS PAGE FOR ABBREVIATIONS:

43. Modified Diet Writing	a. (SA)	b. (A)	c. (U)	d. (D)	e. (SD)
44. Patient Interviews	a. (SA)	b. (A)	c. (U)	d. (D)	e. (SD)
45. Diet Counseling	a. (SA)	b. (A)	c. (U)	d. (D)	e. (SD)
46. Clinical Dietetics Admin	a. (SA)	b. (A)	c. (U)	d. (D)	e. (SD)
47. Regular Food Prep	a. (SA)	b. (A)	c. (U)	d. (D)	e. (SD)
48. Modified Diet Food Prep	a. (SA)	b. (A)	c. (U)	d. (D)	e. (SD)
49. Nourishment Prep	a. (SA)	b. (A)	c. (U)	d. (D)	e. (SD)
50. Special-Tube Formula Prep	a. (SA)	b. (A)	c. (U)	d. (D)	e. (SD)
51. Assembly of Patient Trays	a. (SA)	b. (A)	c. (U)	d. (D)	e. (SD)
52. Service of Patient Trays	a. (SA)	b. (A)	c. (U)	d. (D)	e. (SD)
53. Service of Cafeteria Food	a. (SA)	b. (A)	c. (U)	d. (D)	e. (SD)
54. Ingredient Preparation	a. (SA)	b. (A)	c. (U)	d. (D)	e. (SD)
55. Baking	a. (SA)	b. (A)	c. (U)	d. (D)	e. (SD)
56. Meat Cutting	a. (SA)	b. (A)	c. (U)	d. (D)	e. (SD)
57. Receiving, Issuing, Storing Supplies	a. (SA)	b. (A)	c. (U)	d. (D)	e. (SD)
58. Ration Accounting	a. (SA)	b. (A)	c. (U)	d. (D)	e. (SD)
59. Pot and Pan or Dishwashing	a. (SA)	b. (A)	c. (U)	d. (D)	e. (SD)

60. I enjoy working in this MOS:

a. Strongly Agree

b. Agree

c. Undecided

d. Disagree

e. Strongly Disagree

61. If you are assigned to a field unit now, how much time (in days) in the past year did you spend in MOS proficiency training at the hospital?

a. 10 or below

b. 11-20

c. 21-30

d. 31-90

e. 90 or greater

62. If you are assigned to a field unit now, do you believe you spent enough time rotating thru the Nutrition Care Division at the hospital?

a. Yes

b. No

63-80. If you are presently assigned to a field unit, select the skills you have or will practice during your hospital rotation.

63. Modified Diet Writing	a. Yes	b. No
64. Patient Interviews	a. Yes	b. No
65. Diet Counseling	a. Yes	b. No
66. Clinical Dietetics Admin	a. Yes	b. No
67. Regular Food Prep	a. Yes	b. No
68. Modified Diet Food Prep	a. Yes	b. No
69. Nourishment Prep	a. Yes	b. No
70. Special-Tube Formula Prep	a. Yes	b. No
71. Assembly of Patient Trays	a. Yes	b. No
72. Service of Patient Trays	a. Yes	b. No
73. Service of Cafeteria Food	a. Yes	b. No
74. Ingredient Preparation	a. Yes	b. No
75. Baking	a. Yes	b. No

76. Meat Cutting a. Yes b. No

77. Receiving, Issuing, Storing Supplies a. Yes b. No

78. Ration Accounting a. Yes b. No

79. Pot and Pan or Dishwashing a. Yes b. No

80. Do you feel the rotation is valuable to the retention of your clinical skills?

a. Strongly Agree

b. Agree

c. Undecided

d. Disagree

e. Strongly Disagree

81-97. What training would you like added to your hospital rotation?

81. Modified Diet Writing a. Yes b. No

82. Patient Interviews a. Yes b. No

83. Diet Counseling a. Yes b. No

84. Clinical Dietetics Admin a. Yes b. No

85. Regular Food Prep a. Yes b. No

86. Modified Diet Food Prep a. Yes b. No

87. Nourishment Prep a. Yes b. No

88. Special - Tube Formula Prep a. Yes b. No

89. Assembly of Patient Trays a. Yes b. No

90. Service of Patient Trays a. Yes b. No

91. Service of Cafeteria Food a. Yes b. No

92. Ingredient Prep a. Yes b. No

93. Baking a. Yes b. No

94. Meat Cutting a. Yes b. No

95. Receiving, Issuing, Storing Supplies a. Yes b. No

96. Ration Accounting a. Yes b. No

97. Pot and Pan or Dishwashing a. Yes b. No

98. Have you ever taken the Skill Qualification Test (SQT)?

a. Yes

b. No

99. If you have taken the SQT, did you study for it on your own?

a. Yes

b. No

100. If you have taken the SQT test, what years did you take it?

a. 1979

b. 1980

c. 1981

d. 1982

e. 1983

APPENDIX D

Opinion Survey: Chief Nutrition Care Division

CHIEFS NUTRITION CARE DIVISION SURVEY

Retention of MOS-related skills among 94F junior enlisted personnel is major concern to the Chief, Dietitian Section, COL Frances A. Iaroboni, Office of the Surgeon General. A study of which this survey is a part, is being conducted to assist her in shaping training policy and programs for the future. Your candid answers will be greatly appreciated. Select a single answer best describing your opinion by filling in the circle on the answer sheet matching the letter of the answer.

1. Do you conduct 94F MOS-related training in your unit?

    a. Yes

    b. No

2. Are the FORSCOM 94F personnel on your post invited to attend your MOS-related training?

    a. Yes

    b. No

3. If the answer to number 2 is Yes, do the FORSCOM 94F personnel on your post attend your MOS-related training sessions on a regular basis?

    a. Yes

    b. No

4. MOS-related training is conducted in your division:

    a. Daily

    b. Weekly

    c. Every other week

    d. Monthly

    e. Quarterly

5. MOS training sessions last:

    a. 15 minutes

    b. 30 minutes

    c. 45 minutes

    d. 1 hour

    e. Longer than 1 hr.

6. I believe the average length of each MOS training sesion should be:

a. 15 minutes

b. 30 minutes

c. 45 minutes

d. 1 hour

e. Longer than 1 hr.

7. Regarding 94F MOS-related training in your unit, what is your degree of satisfaction?

a. Very Satisfied

b. Satisfied

c. Unsure

d. Dissatisfied

e. Very Dissatisfied

8-10. Who conducts your MOS-related training?

