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LEADERSHIP INSTRUCTION FOR INFANTRY
OFFICER CANDIDATES: TERMINAL TRAINING
OBJECTIVES

James A. Salter, et al

Human Resources Research Organization

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Leadership Instruction for Infantry Officer Candidates: Terminal Training Objectives

James A. Salter and T.O. Jacobs

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Fort Benning, Georgia
HUMAN RESOURCES RESEARCH ORGANIZATION

Work Unit: OC LEADER

July 1973

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The Human Resources Research Organization (HumRRO) is a nonprofit corporation established in 1969 to conduct research in the field of training and education. It is a continuation of The George Washington University Human Resources Research Office. HumRRO's general purpose is to improve human performance, particularly in organizational settings, through behavioral and social science research, development, and consultation. HumRRO's mission in work performed under contract with the Department of the Army is to conduct research in the fields of training, motivation, and leadership.

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

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FOREWORD

This report describes the work completed, by the Human Resources Research Organization, in the third phase of Work Unit OC LEADER, Systems Engineering of Leadership Training for Officer Candidate Programs. The research materials compiled in the second phase were analyzed to form Terminal Training Objectives (TTOs). These training objectives, when reflected in revised leadership instruction, are designed to improve, update, and make more effective the leadership courses taught to Officer Candidates.

The research described in this report was conducted by HumRRO Division No. 4, Fort Benning, Georgia, under the direction of Dr. T.O. Jacobs, Director. Military support was provided by the U.S. Army Infantry Human Research Unit. This unit is currently commanded by LTC Willys E. Davis; the project was initiated when the unit was commanded by LTC Chester I. Christie. The HumRRO research group consisted of Dr. T.O. Jacobs, who is the Work Unit leader, and Mr. James A. Salter. Dr. James A. Caviness also participated during earlier phases of the Work Unit.

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Meredith P. Crawford
President
Human Resources Research Organization

SUMMARY AND CONCLUSIONS

MILITARY PROBLEM

The U.S. Continental Army Command (CONARC) has directed that systems engineering procedures be applied to all programs of instruction in the Continental United States (CONUS). Because of the difficulty of applying existing systems engineering procedures (designed more for "hard skills" dealing with equipment-centered jobs) to jobs containing "soft skills,"¹ the U.S. Army Infantry School (USAIS) requested assistance in the systems engineering of Officer Candidate (OC) leadership instruction.

The objective of systems engineering methodology is to enable the development of instruction that focuses on the development of the knowledges and skills that are central to effective performance in the job for which the student is being trained. Two major problems for the systems engineering of the leadership portions of the OC graduate's initial duty assignment were (a) the basic difficulty of systems engineering "soft skills" (contrasted with hardware-oriented skills), and (b) the wide variety of initial duty assignments received by the OC graduate.

Although Infantry OC graduates are trained for a specific primary Military Occupational Specialty (MOS 1542), data available from the first phase of the research show that a selected sample of 385 Infantry OC graduates received initial assignments to a total of 66 different duty positions and 47 different MOS numbers. These data suggest that leadership training for OCs must be highly comprehensive. Furthermore, OC graduates normally do not receive additional formal leadership training until, as captains, they reach the Infantry Officer Advanced Course (IOAC); this suggests that their OC leadership training should also be highly effective.

RESEARCH PROBLEM

In Work Unit OC LEADER, research has centered upon the first three steps of systems engineering of training as specified in CONARC Reg 350-100-1. The first step, Job Analysis, involves two substeps: (a) job identification and (b) development of the task inventory. The second step, Selecting Tasks for Training, operates from the base of the complete job task inventory developed in the first step. Each task in the inventory is tested for the degree to which it is critical that the junior officer become proficient in it through formal training, prior to job entry in his initial assignment. The job tasks that survive this test are carried forward in the systems-engineering sequence. The results of the application of these steps to leadership instruction for Infantry OC students have been reported previously under Work Unit OC LEADER (1).²

The present report is concerned with the third step of systems engineering of training, Training Analysis. The tasks must be used to form training objectives, which are instructional objectives expressed in terms of the behavior expected of OC graduates. This analysis of the tasks in their job inventory statement form is necessary before training materials and testing methods can be developed. In short, the development of training objectives is the critical link between selecting tasks for school training, and developing training materials and test instruments.

¹"Soft skills" are most often found in jobs that are not defined by the hardware portion of the system, but are characterized by a high proportion of variable, nonroutine, and covert activities.

²The inventory was prepared by James A. Caviness, HumRRO Division No. 4, and was completed in June 1970.

APPROACH

The guiding principle of systems engineering of training is that training must logically follow and be determined by the actual on-the-job functions required of the job holder. The logic is that the teaching program must be both limited to, and comprehensive of, the broad spectrum of knowledges and skills functionally required in the job that the graduate will be performing immediately after he has left the training environment. Responsive to this logic, the initial steps—identification of the job and development of the task inventory—were approached by surveying two independent samples of OC graduates. For the purpose of identifying the jobs that graduates must be trained to perform, the first sample provided data on both their initial duty assignments following commissioning and all subsequent reassignments during the mandatory first tour following commission.

The second sample provided information about their on-the-job experiences in the duty positions identified through the first sample. This information was used to construct a task inventory that was submitted to a panel of five experienced officers in the Leadership Department of the U.S. Army Infantry School. Their judgments were pooled to select a manageable number of the most important tasks for formal school training.

This report covers the third step in the systems engineering approach, Training Analysis, as guided by CONARC Reg 350-100-1. This step explores the possibility that the task statement, which was adequate for inventorying the job and selecting tasks for training, may be too broad and complex to be adequate for effective training. It may be necessary to break down a job task statement into a number of component subtasks that can serve as more limited and manageable training action elements. This conversion was accomplished by leadership subject-matter experts at HumRRO. The full range of the extensive technical literature concerning leadership theory and practice was used, but particular reliance was placed upon a smaller number of publications especially relevant to leadership doctrine for the junior officer.

RESULTS

Following the first two steps of the systems engineering process (Job Analysis and Selecting Tasks for Training), the third step (Training Analysis) has been completed. Fifteen Terminal Training Objectives (TTOs) with their associated Supporting Knowledges and Skills were constructed.

Briefly, the OC graduate should be able to do the following, under combat or garrison conditions, to a standard acceptable to his CO and a majority of all subordinates:

- TTO 1—Assume command of a platoon or other unit by replacing the previous leader and causing willing acceptance of his authority and leadership.
- TTO 2—Evaluate his own leadership actions against the standard of the degree to which each action contributes to unit effectiveness.
- TTO 3—Diagnose situations, determine the leadership style or behavior required by each situation, and flexibly use the leadership style or behavior called for at that time.
- TTO 4—Obtain unit goals and missions from senior leaders, communicate them accurately to the unit as understandable tasks and goals, and define required standards of performance.

- TTO 5—Motivate unit members to regard unit goals as their own.
- TTO 6—Ensure that subordinates receive an acceptable rate of return from their contribution of effort and other costs associated with their performance of duties.
- TTO 7—Determine the individual(s) responsible for unacceptable mission performance and recommend proper corrective action.
- TTO 8—Use and support subordinate leaders.
- TTO 9—Maintain a two-way flow or exchange of information between himself and his subordinates.
- TTO 10—Protect and increase the self-esteem of unit members.
- TTO 11—Encourage and facilitate the development of close, mutually satisfying social relationships among members of the unit.
- TTO 12—Tolerate without prejudice all values held by subordinates that conflict with his own values but that do not detract from performance of the unit's mission.
- TTO 13—Provide for the human maintenance needs of his subordinates.
- TTO 14—Conduct imaginative and innovative individual and unit training.
- TTO 15—Assist his men in handling their natural fears and avoiding instances of panic.

CONCLUSION

The Terminal Training Objectives are ready to be carried forward to the next step in the systems engineering of training methodology. The revision of leadership instruction for officer candidates to reflect the TTOs should result in an improved and updated course.