8. Dietitians	a. Yes	b. No	c. Not Conducted
9. 94F Senior NCO(E6 or above)	a. Yes	b. No	c. Not Conducted
10. 94F Junior Personnel	a. Yes	b. No	c. Not Conducted

11. Who do you think should conduct the majority of your training?

a. Dietitian

b. 94F Senior NCO

c. 94F Junior Personnel

12. I am satisfied with the quality of the MOS-related training conducted in my division:

a. Strongly Agree

b. Agree

c. Unsure

d. Disagree

e. Strongly Disagree

13. FORSCOM assigned 94F enlisted personnel on your post rotate in your division for MOS proficiency training for a total of:

a. 2 weeks

b. 4 weeks

c. 6 weeks

d. 2 months

e. 3 months or greater

14. I believe the MOS rotation should comprise this amount of each year:

a. 2-4 weeks

b. 4-6 weeks

c. 6-8 weeks

d. 2-3 months

e. 3 months or greater

15. I believe MOS rotation should be consecutive:

a. Yes

b. No

16. I can handle _____ 94F MOS proficiency rotation personnel in my division at current staffing levels.

a. one

b. two

c. three

d. four

e. five

17. I am satisfied with the quality of the MOS proficiency training rotations:

a. Strongly Agree

b. Agree

c. Unsure

d. Disagree

e. Strongly Disagree

18-33. FORSCOM 94F personnel perform these duties duting MOS proficiency training:

18. Patient Interviews	a. Yes	b. No
19. Modified Diet Writing	a. Yes	b. No
20. Diet Counseling	a. Yes	b. No
21. Clinical Dietetics Administration	a. Yes	b. No
22. Regular Food Preparation	a. Yes	b. No
23. Modified Diet Preparation	a. Yes	b. No
24. Nourishment Preparation	a. Yes	b. No
25. Special Formula/Tube Feeding Preparation	a. Yes	b. No
26. Assembly of Patient Trays	a. Yes	b. No
27. Service of Cafeteria Food	a. Yes	b. No
28. Ingredient Preparation	a. Yes	b. No
29. Baking	a. Yes	b. No
30. Meat Cutting	a. Yes	b. No
31. Receiving, Issuing, Storing Supplies	a. Yes	b. No
32. Ration Accounting	a. Yes	b. No
33. Pots and Pans or Dishwashing	a. Yes	b. No

34. Do you expect soldiers to devote personal time to study for the SQT?

a. Yes

b. No

35. I believe FORSCOM personnel should have a point of contact on 94F training issues at:

a. Post Level

b. FORSCOM HQ Level

c. Department of Army Level

d. None

36. I believe the point of contact on 94F training issues should be:

a. Dietitian

b. Senior 94F NCO

c. MSC

d. None

APPENDIX E

Opinion Survey: FORSCOM Commander

FORSCOM MEDICAL UNIT COMMANDERS

Retention of MOS related skills among 94F junior enlisted personnel is of major concern to the Chief, Dietitian Section, COL Francis A. Iacoboni, Office of the Surgeon General. A study of which this survey is a part, is being conducted to assist her in shaping training policy and programs for the future. Your candid answers will be greatly appreciated. Select a single answer best describing your opinion by filling in the circle on the answer sheet matching the letter of the answer.

1. Do you conduct 94F MOS-related training in your unit?

    a. Yes

    b. No

2. Training sessions are conducted primarily:

    a. In garrison by unit

    b. By the hospital

    c. In the field

3. There were _____ MOS-related training session conducted in the period June 1982-June 1983.

    a. 10

    b. 15

    c. 20

    d. 25

    e. 30 or greater

4. MOS-related training is conducted in the unit for the 94F personnel:

    a. Daily

    b. Weekly

    c. Every other week

    d. Monthly

    e. Quarterly

5. MOS training sessions last:

a. 15 minutes

b. 30 minutes

c. 45 minutes

d. 1 hour

e. Longer than one hour

6. Regarding 94F MOS-related training in your unit, what is your degree of satisfaction?

a. Very Satisfied

b. Satisfied

c. Unsure

d. Dissatisfied

e. Very Dissatisfied

7. I believe the average length of each MOS training should be:

a. 15 minutes

b. 30 minutes

c. 45 minutes

d. 1 hour

e. Longer than one hour

8-10. Who conducts your MOS-related training to the 94F personnel?

8. Dietitians	a. Yes	b. No	c. Not conducted
9. 94F Senior NCO(E6 or above)	a. Yes	b. No	c. Not conducted
10. 94F Junior Personnel	a. Yes	b. No	c. Not conducted

11. If dietitians conduct training, what percent of the training do they conduct?

a. 5%

b. 10%

c. 15%

d. 20%

e. 25% or greater

12. If 94F Senior NCO(E6 or above) personnel conduct training, what percent of the training do they conduct?

a. 5%

b. 10%

c. 15%

d. 20%

e. 25% or greater

13. If 94F Junior Personnel conduct training, what percent of the training do they conduct?

a. 5%

b. 10%

c. 15%

d. 20%

e. 25% or greater

14. Who do you think should conduct the majority of your 94F MOS proficiency training?

a. Dietitian

b. 94F Senior NCO(E6 or above)

c. 94F Junior Personnel

15. Do your personnel rotate at the hospital for MOS proficiency training?

a. Yes

b. No

16. I am satisfied with the quality of the MOS-related training conducted to 94F personnel:

a. Strongly Agree

b. Agree

c. Unsure

d. Disagree

e. Strongly Disagree

17. If your personnel rotate, assigned 94F enlisted personnel rotate each year in the hospital for MOS proficiency training for a total of:

a. 2 weeks

b. 4 weeks

c. 6 weeks

d. 2 months

e. 3 months or greater

18. I believe the MOS proficiency training should comprise this amount of each year:

a. 2 weeks

b. 4 weeks

c. 6 weeks

d. 2 months

e. 3 months or greater

19. I am satisfied with the quality of the MOS proficiency training rotations in the hospital:

a. Strongly Agree

b. Agree

c. Unsure

d. Disagree

e. Strongly Disagree

20. The hospital and this field unit on this installation have a close working relationship:

a. Strongly Agree

b. Agree

c. Unsure

d. Disagree

e. Strongly Disagree

21. In the period of a year, the first term 94F personnel assigned to your unit are attached to the hospital's Nutrition Care Division for MOS proficiency training for:

a. 15 days

b. 30 days

c. 45 days

d. 60 days

e. 90 days or longer

22. During MOS proficiency training rotation, I believe the hospital rotates 94F personnel through the varied activities of the Nutrition Care Division:

a. Yes

b. No

23. The MOS proficiency training rotation covers a consecutive period of time:

a. Yes

b. No

24. Would it be helpful to you to have a Dietitian at your post level to be more involved in training?

a. Yes

b. No

25. Would it be helpful to you to have centrally developed MOS-specified training modules for 94F personnel distributed to your unit to assist in your training effort?

a. Yes

b. No

26. Would you like to have a point of contact at a higher headquarters on 94F training issues?

a. Yes

b. No

27. I would like a point of contact on 94F training issues at:

a. None

b. FORSCOM

c. Department of Army

28. I would like my point of contact on 94F training issues to be:

a. None

b. Dietitian

c. Senior 94F NCO

d. MSC

29. I think the most important training factor for 94F personnel is:

a. the trainer

b. the training module

c. the higher headquarters contact

d. Dietitian involvement at post level

30. Do you expect soldiers to devote personal time study for the SQT?

a. Yes

b. No

APPENDIX F

Opinion Survey: PROFIS Fillers

PROFIS FILLERS SURVEY

Retention of MOS-related skills among 94F junior enlisted personnel is of major concern to the Chief, Dietitian Section, COL Frances A. Iacoboni, Office of the Surgeon General. A study of which this survey is a part, is being conducted to assist her in shaping training policy and programs for the future. Your candid answers will be greatly appreciated. Select a single answer best describing your opinion by filling in the circle on the answer sheet matching the letter of the answer.

1. Are you assigned to the same post as the FORSCOM unit to which you are assigned as a PROFIS filler?

   a. Yes

   b. No

2. Does the FORSCOM unit conduct MOS proficiency training?

   a. Yes

   b. No

3. Do you conduct MOS proficiency training to the 94F FORSCOM personnel whom you would supervise as a PROFIS filler?

   a. Yes

   b. No

4. How frequently do you conduct proficiency training?

   a. not conducted

   b. twice a year

   c. three times a year

   d. quarterly

   e. monthly

5. How long is the average training session?

   a. 15 Minutes

   b. 30 Minutes

   c. 45 Minutes

   d. 1 Hour or longer

   e. Not conducted

6-23. Which of these subjects do you teach?

6. INTERVIEWS	a. Yes	b. No	c. Not conducted
7. MODIFIED DIET WRITING	a. Yes	b. No	c. Not conducted
8. DIET COUNSELING	a. Yes	b. No	c. Not conducted
9. CLINICAL DIETETICS ADMIN	a. Yes	b. No	c. Not conducted
10. REGULAR FOOD PREPARATION	a. Yes	b. No	c. Not conducted
11. MODIFIED DIET PREPARATION	a. Yes	b. No	c. Not conducted
12. NOURISHMENT PREPARATION	a. Yes	b. No	c. Not conducted
13. SPECIAL FORMULA/TUBE FEEDING PREP	a. Yes	b. No	c. Not conducted
14. ASSEMBLY OF PATIENT TRAYS	a. Yes	b. No	c. Not conducted
15. SERVICE OF PATIENT TRAYS	a. Yes	b. No	c. Not conducted
16. SERVICE OF CAFETERIA FOOD	a. Yes	b. No	c. Not conducted
17. INGREDIENT PREPARATION	a. Yes	b. No	c. Not conducted
18. BAKING	a. Yes	b. No	c. Not conducted
19. MEAT CUTTING	a. Yes	b. No	c. Not conducted
20. RECEIVING, ISSUING, STORING SUPPLIES	a. Yes	b. No	c. Not conducted
21. RATION ACCOUNTING	a. Yes	b. No	c. Not conducted
22. POTS AND PANS OR DISHWASHING	a. Yes	b. No	c. Not conducted
23. FIELD FEEDING TECHNIQUES	a. Yes	b. No	c. Not conducted

24. Are there additional subjects besides those in the previous question that you teach?

    a. Yes

    b. No

25. Where do you conduct the training?

    a. In garrison

    b. During FTX's

    c. At the hospital

    d. Not conducted

26-32. I believe the majority of the training for FORSCOM personnel should be conducted:

26. In garrison by hospital dietitian	a. Yes	b. No
27. In garrison by 94F senior personnel from hospital	a. Yes	b. No
28. In garrison by 94F junior personnel from hospital	a. Yes	b. No
29. In garrison by 94F senior personnel from unit	a. Yes	b. No
30. In garrison by 94F junior personnel from unit	a. Yes	b. No
31. In the hospital in MOS proficiency rotations	a. Yes	b. No
32. In the hospital in structured classes	a. Yes	b. No

33. I am satisfied with the quality of the MOS training conducted:

a. Strongly Agree

b. Agree

c. Undecided

d. Disagree

e. Strongly Disagree

34-39. I believe training should be composed of all these elements:

34. In garrison by hospital dietitian	a. Yes	b. No
35. In garrison by 94F senior personnel from hospital	a. Yes	b. No
36. In garrison by 94F junior personnel from hospital	a. Yes	b. No
37. In garrison by 94F senior personnel from unit	a. Yes	b. No
38. In garrison by 94F junior personnel from unit	a. Yes	b. No
39. In the hospital at the hospital in structured classes	a. Yes	b. No

40. How often does the FORSCOM unit conduct field training exercises (FTX's)?

a. Monthly

b. Every other month

c. Quarterly

d. Twice a year

e. Once a year

41. I attend field training exercises(FTX) with the FORSCOM unit:

a. Yes

b. No

42. If the answer to question 41 is yes, how often do you attend FTX's with the FORSCOM unit?

a. Once a year

b. Twice a year

c. Quarterly

d. Every other month

e. Monthly

43. I review the SQT scores for my subordinate FORSCOM 94F personnel to develop training topics.

a. Yes

b. No

44. I use SQT scores as a planning basis for training.

a. Yes

b. No

45. Do 94F enlisted FORSCOM personnel rotate through the hospital?

a. Yes

b. No

46. Are you aware of the amount of time that 94F enlisted FORSCOM personnel rotate through the hospital?

a. Yes

b. No

47. If yes, what is the period of time in days?

a. 15 days

b. 30 days

c. 45 days

d. 60 days

e. 90 days or greater

48. I believe the MOS proficiency(hospital rotation) should comprise this amount of each year:

a. 2 weeks

b. 4 weeks

c. 6 weeks

d. 2 months

e. 3 months

49. I am satisfied with the quality of the MOS proficiency training rotations:

a. Strongly Agree

b. Agree

c. Undecided

d. Disagree

e. Strongly Disagree

50. Do you expect soldiers to devote personal time to study for the SQT?

a. Yes

b. No

51. Do you think MOS specific training modules should be developed centrally, and then distributed to the FORSCOM units?

a. Yes

b. No

52. Do you think MOS training for 94F FORSCOM personnel should be monitored by someone outside the FORSCOM unit?

a. Yes

b. No

53. I would like a point of contact on 94 F training issues at:

a. None

b. FORSCOM

c. Department of Army

54. I would like my point of contact on 94 F training issues to be:

a. None

b. Dietitian

c. Senior 94 F NCO

d. MSC

55. I think the most important training issue for 94F personnel is:

a. the trainer

b. the training module

c. the higher headquarters contact

d. Dietitian involvement at post level.