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**Leadership Instruction for
Infantry Officer Candidates:
Terminal Training Objectives**

INTRODUCTION

BACKGROUND

The modern Army presents the junior officer with a great variety of challenges; thus there is a constant effort to improve and update the leadership training that he will receive before he is commissioned. Regardless of the duty position or the location of his assignment, the junior officer may be called upon to accept and manage formidable responsibilities. He may be responsible for equipment or property worth hundreds of thousands of dollars; he may be responsible for training and leading men who will be involved in combat.

The junior officer may never have fully experienced the dilemma of leadership, which involves being held responsible for the successful accomplishment of the kind of task that could never be accomplished by the leader's efforts alone. The leader is dependent upon the aid of other men. He must persuade a man to help him, decide what part of the task the man should do, tell the man what he has to do (and, in some cases, teach him how to do it), supervise him while he is doing it, evaluate the result, and accomplish all of this in a way that increases the man's readiness to help him again.

Because of these responsibilities—for the lives, well-being, and increased capability of the men under his authority—there is an unending requirement to improve the leadership ability of the young officer.

MILITARY PROBLEM

The U.S. Continental Army Command (CONARC) has directed that systems engineering procedures be applied to all Continental U.S. (CONUS) programs of instruction. The U.S. Army Infantry School (USAIS) requested HumRRO to assist in systems engineering of officer candidate (OC) leadership instruction. The requirement for systems engineering assumes that leadership requirements for a particular job can be identified. The logic is that the teaching program must be determined by the job that the graduates will be performing after they have left the training environment.

Two major problems existed for the systems engineering of the leadership portions of the OC graduate's initial duty assignment. The first was the basic difficulty of systems engineering "soft skills."³ The second was the wide variety of initial duty assignments received by the OC graduate. This suggests that leadership training for OCs must be highly comprehensive. Furthermore, because OC graduates normally receive no additional formal leadership training until, as captains, they reach the Infantry Officer Advanced Course (IOAC), their leadership training while in OC status should also be highly effective.

RESEARCH PROBLEM

Work Unit OC LEADER was concerned with the first three steps of systems engineering as they are detailed in CONARC Reg 350-100-1 (1), and presented in Figure 1.

³"Soft skills" are most often found in jobs that are not defined by the hardware portion of the system, but are characterized by a high proportion of variable, nonroutine, and covert activities.

The entire CONARC procedure for systems engineering of training, and the research and report phasing adopted by Work Unit OC LEADER, are shown in the figure, although this report concerns only the completion of Phase III, Training Analysis.

Steps in Systems Engineering of Leadership Training for Officer Candidate Programs

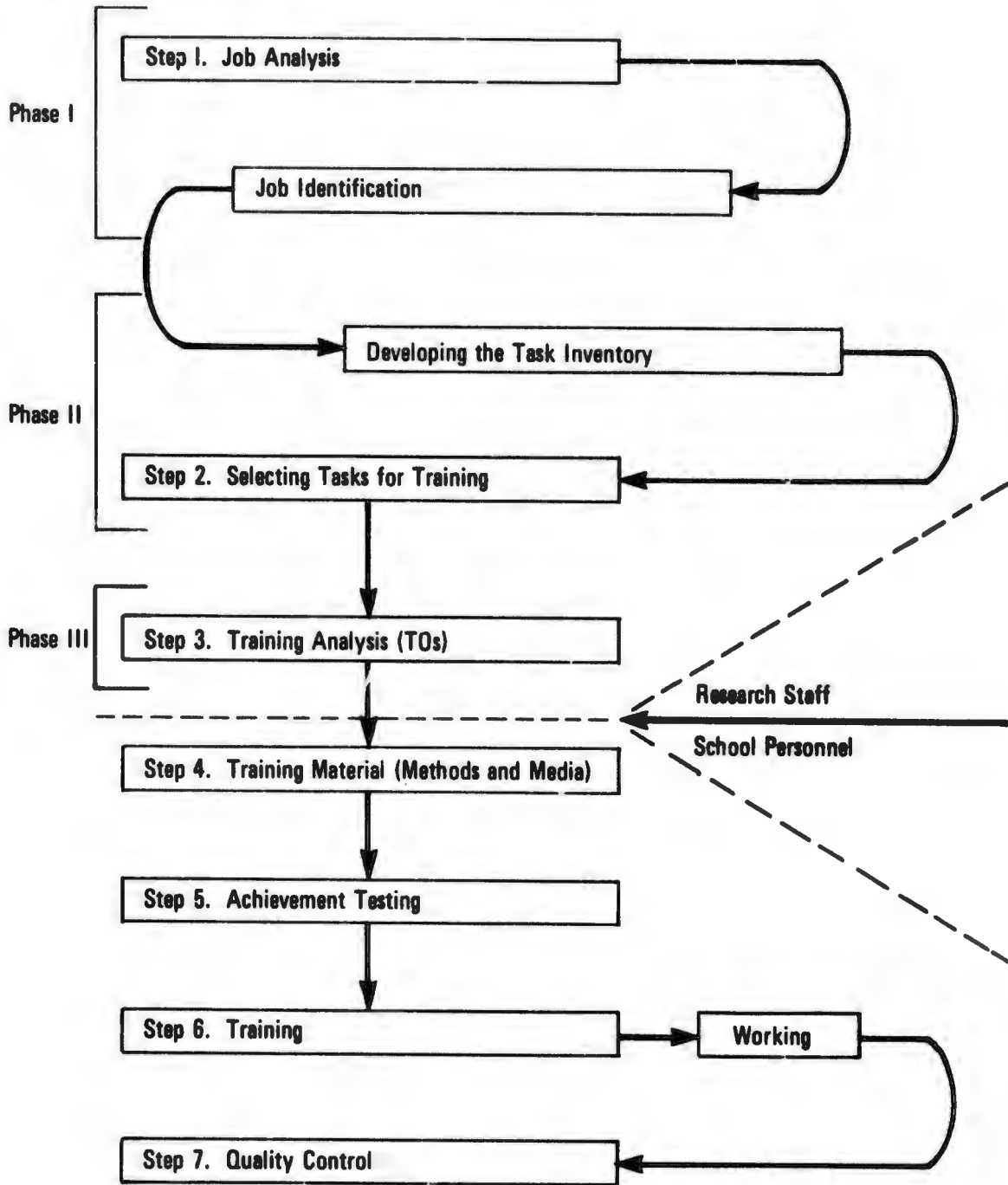


Figure 1

Phase I

The systems engineering requirement for job identification, which constitutes the first part of Job Analysis, was allotted to this phase. Job identification was completed by reviewing the assignment history of 385 recent Infantry OC graduates. The results indicated that OCs are assigned, upon graduation, to a wide variety of MOS and duty positions. The first analysis was made of the initial duty assignment, and it was determined that a total of 66 different duty positions and 47 different MOSs appeared in the initial assignment record. The second analysis was of the series of reassignments over the entire mandatory tour of duty. It was determined that the bulk of the different assignments could be reduced by classifying them according to a militarily meaningful set of categories.

Five categories, called tour patterns, were selected: Troop Command, Troop Staff, Instructor, Aviator, and Special Forces. It was possible to classify 94.4% of the sample as having served over one-half the mandatory tour in duty positions fitting one of these tour patterns (2). Information concerning these tour patterns formed the data base in the planning stages of Phase II.

Phase II

Development of the task inventory, which was the second part of Step 1, Job Analysis, and Step 2, Selection of Tasks for Training, was allocated to Phase II. The task inventory was completed by contacting a sample of 200 active-duty junior officers who held duty positions in one of the five tour patterns. The sample was stratified to reproduce the proportionate representation of each tour pattern in Phase I, as follows: Troop Command, 36.5%; Troop Staff, 26.5%; Instructor, 9%; Aviator, 20%; Special Forces, 8%.

Information was gathered through the use of a Task Inventory Questionnaire (TIQ), which contained different kinds of situations a leader might be called upon to deal with in the course of his duties.⁴ The respondent was asked to indicate whether he personally had encountered any of these situations while in his present position. At the end of each situation, he was given an opportunity to state additional actions he may have performed that were typical of his duty position whenever that situation occurred. The responses to the TIQ were tabulated, and new items were generated from the additional actions. The combination of leadership actions made up a task inventory applicable to all tour patterns.