APPENDIX G

Composite Tally 94F Respondents

149

MEDDAC-31 returned

MEDCEN- 18 returned

FORSCOM-45 returned

94 Total returned

94 F ENLISTED PERSONNEL SURVEY

Retention of MOS-related skills that you learned at the Academy of Health Sciences is of major concern to personnel at the Office of the Surgeon General. Your assistance by completing this survey will help planners determine your opinion about the MOS training you receive early in your career. This survey is interested in your opinion of training in your present assignment. Since your answers will help shape the training programs of the future, your honest answers are appreciated. Mark the answer sheet to match the letter of the answer or fill in the blanks on this form. **Select only one answer per question.** Return both the questionnaire and answer sheet.

	MEDDAC	MEDCEN	FORSCOM	OVERALL
1. Are you:				
a. Male	82%	86%	72%	77%
b. Female.	18%	14%	28%	23%
2. How old are you?				
a. 18	--	---	4%	
b. 19	22%	28%	13%	
c. 20	22%	---	17%	
d. 21	11%	—%	21%	
e. 22 or older.	44%	72%	45%	
3. What is the highest level of education you have completed?				
a. 11th grade or below	3%	14%	4%	
b. 12th grade(high school)	81%	72%	75%	
c. 1-2 years college	13%	---	17%	
d. 3-4 years college	3%	14%	2%	
e. graduate level degree.---		---	2%	

4. When did you graduate from 94F10 school? Month_____ Year_____.

5. When did you graduate from 94B school at Ft Jackson? Month_____ Year_____.

6. Please list your assignment history since graduation to the present.

POST, ADDRESS	MEDCEN	MEDDAC	COMBAT SUPPORT HOSPITAL OR EVAC HOSPITAL

7. Is MOS-related training conducted in your unit?

	MEDDAC	MEDCEN	FORSCOM
a. Yes	77%	86%	39%
b. No.	23%	14%	61%

8. If MOS training is conducted in your unit, what is the frequency?

a. Not conducted	23%	14%	52%
b. Weekly	37%	14%	7%
c. Every other week	6%	14%	---
d. Monthly	20%	14%	4%
e. Quarterly	14%	44%	27%

9. MOS training sessions generally lasted:

a. 15 minutes	31%	---	36%
b. 30 minutes	27%	16%	13%
c. 45 minutes	10%	16%	10%
d. 1 hour	18%	52%	23%
e. Longer than 1 hr.	14%	16%	18%

10. I believe MOS training sessions should be:

	MEDDAC (MD)	MEDCEN (MN)	FORSCOM (FS)
a. 15 minutes	15%	---	---
b. 30 minutes	37%	14%	6%
c. 45 minutes	12%	29%	10%
d. 1 hour	21%	57%	41%
e. Longer than 1 hr.	15%	---	43%

11. Regarding MOS-related training in your present assignment what is your degree of satisfaction?

a. Very Satisfied	21%	15%	4%
b. Satisfied	32%	28%	14%
c. Undecided	24%	57%	14%
d. Dissatisfied	8%	---	20%
e. Very Dissatisfied	15%	---	48%

12-14. Who conducts your MOS-related training if conducted?

TRAINER	MD	MN	FS	MD	MN	FS	MD	MN	FS	OVERALL
	a. Yes			b. No			c. Not conducted			
12. Dietitian	35	--	19	45	83	17	20	17	64	21 28 5
13. Senior 94 F NCO	71	63	36	7	25	4	22	12	60	
14. 94 F Junior personnel	43	43	---	27	43	--	30	14	--	

15. If the dietitian conducts training, what percent of the time does (s)he teach?

	MEDDAC	MEDCEN	FORSCOM
a. 5%	62%	50%	46%
b. 10%	5%	50%	18%
c. 15%	---	---	6%
d. 20%	5%	---	12%
e. 25% or greater	28%	---	18%

	MEDDAC	MEDCEN	FORSCOM
16. If 94F Senior(E6 or above) personnel conduct training, what percent of the time do they teach?			
a. 5%	10%	---	39%
b. 10%	7%	---	---
c. 15%	14%	40%	13%
d. 20%	17%	20%	22%
e. 25% or greater	52%	40%	26%
17. If 94F Junior personnel conduct training, what percent of the time do they teach?			
a. 5%	15%	25%	38%
b. 10%	25%	---	14%
c. 15%	20%	---	14%
d. 20%	5%	75%	---
e. 25% or greater	35%	---	34%
18. Who do you think should conduct the majority of your MOS-related training?			
a. Dietitian	36%	---	49%
b. 94 F Senior NCO	46%	71%	47%
c. 94 F contemporaries	18%	29%	4%
19. The trainers usually seem prepared to teach the class.			
a. Strongly Agree	16%	20%	17%
b. Agree	55%	80%	42%
c. Undecided	23%	---	17%
d. Disagree	3%	---	10%
e. Strongly Disagree	3%	---	14%
20. The trainers usually use visual aids.			
a. Yes	65%	60%	43%
b. No	35%	40%	67%

	MEDDAC	MEDCEN	FORSCOM
21. Visual aids help me learn more quickly:			
a. Strongly Agree	35%	29%	54%
b. Agree	50%	57%	34%
c. Undecided	9%	14%	8%
d. Disagree	3%	---	2%
e. Strongly Disagree	3%	---	2%
22. The trainer usually provides handouts:			
a. Yes	69%	75%	53%
b. No	**21%**	**25%**	**47%**
23. If provided handouts in a class, I would use them in studying for SQT exams.			
a. Yes	88%	83%	95%
b. No	12%	17%	5%
24. I pay attention and learn the material provided in class better when I know I will be quizzed or examined.			
a. Strongly Agree	18%	14%	37%
b. Agree	52%	43%	43%
c. Undecided	21%	29%	7%
d. Disagree	9%	---	13%
e. Strongly Disagree	---	14%	---
25. The trainer usually gives a quiz or exam after the class.			
a. Yes	44%	50%	50%
b. No	56%	50%	50%

26-40. Which of these skills did you use in your present assignment?