The next step in Phase II involved the selection of tasks for training. The task inventory was submitted to a panel of five experienced military leaders who were then involved in leadership development and assessment. Each man on the panel sorted the tasks three times. The first sorting cut the number of tasks approximately in half. The second sorting produced consensus on the 63 tasks that should receive priority in training. The third sorting served to rank-order the 63 leadership tasks. These tasks, ranked for training priority, provide the base for development of leadership instruction.

Phase III

Training Analysis, the next step in the systems engineering of training, was allocated to Phase III, and is the subject of this report. This step involved the further analysis of the leadership tasks in their job inventory statement form, so that training content could be developed (e.g., content, methods and media, achievement testing procedures, etc).

⁴ An example of a TIQ item is "When an important job like a field problem or inspection is assigned to his unit, the leader explains his reasons for his instructions by telling the men why it is important to do the job the way he says."

Training Analysis addresses the possibility that the statement of the task which was adequate for the purpose of inventorying the job and selecting tasks for training may be inappropriate for the purpose of effective training; it may be necessary to reword or combine job inventory statements into more manageable Terminal Training Objectives. In short, the development of training objectives from the task inventory statements is the critical link between selecting the tasks for school training and developing training materials and evaluation methods.

METHOD

TRAINING OBJECTIVES

The methodology of systems engineering of course design for job-related training provides guidance for the derivation and development of a specified set of training objectives and the selection and organization of instructional material for efficient attainment of this set of training objectives (1, 2, 3, 4, 5, 6, 7, 8, 9).

Publications dealing with systems engineering typically define training objectives in terms of three component parts:

The training action element specifies the behavior the student is expected to be able to perform, on cue, at the end of the course.

The training conditions are derived from, and must simulate or approximate, those actual job conditions that influence task performance.

The training standards specify the acceptable level of performance that must be achieved by the trainee. They should reflect realistically the performance that is expected of a course graduate upon job-entry rather than the level of proficiency demonstrated by an experienced and successful incumbent.

In treating systems engineering of training Rundquist (5) stated:

"Following good course design procedure more than compensates for the effort required because:

1. *The training objective increases the likelihood that the course stays on target.* A set of well-written objectives is communicable. Where there is instructor turnover, objectives will be found to prevent dilution of the course by adding 'nice to know' content and subtracting relevant content.
2. *The course steadily increases in efficiency.* Students are highly likely to achieve the objectives in shorter times and with more effective instructional aids because instructors can concentrate on improving training methods.
3. *The course is effective.* The content is relevant and essential. Students acquire the knowledges and skills needed to attain the job-related objectives."

However, the development of training objectives for leadership instruction is hampered by the lack of usable precedent. Published guidance for the writer of course training objectives tends to lean heavily upon the technique of defining terms and procedural steps by contrasting good and bad examples. Unfortunately, for the purposes of writing leadership training objectives, most of the previous practical applications of the systems engineering methodology have been to training the man in a man-machine or hardware system. Therefore, the work of "defining by example" is overweighted with situations where training actions, conditions, and standards are more or less dictated by the characteristics of the machine or tool portion of the system. The difficulties thereby

caused in systems engineering such subjects as leadership can be illustrated through examination of some of the relevant similarities and differences between the leadership system and a pure man-machine system.

LEADERSHIP

Systems Approach to Leadership

At its most complicated, the leadership role of the junior officer comes as one of the middle links in the following system: Direct Superior—Junior Officer—NCO-in-Charge—Enlisted Man—Materiel and Equipment. Over time, this system is not rigid and the junior officer may be sequentially involved almost daily in all the possible combinations of the elements. In Figure 2, this concept is graphically presented; solid arrows indicate direct action of one element upon another and the dashed return arrows indicate feedback information about the results of the action. The various portions of the total system illustrated in Figure 2 can be examined and discussed separately.

Junior Officer Leadership Systems and Subsystems

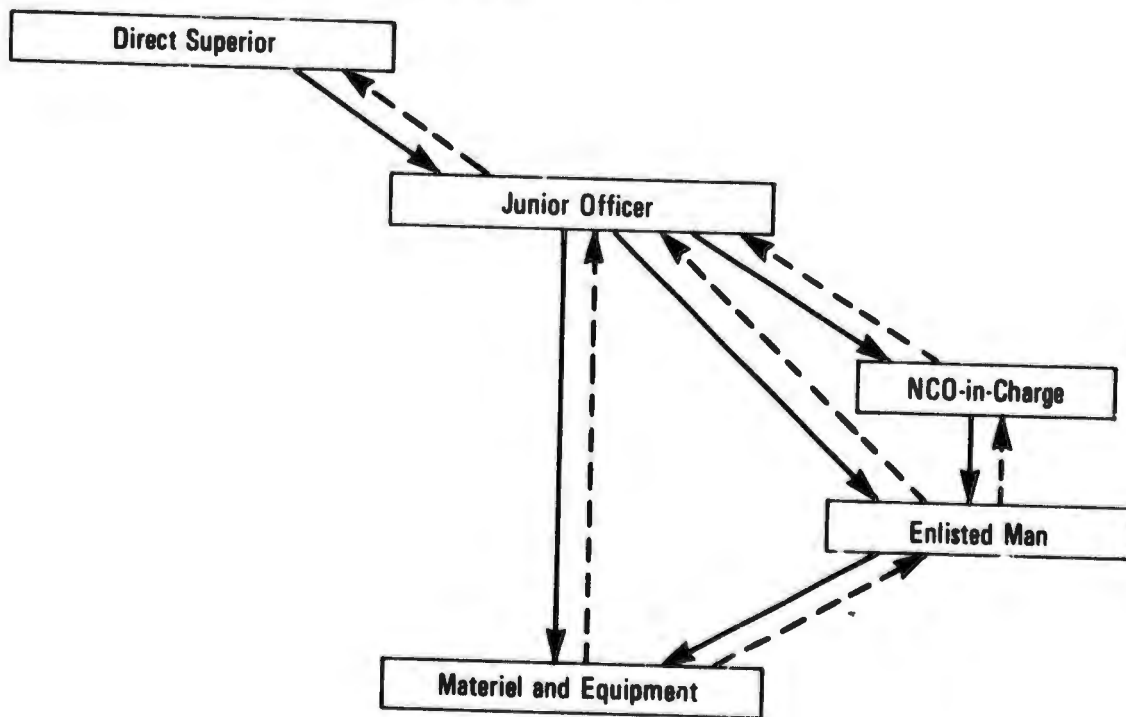


Figure 2

Junior Officer—Materiel and Equipment. The simplest case of a man-machine system is the junior officer acting directly upon the materiel and equipment allocated to his responsibility and monitoring the feedback. For example, the platoon leader must act directly upon hardware such as map and compass and must know the care and use of every weapon assigned to any of his subordinates. Technical training is necessary whenever the requirements of the duty position give the junior officer a role in the effective functioning of a man-machine system.

Whenever the junior officer acts directly upon hardware, or communicates publicly regarding hardware, his subordinates can observe this and store the information for future use. This stored information may have latent effects that either prejudice or enhance the desired effect of future leadership actions. In this sense, technical training objectives are a part of leadership training, as is indicated by the traditional leadership principle, "Set the Example" (10). However, beyond noting that technical incompetence often deters or dilutes leadership effectiveness, technical military skills and knowledges are considered to be beyond the scope of this Work Unit. The focus was, instead, upon leadership in the man-man systems.

Direct Superior—Junior Officer. The direct superior—junior officer subsystem is unusual in a number of ways. Here, the junior officer is the second man in a man-man system. The bearing of this system upon leadership training for the junior officer arises from the fact that the Army's formal hierarchy does present both needs and opportunities for "leadership up" as well as "leadership down." In a man-machine system, what the machine does has a determining effect on the next group of actions the man decides to take; in this sense, the machine sometimes "leads" the man. In a man-man system, the subordinate (the junior officer here) is often the filter through which information must pass about what is happening at the job site.