SKILL				
26. Modified Diet Writing	a. Yes	54%	b. No	46%
27. Patient Interviews	a. Yes	47%	b. No	53%
28. Diet Counseling	a. Yes	40%	b. No	60%
29. Clinical Dietetics Admin	a. Yes	31%	b. No	69%
30. Regular Food Prep	**a. Yes**	**97%**	**b. No**	**3%**
31. Modified Diet Food Prep	a. Yes	69%	b. No	31%
32. Nourishment Prep	a. Yes	55%	b. No	45%
33. Special-Tube Formula Prep	**a. Yes**	**26%**	**b. No**	**74%**
34. Assembly of Patient Trays	**a. Yes**	**60%**	**b. No**	**40%**
35. Service of Patient Trays	a. Yes	51%	b. No	49%
36. Service of Cafeteria Food	a. Yes	77%	b. No	23%
37. Ingredient Preparation	a. Yes	60%	b. No	40%
38. Baking	a. Yes	51%	b. No	49%
39. Meat Cutting	a. Yes	34%	b. No	66%
40. Receiving, Issuing, Storing Supplies	a. Yes	43%	b. No	57%
41. Ration Accounting	a. Yes	49%	b. No	51%
42. Pot and Pan or Dishwashing	a. Yes	54%	b. No	46%

43-60. I believe performance of these skills is important as a Nutrition Care Specialist? The following abbreviations should be used for questions 43-60:

Strongly Agree (SA) - Select Answer A

Agree (A) - Select Answer B

Undecided (U) - Select Answer C

Disagree (D) - Select Answer D

Strongly Disagree (SD) - Select Answer E

26-40. Which of these skills did you use in your present assignment?

SKILL				
26. Modified Diet Writing	a. Yes 57%	b. No 43%		
27. Patient Interviews	a. Yes 67%	b. No 33%		
28. Diet Counseling	a. Yes 33%	b. No 67%		
29. Clinical Dietetics Admin	a. Yes 33%	b. No 67%		
30. Regular Food Prep	a. Yes 67%	b. No 33%		
31. Modified Diet Food Prep	a. Yes 50%	b. No 50%		
32. Nourishment Prep	a. Yes 50%	b. No 50%		
33. Special-Tube Formula Prep	a. Yes 33%	b. No 67%		
34. Assembly of Patient Trays	a. Yes 67%	b. No 33%		
35. Service of Patient Trays	a. Yes 50%	b. No 50%		
36. Service of Cafeteria Food	a. Yes 50%	b. No 50%		
37. Ingredient Preparation	a. Yes 50%	b. No 50%		
38. Baking	a. Yes 67%	b. No 33%		
39. Meat Cutting	a. Yes 33%	b. No 67%		
40. Receiving, Issuing, Storing Supplies	a. Yes 67%	b. No 33%		
41. Ration Accounting	a. Yes 67%	b. No 33%		
42. Pot and Pan or Dishwashing	a. Yes 17%	b. No 83%		

43-60. I believe performance of these skills is important as a Nutrition Care Specialist? The following abbreviations should be used for questions 43-60:

Strongly Agree (SA) - Select Answer A

Agree (A) - Select Answer B

Undecided (U) - Select Answer C

Disagree (D) - Select Answer D

Strongly Disagree (SD) - Select Answer E

26-40. Which of these skills did you use in your present assignment?

SKILL				
26. Modified Diet Writing	a. Yes	17%	b. No	83%
27. Patient Interviews	a. Yes	8%	b. No	92%
28. Diet Counseling	a. Yes	6%	b. No	94%
29. Clinical Dietetics Admin	a. Yes	12%	b. No	88%
30. Regular Food Prep	a. Yes	98%	b. No	2%
31. Modified Diet Food Prep	a. Yes	35%	b. No	65%
32. Nourishment Prep	a. Yes	33%	b. No	67%
33. Special-Tube Formula Prep	a. Yes	14%	b. No	86%
34. Assembly of Patient Trays	a. Yes	41%	b. No	59%
35. Service of Patient Trays	a. Yes	39%	b. No	61%
36. Service of Cafeteria Food	a. Yes	55%	b. No	45%
37. Ingredient Preparation	a. Yes	78%	b. No	22%
38. Baking	a. Yes	67%	b. No	33%
39. Meat Cutting	a. Yes	56%	b. No	44%
40. Receiving, Issuing, Storing Supplies	a. Yes	31%	b. No	69%
41. Ration Accounting	a. Yes	25%	b. No	75%
42. Pot and Pan or Dishwashing	a. Yes	55%	b. No	45%

43-60. I believe performance of these skills is important as a Nutrition Care Specialist? The following abbreviations should be used for questions 43-60:

Strongly Agree (SA) - Select Answer A

Agree (A) - Select Answer B

Undecided (U) - Select Answer C

Disagree (D) - Select Answer D

Strongly Disagree (SD) - Select Answer E

SEE PREVIOUS PAGE FOR ABBREVIATIONS:

43. Modified Diet Writing	a. (SA)	b. (A)	c. (U)	d. (D)	e. (SD)
44. Patient Interviews	a. (SA)	b. (A)	c. (U)	d. (D)	e. (SD)
45. Diet Counseling	a. (SA)	b. (A)	c. (U)	d. (D)	e. (SD)
46. Clinical Dietetics Admin	a. (SA)	b. (A)	c. (U)	d. (D)	e. (SD)
47. Regular Food Prep	a. (SA)	b. (A)	c. (U)	d. (D)	e. (SD)
48. Modified Diet Food Prep	a. (SA)	b. (A)	c. (U)	d. (D)	e. (SD)
49. Nourishment Prep	a. (SA)	b. (A)	c. (U)	d. (D)	e. (SD)
50. Special-Tube Formula Prep	a. (SA)	b. (A)	c. (U)	d. (D)	e. (SD)
51. Assembly of Patient Trays	a. (SA)	b. (A)	c. (U)	d. (D)	e. (SD)
52. Service of Patient Trays	a. (SA)	b. (A)	c. (U)	d. (D)	e. (SD)
53. Service of Cafeteria Food	a. (SA)	b. (A)	c. (U)	d. (D)	e. (SD)
54. Ingredient Preparation	a. (SA)	b. (A)	c. (U)	d. (D)	e. (SD)
55. Baking	a. (SA)	b. (A)	c. (U)	d. (D)	e. (SD)
56. Meat Cutting	a. (SA)	b. (A)	c. (U)	d. (D)	e. (SD)
57. Receiving, Issuing, Storing Supplies	a. (SA)	b. (A)	c. (U)	d. (D)	e. (SD)
58. Ration Accounting	a. (SA)	b. (A)	c. (U)	d. (D)	e. (SD)
59. Pot and Pan or Dishwashing	a. (SA)	b. (A)	c. (U)	d. (D)	e. (SD)