Some of the same general leadership skills that the junior officer uses in dealing with his own subordinates come into play when he is performing the role of responsible follower for his own superior—ability to (a) identify the critical factors in a situation, (b) formulate tentative plans, and (c) communicate his thinking with clarity and poise.

Junior Officer—NCO and Junior Officer—Enlisted Man. The parts of the system that have to do with noncommissioned officers (both junior and senior) and enlisted men can combine in a number of different ways at different times. According to Army doctrine, the leader's responsibilities fall into the two major areas of "accomplishment of the mission" and the "welfare of the men." The most frequently occurring system in the latter case is a man-man system as in Junior Officer—NCO or Junior Officer—Enlisted Man. Here, the focus of the leader's action is on the effect it has upon the subordinate. The focus in the former area is on the effect that the leader's actions eventually have upon the mission objectives.

A junior officer's leadership action may travel through a lengthy chain before it directly affects the mission. The chain, Junior Officer—Senior NCO—Junior NCO—Enlisted Man—Machine would be a man-man-man-man-machine system. During the course of a complicated mission, any or all of the possible linkage systems between the junior officer and the machine may occur.

Exchange Theory Approach to Leadership

A useful frame of reference for understanding leadership in man-ascendant systems is from the viewpoint of social exchange theory (11). This theory is that people interact (a fundamental man-man system) because each person gains something from the interaction. Each can and does provide a benefit to the other during the interaction, for which he can expect later benefits in return. These benefits may be minor (e.g., an exchange of compliments or merely pleasant conversation), or they may be of major consequence (e.g., badly needed advice or help on a job that must be done). The more mutually beneficial such relationships are, the more valuable they are to the participants, and the more permanent they tend to be.

While each man in a man-man system acts as though his behavior were guided by exchange principles, he probably is not consciously aware of this, and probably could not explain exchange principles if asked to do so. There are, nonetheless, some essential principles. One is the expectation of reciprocity that is shared by both participants in the

exchange. An informal contract is arrived at by which each man provides something that is needed by the other, in the expectation that the other will reciprocate.

Two further aspects of an exchange relationship concern the notions of cost and benefit. First, the action of providing something to someone else costs the person in two ways. The cost is computed from the value of the resource that one person is providing to the other, and also from the fact that the person must forego any potentially attractive alternative activities while he is carrying out his part of the exchange relationship.

The second aspect, the benefit, is equal to the value to the person of the needed resource that is being provided by the other. If the notions of cost and benefit are combined, it can be said that each person is achieving a particular benefit-to-cost ratio from the exchange relationship. If received benefits are seen as exceeding expended costs, the exchange will be considered positive and rewarding; a negative attitude toward the exchange will develop, however, if costs are seen as exceeding benefits. The exchange relationship will continue over time and the system will operate undisturbed so long as each participant is satisfied with his particular benefit-to-cost ratio.

The above discussion might make it appear that individuals are continually looking for one-to-one exchanges on a relatively short time-frame basis. The picture is more complex than this, however. It is likely that a person will quickly terminate an exchange relationship whenever his benefit-to-cost ratio is negative, if he cannot improve the ratio and if there is no coercion to continue the relationship. On the other hand, if a relationship between two individuals develops with early favorable exchanges, this reinforcement will lead both individuals to work toward a long-term relationship with expanded bases for exchange. A final aspect to note is that exchange principles apply equally well when one of the parties in the exchange is a small informal group or a large formal organization rather than another individual.

For the junior officer, leadership is largely a matter of monitoring the various exchange relationships between (a) himself and other members of the system, and (b) these members and the formal military organization, and attempting to influence the outcome of these exchanges in a direction favorable to the attainment of organizational goals. For example, by learning more about the needs of a particular subordinate, the leader can ensure that the benefit that he, or the military organization he represents, offers to this individual is relevant and valuable to the individual. This increases the likelihood that the subordinate will be willing to invest his own effort in working toward achieving the goals of the leader or organization, because he anticipates he will receive an adequate return benefit for his invested costs.

Thus, the junior officer must first be knowledgeable about the entire list of benefits that he can administer directly to his subordinates or effectively recommend to a senior authority that the organization should administer. Some of these benefits may be tangible (awards, promotion, passes) and others may be intangible (praise, opportunities for achievement and for increased self-esteem). If the junior officer is thoroughly familiar with the nature of all the benefits that he can control and offer, he is more likely to recognize those that will be particularly attractive to the individual he wishes to influence or, as it will be in many cases, a group of individuals with shared attitudes and expectations concerning what is a proper benefit in return for a given level of effort.

Leadership at the junior officer level also requires adequately developed communication skills. Communication is required in order to learn from the subordinate what he values, and to persuade him that there is a direct, reliable connection between doing what the leader wants and receiving desired benefits. Unless the individual subordinate (or group of subordinates) is convinced that what the leader wants will be instrumental in obtaining benefits that will satisfy needs, subordinates will seek alternative means that may be detrimental to the goals of the organization. Convincing the subordinate that good performance will also be rewarding to the subordinate is a large part of the leadership task.

A benefit-to-cost ratio can be raised by improving the benefit, but a more advantageous outcome can be produced if the benefit remains the same and the cost is lowered. The leader can perform another large part of the leadership task by taking actions that lower the cost of the tasks performed by his subordinates. The cost of an activity to a subordinate will be lower if it is well-planned, coordinated with interlocking activities, and supervised in a nonthreatening climate. The cost of an activity also decreases as skill in performing it increases. Leadership skill in performance counseling or other types of task instruction for the subordinate thus has a bearing on the exchange relationship.

It is fruitful to view leadership as a characteristic of a man-ascendant system where the principles of social exchange are dominant in the various man-man relationships that the junior officer must manage effectively in order to achieve efficient attainment of unit goals. The conversion of the leadership task inventory to a coherent set of terminal training objectives was accomplished using social exchange principles as fundamental guidelines.

LEADERSHIP TRAINING OBJECTIVES

In order to be responsive to the systems the junior officer will encounter on the job, it was necessary to determine the elements that would train the student to produce the desired effect on the welfare of a man or on the accomplishment of a mission (training or operational) through men.

Training action elements for leadership require many of the same considerations as those for a pure man-machine system. For the bulk of the trainee pool, priority must be given to (a) actions that are not civilian-acquired and (b) actions that can result in errors costly either to the welfare of subordinates or to the accomplishment of mission. Such errors are most likely to occur before on-the-job training can take effect. Furthermore, the action statement must attain an optimal level of specificity. It should be neither so specific that the action can be performed immediately after a simple verbal description nor so general that only knowledge about the task is acquired, without the ability to perform it. The form and content of the lesson plan are most efficient when this optimal level of specificity is attained.

On the other hand, a list of leadership action elements may appear atypical because the nature of a complicated man-man system is such that the preparation for final action is often as difficult and time-consuming as the action itself. The problem-solving process involves (a) recognition that a problem exists, (b) identification of the similarities and differences between the problem at hand and other problems of the same general class, (c) identification of the available alternative actions, (d) selection of the action that has the maximum desired effect with the minimum undesirable side-effects, (e) adequate performance of the selected action at the problem sites, and (f) evaluation of the feedback.

In this process, hidden actions involving knowledge of facts and principles, skills of mental manipulation, and general attitudes will occur more often than actions that are visible to an observer and have an observable effect on the problem. A list of leadership training actions selected for school training will contain a relatively large number of actions that are initially hidden, in order to reflect the imbalance between visible and hidden actions inherent in the problem-solving process.

The differences between a man-machine system and a man-man system are equally difficult to reconcile when developing the other elements of a training objective. One of these elements is the statement of training conditions: "Training Conditions must approximate those job conditions that influence task performance. The guiding principle is realism to the extent possible for training purposes when specifying training conditions" (1).

A number of points need to be made in regard to this. In the first place, for even the most sophisticated machine, variations in job conditions that require differences in the way the machine is operated are limited. On the other hand, a subordinate is more responsive to changes in the environment than the most sophisticated machine, and two subordinates will be less similar than two identical machines in their response to identical job conditions. For a junior officer with several different "kinds" of subordinates and rapidly shifting mission requirements, listing every critical job condition becomes a formidable undertaking; moreover, two OC graduates will undoubtedly encounter different sets of job conditions during their separate careers.

Leadership instruction can aim only at simulating the most likely or frequently encountered job conditions, which, in the case of the OC graduate, can be assumed to fall into two categories—garrison and combat job conditions. If the OC graduate has an opportunity to practice the relevant training action elements under training conditions that simulate the salient factors of these two types of job conditions, this learning will be likely to transfer to unforeseen job conditions.

Differences between a man-machine system and a man-man system also appear in the case of developing training standards. "The standard is that part of a training objective that specifies the acceptable level of performance that must be achieved by the trainee. Training standards should be stated in realistic terms that reflect on-the-job requirements" (1). Machine-ascendant systems usually come with published Department of the Army (DA) standards that are easily obtainable from field manuals, regulations, and so forth. Moreover, the machine itself often performs most of the work in obtaining reliable quantitative measurement of the performance—a rifle, for example, produces easily measured evidence of performance.

In contrast, the "product" of a leadership action is often intangible, may not appear for days or weeks after the action has occurred, may have a short life-span, and may have side effects in addition to the intended main effect. Human judgment as to what constitutes a "realistic level" of performance is often the only available method of evaluation. For example, in the first weeks after assuming command, a junior officer can make leadership errors that range from minor to serious in terms of their impact on the morale of his men and the confidence they have in him. In terms of these two kinds of "standards," no measurement is possible except the judgments either of the men themselves, or of experienced observers. Similarly, during or following training, only an observer or a group of observers can make the complex judgments necessary to determine whether a trainee's performance of the leadership actions is within the "tolerance limits." Human judgment is preferable to sole reliance upon statistics, given the present state of the art in developing these measures; also, using the judgments of several observers, rather than just one, averages out any biases that one observer might have.

Because of the characteristics of the various man-man systems in which the junior officer is involved daily, the observers who are in the best position to judge a leader's performance of a terminal training objective are his commanding officer, his subordinate leaders, and his junior subordinates. Performing the leadership terminal training objectives to a standard acceptable to this group of observers is also relevant to the job-entry level of proficiency that must be attained by the OC graduate. It seems appropriate to use just such a standard as the statement of required proficiency in the performance of terminal training objectives, and this is the type of standard that has been included in the objectives developed during this phase of the research.

RESULTS

The leadership tasks selected by the panel of experienced leaders as having high priority in OC leadership training were converted from their task inventory statement

form to a set of terminal training objectives. These objectives were the ones considered both necessary and sufficient for the OC graduate to acquire. The conversion was made so that the task inventory could be translated into a form more suitable for the purposes of accomplishing the fourth step in the systems engineering procedure, "Training Materials (Methods and Media)." Tasks that constituted a supporting knowledge or skill rather than a terminal training objective were placed under the appropriate TTOs.

The conversion from task inventory to a final set of 15 TTOs was accomplished by subject-matter specialists at HumRRO. The full range of the extensive technical literature concerning leadership theory and practice was used, but particular reliance was placed on a smaller number of publications especially relevant to the junior officer (10 through 17).

The 15 leadership terminal training objectives (and supporting knowledges and skills) that were developed from applying the three research steps of the systems engineering methodology are presented in the following section of this report.

Inventory of Leadership Terminal Training Objectives (TTOs)

Terminal Training Objective 1

Under either combat or garrison conditions, the OC graduate must *assume command of a platoon or other unit by replacing the previous leader and causing willing acceptance of his authority and leadership* to a standard acceptable to his CO and a majority of all subordinates.

SUPPORTING KNOWLEDGES AND SKILLS

The OC graduate must:

- (1) Learn the names, ranks, and physical capabilities of every member of his unit; learn the military qualifications of all subordinates and develop an initial assessment of the current and potential value of each member through observation of performance, study of available records, conversation with subordinate leaders, and informal interview.
- (2) Recognize that his initial observation of the unit should be oriented toward:
 - (a) Assessing the unit's condition and its competence to accomplish assigned missions.
 - (b) Determining the developmental goals he wishes to pursue, ensuring that they do not conflict with higher unit goals.
 - (c) Developing a deliberate and well-thought-out strategy for accomplishing his developmental goals.
- (3) Recognize that, during his initial observation, he cannot belittle unit members whom he has observed without jeopardizing his own acceptance as a leader; correction of established unit practices, unless grossly in error, should be a part of his deliberate strategy for development of the unit, not actions taken on the spur of the moment.
- (4) Seek to learn soon if there are conflicting subgroups or cliques within the unit; identify soon those of his subordinates who are influence leaders within their groups and:
 - (a) Assess their group-supported norms and attitudes, in order to learn their orientation toward high standards of performance, what they consider reasonable, and the extent to which they can be counted upon to support his own high standards and expectations.
 - (b) Assess their strengths rapidly, in order to be able, through participatory methods, to obtain their commitment to high professionalism and high standards for unit performance.
 - (c) Develop a strategy for gradual and programed effort to change any group norms not compatible with high excellence
 - (d) Know that norms can be changed only gradually, only through positive leadership, and the use of positive incentives to reward change.
 - (e) Know that threats or punitive methods, alone, will not produce desired change.
- (5) Assess the climate in his unit by observing openness of communication between unit members, and between them and himself; recognize that during his initial hours or days with the unit he must be prepared to spend unusually large amounts of time talking with unit members and observing them in order to assess the unit's climate, its way of doing things, and its customary level of performance.

- (6) Seek to challenge subordinate leaders, particularly influence leaders, to become deeply committed to unit goals through creating responsibility for them, and delegating authority as appropriate.
- (7) Demonstrate to his new subordinates as soon as practicable that he can be trusted; recognize that he should take the first step in establishing a relationship of mutual trust and respect.
- (8) Make only those promises to his subordinates that are reasonably within his position capability and individual ability to carry through
- (9) Establish through early interaction with his new subordinates that he:
 - (a) Is sympathetic to unit traditions and useful customs.
 - (b) Will not make trivial changes in policy or SOP in order to assert his authority.
 - (c) Is self-confident.
 - (d) Is not arrogant or over-confident but expects to benefit from the experience of valued members of the unit.
 - (e) Is approachable.
 - (f) Is sympathetic to their problems and their needs for esteem satisfactions.
- (10) Recognize that rotation of command is an event which may touch off struggles for power among his subordinates; know that if this does occur, the result will be increased personal threat to all subordinate leaders, which will be reflected in lessened flexibility and good judgment on their part.
- (11) Determine from his subordinate leaders whether any members of the unit have personal problems which require his counseling and/or referral to the proper assisting agency.
- (12) Realize that any deviation from the generally accepted military code of professional ethics due to desire for personal gain, or pressures brought to bear by superiors or circumstances, will be costly for both his own self-concept and the unit's opinion of him.

Terminal Training Objective 2

Under either combat or garrison conditions, the OC graduate must *evaluate his own leadership actions against the standard of the degree to which each action contributes to unit effectiveness to a standard acceptable to his CO and a majority of all subordinates but especially his subordinate leaders.*

SUPPORTING KNOWLEDGES AND SKILLS

Each OC graduate must:

- (1) Know that a leader's acceptance by the unit and the respect accorded him as a leader depend on the extent to which his actions facilitate the attainment of unit objectives and not nearly as much on his own personality characteristics; know, however, that a display of negative emotional behavior—which might be considered "personality"—is highly likely to lead to early loss of the respect of his men..
- (2) Know that the two general functions of a leader concern the mission and the welfare of the men and know which takes precedence in case of a direct conflict that prevents equal achievement of both functions.
- (3) Know that his acceptance by the unit depends on the extent to which his actions do not "take over" functions already being served by other unit members, but bring resources or competence to the unit that it does not already have.
- (4) Recognize that effective leadership requires that the leader separate his role from the roles of his subordinates and subordinate leaders; know that the leader must concentrate more on planning, anticipating, coordinating, and other aspects of the leader's role, leaving direct supervision and direction to subordinate leaders, but holding them responsible for these functions.