60. I enjoy working in this MOS:

a. Strongly Agree

b. Agree

c. Undecided

d. Disagree

e. Strongly Disagree

61. If you are assigned to a field unit now, how much time (in days) in the past year did you spend in MOS proficiency training at the hospital?

a. 10 or below	54%
b. 11-20	6%
c. 21-30	6%
d. 31-90	26%
e. 90 or greater	10%

62. If you are assigned to a field unit now, do you believe you spent enough time rotating thru the Nutrition Care Division at the hospital?

a. Yes	6%
b. No	94%

63-80. If you are presently assigned to a field unit, select the skills you have or will practice during your hospital rotation.

63. Modified Diet Writing	a. Yes 52%	b. No 48%
64. Patient Interviews	a. Yes 45%	b. No 55%
65. Diet Counseling	a. Yes 46%	b. No 54%
66. Clinical Dietetics Admin	a. Yes 56%	b. No 44%
67. Regular Food Prep	a. Yes 79%	b. No 21%
68. Modified Diet Food Prep	a. Yes 70%	b. No 30%
69. Nourishment Prep	a. Yes 70%	b. No 30%
70. Special-Tube Formula Prep	a. Yes 48%	b. No 52%
71. Assembly of Patient Trays	a. Yes 77%	b. No 23%
72. Service of Patient Trays	a. Yes 70%	b. No 30%
73. Service of Cafeteria Food	a. Yes 70%	b. No 30%
74. Ingredient Preparation	a. Yes 64%	b. No 36%
75. [illegible]	a. Yes 58%	b. No 42%

76. Meat Cutting	**a. Yes**	**b. No**
77. Receiving, Issuing, Storing Supplies	a. Yes	b. No
78. Ration Accounting	a. Yes	b. No
79. Pot and Pan or Dishwashing	a. Yes	b. No

80. Do you feel the rotation is valuable to the retention of your clinical skills?

a. Strongly Agree

b. Agree

c. Undecided

d. Disagree

e. Strongly Disagree

81-97. What training would you like added to your hospital rotation?

81. Modified Diet Writing	a. Yes	b. No
82. Patient Interviews	a. Yes	b. No
83. Diet Counseling	a. Yes	b. No
84. Clinical Dietetics Admin	a. Yes	b. No
85. Regular Food Prep	a. Yes	b. No
86. Modified Diet Food Prep	a. Yes	b. No
87. Nourishment Prep	a. Yes	b. No
88. Special - Tube Formula Prep	a. Yes	b. No
89. Assembly of Patient Trays	a. Yes	b. No
90. Service of Patient Trays	a. Yes	b. No
91. Service of Cafeteria Food	a. Yes	b. No
92. Ingredient Prep	a. Yes	b. No
93. Baking	a. Yes	b. No

94. Meat Cutting	**a. Yes**	**b. No**
95. Receiving, Issuing, Storing Supplies	a. Yes	b. No
96. Ration Accounting	a. Yes	b. No
97. Pot and Pan or Dishwashing	a. Yes	b. No

98. Have you ever taken the Skill Qualification Test (SQT)?

a. Yes

b. No

99. If you have taken the SQT, did you study for it on your own?

a. Yes

b. No

100. If you have taken the SQT test, what years did you take it?

a. 1979

b. 1980

c. 1981

d. 1982

e. 1983

APPENDIX H

Responses: Chief Nutrition Care Division

Sent out-38
Returned-24
No 94 F 10-5

CHIEFS NUTRITION CARE DIVISION SURVEY

Retention of MOS-related skills among 94F junior enlisted personnel is major concern to the Chief, Dietitian Section, COL Frances A. Iacoboni, Office of the Surgeon General. A study of which this survey is a part, is being conducted to assist her in shaping [illegible] policy and programs for the future. Your candid answers will be greatly appreciated. [illegible] your opinion by filling in the [illegible] answer [illegible].

1. Do you conduct 94F MOS-related training in your unit?

a. Yes 92%

b. No 8%

2. Are the FORSCOM 94F personnel on your post invited to attend your MOS-related training?

a. Yes 39%

b. No 36%

No 94F10-25%

3. If the answer to number 2 is Yes, do the FORSCOM 94F personnel on your post attend your MOS-related training sessions on a regular basis?

a. Yes 36%

b. No 64%

4. MOS-related training is conducted in your division:

a. Daily 5%

b. Weekly 31%

c. Every other week 9%

d. Monthly 36%

e. Quarterly 14%

None-5%

5. MOS training sessions last:

a. 15 minutes --

b. 30 minutes 72%

c. 45 minutes 9.3%

d. 1 hour 9.3%

e. Longer than 1 hr. 9.3%

6. I believe the average length of each MOS training sesion should be:

a. 15 minutes ---

b. 30 [illegible] 71%

c. [illegible] 4%

d. 1 hour 22%

e. Longer than 1 hr.

7. Regarding 94F MOS-related training in your unit, what is your degree of satisfaction?

a. Very Satisfied 9%

b. Satisfied 48%

c. Unsure 22%

d. Dissatisfied 17%

e. Very Dissatisfied 4%

8-10. Who conducts your MOS-related training?