- (5) Recognize that his seniors and his subordinates may have conflicting expectations concerning what leader behavior should be; know that his effectiveness as a leader will depend to a major extent upon his ability to balance the following expectations:
 - (a) His seniors' expectation that he will be relatively more directive and formal with his subordinates, emphasizing performance and the accomplishment of unit goals relatively more than he emphasizes concern for his men.
 - (b) His subordinate leaders' expectation that he will be relatively more concerned with supporting their actions, decisions, and recommendations than with their subordinates.
 - (c) His subordinates' expectation that he will be relatively more concerned with their welfare than with other matters and their expectation he will represent them in his interactions with his own seniors.
- (6) Recognize that his subordinates may legitimately feel that they may hold him responsible for his performance just as he calls them to account for their performance; know that in no case should he deny error when to his knowledge he made the error.
- (7) Habitually consult with subordinate leaders, time permitting, to provide them advance warning of problems to which he has no ready solution, and to obtain their suggestions and advice concerning possible courses of action in these situations; recognize that such consultation poses less threat to his creditability as a leader than attempting to "bluff his way through"; recognize also that for such situations his peers and his senior commander constitute another source of advice and counsel, which, in some cases, may be preferred to subordinate leaders.
- (8) Recognize that effectiveness in the immediate time frame can be achieved sometimes through actions that have the potential for longer range adverse effects; know that, if no alternative actions are available, the full plan must include actions that will avert the long-range effects created by the only solution to the short-term problem.

Terminal Training Objective 3

Under either combat or garrison conditions, the OC graduate must *diagnose situations, determine the leadership style or behavior required by each situation, and flexibly use the leadership style or behavior called for at that time* to a standard acceptable to his CO and a majority of all subordinates.

SUPPORTING KNOWLEDGES AND SKILLS

The OC graduate must:

- (1) Know the three basic elements of leadership, that is, the leader himself (and his abilities), the unit or group he leads (their expectations and abilities), and the situation in which the unit operates (e.g., the unit mission, the expectations of his own seniors, etc.).
- (2) Know that the two general functions of a leader concern the mission and the welfare of the men and know that the mission takes precedence in case of a direct conflict which prevents equal achievement of both functions; know, however, that in some situations, human maintenance considerations must be given first priority when it is the leader's judgment that continued pressure for mission accomplishment would result in unacceptable loss of his human resources, given that an alternate means of mission accomplishment can still be devised at a later time.
- (3) Maintain a long-range balance between actions which emphasize goal activity and actions directed at relieving social-emotional tensions which build up among members of the unit.
- (4) Maintain a general preference for influence actions which are persuasive rather than coercive by, when time permits, carefully explaining the reasons for his actions and decisions in order to convince his subordinates they are the correct ones and, at the same time, develop his subordinates' ability to make more mature judgments for themselves.

- (5) Know how to use consultation with subordinate leaders and subordinates as a way of gathering information about the situation which will aid in diagnosing the critical situational features bearing upon selection of the appropriate leadership style
- (6) Know how to use the leadership problem-solving process to diagnose trends, directions and indications within the unit by recognizing a problem, determining the cause, determining and evaluating possible solutions, selecting the best solution and taking action; know that sole reliance on statistical indicators will often lead to incorrect or superficial diagnoses of problem causes.
- (7) Know how to formulate and implement a plan for self-study for continuing improvement of military and interpersonal skills.

Terminal Training Objective 4

Under either combat or garrison conditions, the OC graduate must *obtain unit goals and missions from senior leaders, communicate them accurately to the unit as understandable tasks and goals, and define required standards of performance* to a standard acceptable to his CO and a majority of all subordinates.

SUPPORTING KNOWLEDGES AND SKILLS

The OC graduate must:

- (1) Check areas of possible misunderstanding in missions or objectives by questioning his seniors, recognizing that the risk of possible embarrassment at that time is less costly than the risk of wasting his human resources through misdirected effort.
- (2) Communicate through the chain of command or directly to his subordinates the performance quality level, quantity level, and time span which are acceptable to him for completion of a training or operational mission.
- (3) Deliver the details of his instructions in a logical sequence; communicate expected standards of excellence both explicitly when assigning tasks and through consistently reacting to completed performances in accordance with previously stated standards; avoid variations in standards from one time to another unless his seniors or the situation specifically require such variation and then make certain that subordinates understand the basis for this change.
- (4) Recognize when the maturity, motivation and ability of individuals warrant issuing mission-type orders; clearly differentiate direct orders from informal suggestions; habitually seek to communicate goals and missions without the use of direct orders, recognizing that the need to resort to direct orders may reflect inadequate prior leadership.
- (5) Supervise progress toward accomplishment of tasks and goals without undue harassment of subordinates; recognize those situations in which subordinates require either tactical or technical guidance in order to perform effectively and provide it as needed, recognizing that overdirecting will limit opportunity for subordinates to develop higher level skills; refrain from controlling when it is clear that subordinates will perform well without such guidance or control.
- (6) Coordinate laterally and communicate upward to ensure that his unit is properly integrated into the parent unit's activities and that his men have the resources they need to accomplish their missions.
- (7) Determine unit goals, based on established policy, on his own initiative when circumstances prevent obtaining direct orders from senior leaders.
- (8) Recognize that there are occasions when subordinates will have more information relevant to mission accomplishment than himself, and that on these occasions it may be essential to involve them in the process of developing the decision for action.

Terminal Training Objective 5

Under either combat or garrison conditions, the OC graduate must *motivate unit members to regard unit goals as their own* to a standard acceptable to his CO and a majority of all subordinates.

SUPPORTING KNOWLEDGES AND SKILLS

The OC graduate must:

- (1) Know that leadership can be defined as those techniques that convince subordinates of the intrinsic value of doing what the leader desires, thereby producing a state of willing cooperation and obedience to accomplish the leader's (unit's) goals even in the absence of direct supervision.
- (2) Know that unit identification and esprit can be increased through:
 - (a) Assigning tasks and missions in such a way that unit members are placed in meaningfully helping relationships with one another (as opposed to working as individuals on individual assignments).
 - (b) Allowing subordinates to participate in planning for mission accomplishment.
 - (c) Requiring high standards.
 - (d) Rewarding through esteem satisfactions (pride in accomplishment).
 - (e) Recognizing good work by praising the groups involved, rather than the men individually.
- (3) Recognize that allowing subordinates to participate in planning for mission accomplishment will not only often increase the quality of the plan, but will also develop his subordinates and increase individual commitment to the success of the mission.
- (4) Know that reliance solely on authority is a necessary tool for the leader only when time does not permit the use of leadership or persuasive techniques, as it often will not.
- (5) Know that arbitrary use of coercive power or threat will generate resentment, especially when it is seen to serve the leader's personal ends.
- (6) Know that giving subordinates the reasons why it is important to undertake a mission and perform it as instructed serves a training function and also removes the appearance of arbitrariness.
- (7) Know that good discipline is a state of self-motivation in which subordinates have acquired a strong desire to accomplish unit missions, usually as a consequence of positive leadership actions.
- (8) Demonstrate to his subordinates that outstanding contributions to accomplishment of unit goals will lead directly to recognition by the leader and by persons outside the unit that the subordinates belong to a superior unit in which they can feel justly proud.

Terminal Training Objective 6

Under either combat or garrison conditions, the OC graduate must *ensure that subordinates receive an acceptable rate of return from their contribution of effort and other costs associated with their performance of duties* to a standard acceptable to his CO and a majority of all subordinates.

SUPPORTING KNOWLEDGES AND SKILLS

The OC graduate must:

- (1) Know that there is an "informal contract" relationship between the military organization and its members, and between the unit's leader and its members, in which each "side" has pledged effort to satisfy the needs of the other, in exchange for satisfaction of its own needs.
- (2) Know that the individual's motivation to perform well is determined by the degree to which he believes:
 - (a) That the offered reward can advance him toward satisfaction of one or several of his needs and that the reward or benefit will be worth the effort required to succeed.
 - (b) That he can succeed in performing the task to the standard required for administration of the reward.
 - (b) That the leader will be fair and consistent in giving the reward to all who succeed.
- (3) Know that subordinates will believe that the ratio of benefits to cost that they receive is just only if it compares favorably to the ratio received by others like them in or out of military service, and will feel resentment if others are experiencing a better ratio.
- (4) Know the value that any individual subordinate places on any and all of the tangible and esteem benefits that the leader can legitimately administer for good performance.
- (5) Know that a leader who administers rewards or awards too freely, or in response to only minimal effort will:
 - (a) Cause the value of these rewards to be diminished in the eyes of his subordinates.
 - (b) Set a new standard (at a lower level) for what he expects in exchange for what he offers.
- (6) Know that the formal or informal groups to which individual subordinates belong will serve as a source of norms of what is a fair level of effort in return for a given size and type of reward, and be aware that certain groups may have norms that are detrimental to the accomplishment of unit goals.
- (7) Know that subordinates will resent the greater benefits normally received by the leader unless they believe that leader's contribution of effort and other resources is also greater than theirs; know that on each side there is an expectation of fairness and that mutual trust and loyalty can be maintained only so long as fairness exists.

Terminal Training Objective 7

Under either combat or garrison conditions, the OC graduate must *determine the individual(s) responsible for unacceptable mission performance and recommend proper corrective action* to a standard acceptable to his CO and a majority of all subordinates.

SUPPORTING KNOWLEDGES AND SKILLS

The OC graduate must:

- (1) Distinguish between performance failures that occur because of inadequate ability and those that occur because of inadequate motivation.
- (2) Know that ability failures should not be punished (i.e., that punishment for failure after trying hard will lead only to less effort next time).
- (3) Know that ability failures require sympathetic performance counseling and practice under nonthreatening conditions in order to build confidence that efforts will be successful next time.
- (4) Know that motivational failures are handled, preferably, by a search for a positive incentive to which the subordinate will respond.

- (5) Know that punishment for motivational failures is sometimes the only workable technique, despite the generally undesirable side effects of punishment.
- (6) Know that, whatever the selected solution, motivational failures must not be allowed to remain uncorrected, because, if not corrected, they will quickly destroy unit motivation and unit effectiveness.
- (7) Correct only those who are directly responsible for failures; refrain from administering group punishment except in the rare situation when the group as a whole is actually responsible.
- (8) Know that a fixed penalty for the same offense will not affect all personnel in the same way, and carefully adjust punishments to the individual to meet the following standards:
 - (a) The punishment is the minimum that will assure that the individual will not repeat the offense.
 - (b) The punishment is within the range judged fair by unit members in general.
 - (c) The punishment is not designed to be retaliation or revenge for the offense, but is an action, carefully designed, solely to prevent a repetition by either the guilty member or any other member of the unit.
- (9) Know that threat of punishment (negative incentives) can in itself raise unit performance only to the barely acceptable minimum level (seldom higher) and even then requires constant supervision.
- (10) Use a careful balance of positive and negative incentives, giving the negative incentives minimum visibility and using them mainly to insure that the few unwilling members of the unit cannot spoil unit effectiveness at the outset; give maximum visibility to the positive incentives, such as the feeling of pride that comes from outstanding accomplishment, to stimulate outstanding unit performance.

Terminal Training Objective 8

Under either combat or garrison conditions, the OC graduate must *use and support subordinate leaders* to a standard acceptable to his CO and a majority of all subordinates.

SUPPORTING KNOWLEDGES AND SKILLS

The OC graduate must:

- (1) Develop the capacity of subordinate leaders by teaching them how to perform in the leadership position at the next higher level and explaining, when time permits, why certain of his own functions are performed as they are.
- (2) Reinforce the development of increased capacity by delegating more challenging responsibilities, within legal limits, to subordinate leaders who demonstrate personal growth within their jobs and a desire for greater responsibility.
- (3) Be constantly alert to the possible subordinate leader who desires the prestige and rewards of a higher rank or position, without being willing to assume the higher responsibilities that are associated with it.
- (4) Support subordinate leaders in their dealings with their own subordinates by being responsive to their need to be able to reward and recommend punishment for their subordinates.
- (5) Avoid causing subordinate leaders to "lose face" through poorly conceived behavior toward them (e.g., bypassing them while in their presence, reversing their decisions, failing to consult them, etc.).
- (6) Develop subordinate leaders into an effective team by encouraging cooperation and rewarding subordinate leaders as a group on unit tasks that can be accomplished only with good teamwork.

- (7) Recognize the role of informality with subordinate leaders as a tool and use it, as appropriate, to further unit effectiveness (e.g., as a reward that can be given as a way of recognizing outstanding competence or performance, but only when the leader himself is respected for his own ability).
- (8) Seek out areas in the local community where he and/or his unit can make a contribution, and allow subordinate leaders discretion to plan unit projects if they desire to do so.

Terminal Training Objective 9

Under either combat or garrison conditions, the OC graduate must *maintain a two-way flow or exchange of information between himself and his subordinates* to a standard acceptable to his CO and a majority of all subordinates.

SUPPORTING KNOWLEDGES AND SKILLS

The OC graduate must:

- (1) Be aware of the advantages and disadvantages of communicating outside the chain of command.
- (2) Be aware of the nature and causes of rumors and the actions the leader can take to stop them.
- (3) Know the means of developing rapport in a two-way conversation; recognize the barriers when they exist, especially the following:
 - (a) A lack of mutual trust and respect.
 - (b) Uncertainty as to what the leader might do with unfavorable information.
 - (c) Reluctance to interrupt downward communication to ask questions, even though the communication is not being understood.
 - (d) Reluctance to approach the leader with information of any sort, because of excessive formality and/or assumed status by the leader.
- (4) Consistently reward upward communication that aids in improvement of unit effectiveness in any respect, regardless of whether the information is favorable or unfavorable.
- (5) Know the two major categories of counseling—problem counseling and performance counseling—and be able to use the technique appropriate to each individual and specific situation (e.g., directive and nondirective).
- (6) Know that in problem counseling a thorough knowledge of the various agencies to which the individual can be referred is almost as essential as basic interpersonal communication skills.
- (7) Avoid the use of profane or immoderate language when communicating with subordinates.
- (8) Recognize that attitude change is a slow process that proceeds by the leader accepting small attitude changes at frequent intervals and rewarding each change as it occurs, rather than expecting a major attitudinal change to result from one influence attempt.
- (9) Recognize that impatience at the wrong time may well destroy in a few moments the earlier gains obtained over a much longer period of time.

Terminal Training Objective 10

Under either combat or garrison conditions, the OC graduate must *protect and increase the self-esteem of unit members* to a standard acceptable to his CO and a majority of all subordinates.

SUPPORTING KNOWLEDGES AND SKILLS

The OC graduate must:

- (1) Maintain the value of his praise by delivering it in clear language and in a way that prevents misinterpretation of his sincerity or reasons for delivering the praise.
- (2) Demonstrate to subordinates that there is a direct, reliable relationship between excellent past performance and the future assignment of tasks that offer a greater measure of independence and responsibility.
- (3) Impart knowledge and attitudes to his subordinates that will aid them in maintaining their own military effectiveness and personal welfare in the absence of direct supervision from their superiors.
- (4) Plan and supervise slack-time activities that contribute to the future military effectiveness and personal welfare of his subordinates and that avoid the appearance of being meaningless or menial details; when confronted with the rare situation which makes no constructive demands on his men, and in which he cannot devise constructive activity, allow his men free time to the extent the situation permits, rather than impose meaningless or make-work requirements upon them.
- (5) Freely seek advice from experienced and qualified subordinates, where the relationship is one of mutual respect.
- (6) Realize that the use of coercive power is usually damaging to the self-esteem of the subordinate who must submit to it, and that it will, on occasion, strongly tempt the subordinate to "get even" in some way.
- (7) Know that causing a loss of face by a subordinate leader will frequently result in a tendency for that subordinate to cause an equal loss of face among his own subordinates, thereby undermining the cohesiveness of the whole unit.