8. Dietitians a. Yes 74% b. No 13% c. Not Conducted 13%

9. 94F Senior NCO(E6 or above) a. Yes 91% b. No__ c. Not Conducted 9%

10. 94F Junior Personnel a. Yes 61% b. No30% c. Not Conducted 9%

11. Who do you think should conduct the majority of your training?

a. Dietitian 9%

b. 94F Senior NCO 86%

c. 94F Junior Personnel 5%

12. I am satisfied with the quality of the MOS-related training conducted in my division:

a. Strongly Agree 5%

b. Agree 52%

c. Unsure 22%

d. Disagree 16%

13. FORSCOM assigned 94F enlisted personnel on your post rotate in your division for MOS proficiency training for a total of:

a. 2 weeks ---

b. 4 weeks 7%

c. 6 weeks ---

d. 2 months 14%

e. 3 months or greater 79%

14. I believe the MOS rotation should comprise this amount of each year:

a. 2-4 weeks ---

b. 4-6 weeks ---

c. 6-8 weeks 10%

d. 2-3 months 45%

e. 3 months or greater 40% NONE-5%

15. I believe MOS rotation should be consecutive:

a. Yes 80%

b. No 15% NONE-5%

16. I can handle _____ 94F MOS proficiency rotation personnel in my division at current staffing levels.

a. one ---

b. two 19%

c. three 38%

d. four 10%

e. five 29% NONE-4%

17. I am satisfied with the quality of the MOS proficiency training rotations:

a. Strongly Agree 10%

b. Agree 32%

c. [illegible] 2[illegible]

d. [illegible] 10%

e. Strongly Disagree 10%

NONE 12%

18-33. FORSCOM 94F personnel perform these duties duting MOS proficiency training:

18. Patient Interviews	a. Yes	87%	b. No	13%
19. Modified Diet Writing	a. Yes	100%	b. No	---
20. Diet Counseling	a. Yes	50%	b. No	50%
21. Clinical Dietetics Administration	a. Yes	60%	b. No	40%
22. Regular Food Preparation	a. Yes	86%	b. No	14%
23. Modified Diet Preparation	a. Yes	100%	b. No	---
24. Nourishment Preparation	a. Yes	93%	b. No	7%
25. Special Formula/Tube Feeding Preparation	a. Yes	73%	b. No	27%
26. Assembly of Patient Trays	a. Yes	100%	b. No	---
27. Service of Cafeteria Food	a. Yes	73%	b. No	21%
28. Ingredient Preparation	a. Yes	73%	b. No	27%
29. Baking	a. Yes	60%	b. No	40%
30. Meat Cutting	a. Yes	58%	b. No	42%
31. Receiving, Issuing, Storing Supplies	a. Yes	75%	b. No	25%
32. Ration Accounting	a. Yes	75%	b. No	25%
33. Pots and Pans or Dishwashing	a. Yes	21%	b. No	79%

None Assigned
5 respond

34. Do you expect soldiers to devote personal time to study for the SQT?

a. Yes 100%

b. No

35. I believe FORSCOM personnel should have a point of contact on 94F training issues at:

a. Post Level 57%

b. FORSCOM HQ Level 33%

c. Department of Army Level 10%

d. None ---

36. I believe the point of contact on 94F training issues should be:

a. Dietitian 27%

b. Senior 94F NCO 73%

c. MSC ---

d. None ---

APPENDIX I

Responses: FORSCOM Commander

Sent out-15
Returned-11
Rate of Return-73%

FORSCOM MEDICAL UNIT COMMANDERS

Retention of MOS related skills among 94F junior enlisted personnel is of major [illegible] to the [illegible] Section, COL Francis A. [illegible], Office of the [illegible] to [illegible] candid answers will be greatly appreciated. [illegible] your opinion by filling in the circle on the answer sheet matching the letter of the answer.

1. Do you conduct 94F MOS-related training in your unit?

a.	Yes	81%
b.	No	19%

2. Training sessions are conducted primarily:

a.	In garrison by unit	33%
b.	By the hospital	55%
c.	In the field	11%

3. There were ______ MOS-related training session conducted in the period June 1982-June 1983.

a.	10	22%
b.	15	---
c.	20	22%
d.	25	11%
e.	30 or greater	44%

4. MOS-related training is conducted in the unit for the 94F personnel:

a.	Daily	37.5%
b.	Weekly	25%
c.	Every other week	12.5%
d.	Monthly	25%
e.	Quarterly	---

5. MOS training sessions last:

a. 15 minutes 11%

b. 30 minutes 11%

c. 45 minutes 11%

d. 1 hour 22%

e. Longer than one hour 44%

6. Regarding 94F MOS-related training in your unit, what is your degree of satisfaction?

a. Very Satisfied 20%

b. Satisfied 50%

c. Unsure ---

d. Dissatisfied 10%

e. Very Dissatisfied 20%

7. I believe the average length of each MOS training should be:

a. 15 minutes ---

b. 30 minutes ---

c. 45 minutes 10%

d. 1 hour 70%

e. Longer than one hour 20%

8-10. Who conducts your MOS-related training to the 94F personnel?

8. Dietitians a. Yes 50% b. No 20% c. Not conducted 30%

9. 94F Senior NCO (E6 or above) a. Yes 80% b. No --- c. Not conducted 20%

10. 94F Junior Personnel a. Yes 80% b. No 10% c. Not conducted 10%

11. If dietitians conduct training, what percent of the training do they conduct?

a. 5% 62.5%

b. 10% 12.5%

c. 15% ---

d. 20% 12.5%

e. 25% or greater 12.5%

12. If 94F Senior NCO(E6 or above) personnel conduct training, what percent of the training do they conduct?

a. 5% 11%

b. 10% 11%

c. 15% ---

d. 20% ---

e. 25% or greater 78%

13. If 94F Junior Personnel conduct training, what percent of the training do they conduct?

a. 5% 11%

b. 10% 33%

c. 15% ---

d. 20% 11%

e. 25% or greater 44%

14. Who do you think should conduct the majority of your 94F MOS proficiency training?

a. Dietitian 30%

b. 94F Senior NCO(E6 or above) 70%

c. 94F Junior Personnel ---

15. Do your personnel rotate at the hospital for MOS proficiency training?

a. Yes 100%

b. No ---

16. I am satisfied with the quality of the MOS-related training conducted to 94F personnel:

a. Strongly Agree 20%

b. Agree 40%

c. Unsure 20%

d. Disagree ---

e. Strongly Disagree 20%

17. If your personnel rotate, assigned 94F enlisted personnel rotate each year in the hospital for MOS proficiency training for a total of:

a. 2 weeks 10%

b. 4 weeks ---

c. 6 weeks ---

d. 2 months 10%

e. 3 months or greater 80%

18. I believe the MOS proficiency training should comprise this amount of each year:

a. 2 weeks ---

b. 4 weeks ---

c. 6 weeks ---

d. 2 months 50%

e. 3 months or greater 50%

19. I am satisfied with the quality of the MOS proficiency training rotations in the hospital:

a. Strongly Agree	40%
b. Agree	40%
c. Unsure	10%
d. Disagree	---
e. Strongly Disagree	10%