Terminal Training Objective 11

Under either combat or garrison conditions, the OC graduate must *encourage and facilitate the development of close, mutually satisfying social relationships among members of the unit* to a standard acceptable to his CO and a majority of all subordinates.

SUPPORTING KNOWLEDGES AND SKILLS

The OC graduate must:

- (1) Know the difference between formal and informal groups and recognize the importance and role of informal leaders.
- (2) Identify informal leaders, recognize them as important influence sources within the unit, and use their influence, when positively oriented to the unit, by enlisting their support (e.g., through consultation, drawing them into participation in planning activities, etc.).
- (3) Understand how groups develop shared expectations of how unit members should behave and the methods used by groups to enforce these expectations.
- (4) Use group-reward procedures to promote cooperation among group members and facilitate the perception that they share a common outcome.
- (5) Know that small informal groups within the unit provide an anchor for many attitudes and are a source of emotional support in time of stress; know that without this emotional support a man has little chance of being effective in combat.
- (6) Recognize that a new man can be more swiftly integrated into the unit if he receives acceptance and informal instruction from a small group of his peers.

- (7) Seek to establish a "sponsor" system for integrating new men into the unit, recognizing, however, that:
- (a) The sponsor, himself, must be relatively influential within a friendship group.
 - (b) The sponsor must agree freely to serve as a sponsor and must support the objectives of the unit.
 - (c) The system works best when the sponsor and the new man have something in common (e.g., both come from the same area or city).
 - (d) The sponsor must gain something for his efforts (e.g., he is allowed free time to "show the new man around").
- (8) Know that an individual who is either unable or unwilling to form mutually satisfying relationships with other members of the unit is a misfit who represents a potentially disruptive element; know that this individual should be eliminated from the service if all attempted positive leadership actions fail to achieve his integration with the unit and its norms.

Terminal Training Objective 12

Under either combat or garrison conditions, the OC graduate must *tolerate, without prejudice, all values held by subordinates that conflict with his own values, but that do not detract from performance of the unit's missions* to a standard acceptable to his CO and a majority of all subordinates.

SUPPORTING KNOWLEDGES AND SKILLS

The OC graduate must:

- (1) Familiarize himself with the values typically held by minority group members, political dissidents, drug users, and both sides of the generation gap; determine which of these values cannot be tolerated because they are detrimental to unit performance (e.g., values promoting drug use), and tolerate the remainder without prejudice.
- (2) Encourage all members of ethnic, racial, religious, or geographic subcultures within the unit to tolerate any differences in values that do not bear upon the unit's effectiveness.
- (3) Deal objectively and calmly with subordinates whose values lead them to behave contrary to regulations; enforce regulations as a part of the responsibility of a leader rather than as a personal attack on the identity or values of subordinates.

Terminal Training Objective 13

Under either combat or garrison conditions, the OC graduate must *provide for the human maintenance needs of his subordinates* to a standard acceptable to his CO and a majority of all subordinates.

SUPPORTING KNOWLEDGES AND SKILLS

The OC graduate must:

- (1) Recognize that, to avoid loss in effectiveness, his human resources require maintenance and attention to the same extent as complex machines; recognize the frequent tendency, through oversight, to push human resources beyond the breaking point.
- (2) Recognize the symptoms of heat stroke, heat exhaustion, or heat cramps; recognize the symptoms of sleep deprivation or deep fatigue in men who have engaged in combat.

- (3) Recognize the need and satisfy the requirement for providing his men with items of personal hygiene and protection in order to ensure, as far as possible, maximum personal comfort.
- (4) Investigate the circumstances and recommend appropriate action for any soldier known to be illegally using or possessing drugs.
- (5) Recognize the need of most soldiers for emotional support during times of personal or unit stress; be concerned for the individual(s), and provide for emotional support either directly, through a subordinate leader, or (preferably) through a buddy or buddy group.
- (6) Recognize situations in which personal problems have reduced a soldier's effectiveness sufficiently that he cannot continue to function without help, and either provide that help or obtain it from specialists in helping agencies (e.g., Chaplain, JAG, etc.) as appropriate.

Terminal Training Objective 14

Under either combat or garrison conditions, the OC graduate must develop and *conduct imaginative and innovative individual and unit training* to a standard acceptable to his CO and a majority of all subordinates.

SUPPORTING KNOWLEDGES AND SKILLS

The OC graduate must:

- (1) Be familiar with all formal training aids available to him in the field.
- (2) Devise imaginative field expedients in conducting training, when routinely available aids are either unavailable or inadequate.
- (3) Diagnose individual and unit weaknesses which can be eliminated by remedial training.
- (4) Protect the safety of members of the unit during the conduct of training.
- (5) Recognize that an element of adventure in training frequently adds appeal to younger unit members, though seniors and older NCOs may not think so; tactfully advocate the merits of allowing such training a fair trial.
- (6) Recognize that providing unit members the opportunity to identify their own training needs and plan for remedial training will often enhance the value of the training.
- (7) Recognize that repetitive, routine, and unchallenging training drills destroy motivation unless their value is in fact real, and this value is thoroughly understood by participants.

Terminal Training Objective 15

Under either combat or garrison conditions, the OC graduate must *assist his men in handling their natural fears and avoiding instances of panic* to a standard acceptable to his CO and a majority of all subordinates.

SUPPORTING KNOWLEDGES AND SKILLS

The OC graduate must:

- (1) Know that, under conditions of stress or threat, his subordinates will expect confident, strong leadership; seek at all times under such conditions to present an appearance of calmness and self-control; strive for consistency in his actions and decisions; seek to avoid appearing or being erratic under stress.

- (2) Know that there is a proper timing for each action or decision; determine when the proper time arrives and plan to take action then, with the knowledge that even a relatively poorly thought-out action taken at the right time will have a better chance of success than a better action after the opportunity to act has passed; avoid, however, being stampeded into action by a strong tendency to want to "do something, anything" under stress, or by subordinates' apparent need for supportive direction.
- (3) Recognize the need and satisfy the requirement for forewarning his men to anticipate and recognize the symptoms of fear experienced by the majority of soldiers in combat.
- (4) Familiarize his unit with the sights, sounds, and odors of the battlefield, to the extent possible.
- (5) Keep his men informed by identifying misconceptions, half-truths, and misinformation concerning the enemy.
- (6) Dispel the fear of individuals that they may be wounded and abandoned.
- (7) Closely supervise any individual who appears to know no fear so that this individual does not pose a threat to human life or the accomplishment of the mission.
- (8) Instruct subordinate leaders and potential leaders in recognizing when panic may be developing and how to handle it when it arises.
- (9) Recognize that the two most effective fear preventives are (a) constructive activity, and (b) a high level of cohesion within the unit in strong friendship or buddy groups; seek to encourage or provide for both.

CONCLUSIONS

The application of the third research step in the systems engineering methodology has resulted in the preparation of leadership terminal training objectives that are ready for the application of the fourth step, "Training Materials (Methods and Media)." Ensuring that this set of terminal training objectives is achieved will result in an improved and updated program of leadership instruction.

The construction of this set of leadership TTOs was guided by data collected within the first two steps of the systems engineering methodology, the "Job Identification" substep of Step 1, and "Selecting Tasks for Training," Step 2. The content of the TTOs and their associated supporting knowledges and skills was also influenced by the assumption of a particular framework for viewing the leader-subordinate relationship. This logical framework evolved from applying the principles of social exchange to the informal contract existing between subordinates and the formal military organization. The junior officer, as the representative of the organization, must acquire the leadership skills to influence the outcomes of the exchange relationship so that maximum satisfaction of the subordinate and optimal attainment of the unit's objectives are achieved.

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