20. The hospital and this field unit on this installation have a close working relationship:

a. Strongly Agree	70%
b. Agree	10%
c. Unsure	10%
d. Disagree	10%
e. Strongly Disagree	---

21. In the period of a year, the first term 94F personnel assigned to your unit are attached to the hospital's Nutrition Care Division for MOS proficiency training for:

a. 15 days	22%
b. 30 days	---
c. 45 days	---
d. 60 days	11%
e. 90 days or longer	66%

22. During MOS proficiency training rotation, I believe the hospital rotates 94F personnel through the varied activities of the Nutrition Care Division:

a. Yes	90%
b. No	10%

23. The MOS proficiency training rotation covers a consecutive period of time:

a. Yes 100%

b. No ---

24. Would it be helpful to you to have a Dietitian at your post level to be more involved in training?

a. Yes 80%

b. No 20%

25. Would it be helpful to you to have centrally developed MOS-specified training modules for 94F personnel distributed to your unit to assist in your training effort?

a. Yes 100%

b. No

26. Would you like to have a point of contact at a higher headquarters on 94F training issues?

a. Yes 80%

b. No 20%

27. I would like a point of contact on 94F training issues at:

a. None 22%

b. FORSCOM 67%

c. Department of Army 11%

28. I would like my point of contact on 94F training issues to be:

a. None ---

b. Dietitian 60%

c. Senior 94F NCO 40%

d. MSC ---

29. I think the most important training factor for 94F personnel is:

a. the trainer 60%

b. the training module 10%

c. the higher headquarters contact 10%

d. Dietitian involvement at post level 20%

30. Do you expect soldiers to devote personal time study for the SQT?

a. Yes 100%

b. No ---

APPENDIX J

Subject Area Incorrect Responses

Objectives

1. To compare percent of correct answers to examination questions between CONUS based FORSCOM and HSC 94F junior (Skill level 1) enlisted personnel and to develop learning decay curves.

2. To analyze, thru survey, CONUS FORSCOM and HSC training relationships. 3. To analyze, thru survey, training provided to FORSCOM 94F enlisted personnel by PROFIS fillers (location, type, quality, and trainer).

4. To analyze, thru survey, training provided to FORSCOM 94F enlisted personnel by HSC personnel (length, location, type, quality, and trainer).

5. To analyze, thru survey, training provided to HSC 94F enlisted personnel by FORSCOM personnel (length, location, type, quality, and trainer).

6. To determine, thru survey, FORSCOM Medical Unit Commander's satisfaction with the skill retention, performance and training of 94F enlisted personnel.

7. To subjectively, thru survey, analyze HSC utilization of CONUS FORSCOM 94F personnel while in MOS proficiency training and compliance with directives.

FORSCOM EXAMINATION SCORES

Survey#	#months since grad	Test Score	P&S Incorrect	Field Incorrect	Clinical Incorrect
91	13	67	1	1	3
98	33	40.6	3	2	4
113	4	53.8	0	3	4
118	13	73.6	1	0	3
116	13	53.8	1	0	3
136	14	53.8	1	2	4
137	7	67	1	1	3
138	36	67	1	1	3
139	14	67	1	1	3
140	24	40.6	1	2	6
141	12	67	0	3	2
143	7	60.4	0	1	4
168	19	67	0	1	3
170	10	60.4	1	2	3
171	12	73.4	0	2	2
172	12	77	1	2	2
173	7	86.8	1	0	2
174	24	53.8	1	2	4
175	36	47.2	2	3	3
176	28	53.8	1	0	6
177	28	60.4	0	3	3
178	36	60.4	1	3	2
179	36	73.6	1	2	1
185	3	53.8	1	1	5
186	11	53.8	1	2	4
187	2	60.4	1	2	3
189	12	47.2	0	2	6
190	2	34	2	3	5
191	7	53.8	1	1	5
192	2	73.6	1	1	2
203	11	73.6	1	0	3
83	9	67	1	1	3
84	7	53.8	0	4	3
109	12	80.2	1	1	1
108	36	60.4	1	2	3
110	36	60.4	1	2	3
163	2	86.8	0	0	2
162	36	47.2	1	2	5
117	2	53.8	1	3	3
115	2	73.6	1	3	0
114	4	6.6	3	4	7
67	6	67	1	1	3
206	7	60.4	1	2	3
204	5	60.4	1	2	3
205	18	67	1	1	3
Total 45					

MEDDAC EXAMINATION SCORES

Survey#	#months since grad	Test Scores	P&S Incorrect	Field Incorrect	Clinical Incorrect
14		40.6	3	4	2
93	36	53.8	0	4	3
94	36	73.4	0	1	3
124	2	73.4	1	0	3
142	3	73.4	1	1	2
144	36	60.4	1	1	4
154	36	47.2	1	3	4
155	36	67	0	3	2
157		27.4	1	3	7
158		47.2	2	4	2
159		40.6	2	2	5
169		80.2	1	0	2
193	26	80.2	0	1	2
194	23	67	1	2	2
165	13	40.6	2	4	3
166	13	40.6	2	3	4
167	12	60.4	2	0	4
85	11	67	0	2	3
161	36	73.6	1	1	2
160	11	40.6	2	2	5
52	18	67	0	2	3
51	26	80.2	1	2	0
129	29	67	0	3	2
53	11	53.8	1	3	3
55	18	80.2	1	1	1
54	6	60.4	0	2	4
145	2	67	1	2	2
146	1	67	1	1	3
147	19	80.2	1	1	1
148	2	80.2	0	1	2
156	2	60.4	1	2	3
Total 31					

MEDCEN EXAMINATION SCORES

Survey#	#months since grad	Test Score	P&S Incorrect	Field Incorrect	Clinical Incorrect
78	8	53.8	1	2	4
79	36	67	1	1	3
80		53.8	0	2	5
81	15	53.8	1	2	4
82	7	67	1	1	3
164	36	54	1	4	5
188		60.4	0	2	4
96		67	2	0	3
92		53.8	1	2	4
90		67	1	1	3
89		60.4	1	2	3
72		80.2	0	0	3
71		67	1	2	2
16		67	2	0	3
34		13.2	3	4	6
31		67	1	1	3
33		73.6	2	0	2
32		7..6	1	1	2
Total 18					