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WARRANT OFFICER SENIOR COURSE WOSC EVALUATION.(U)
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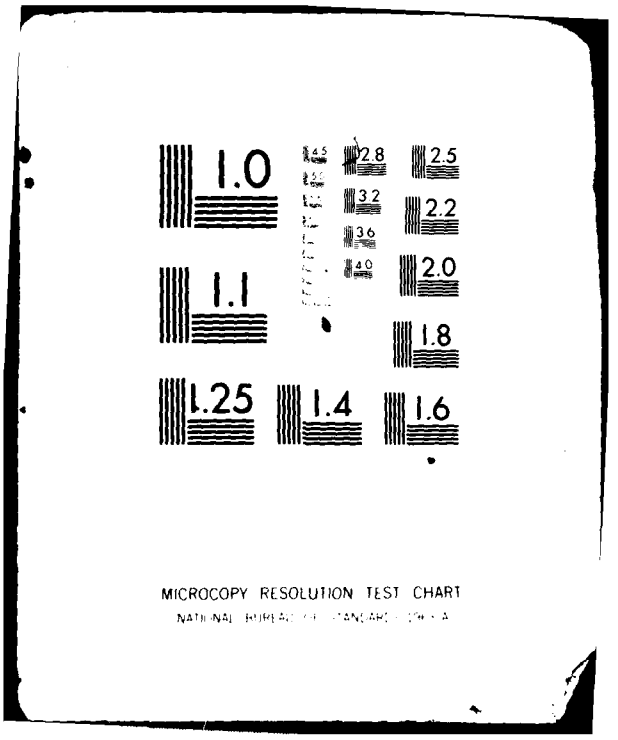
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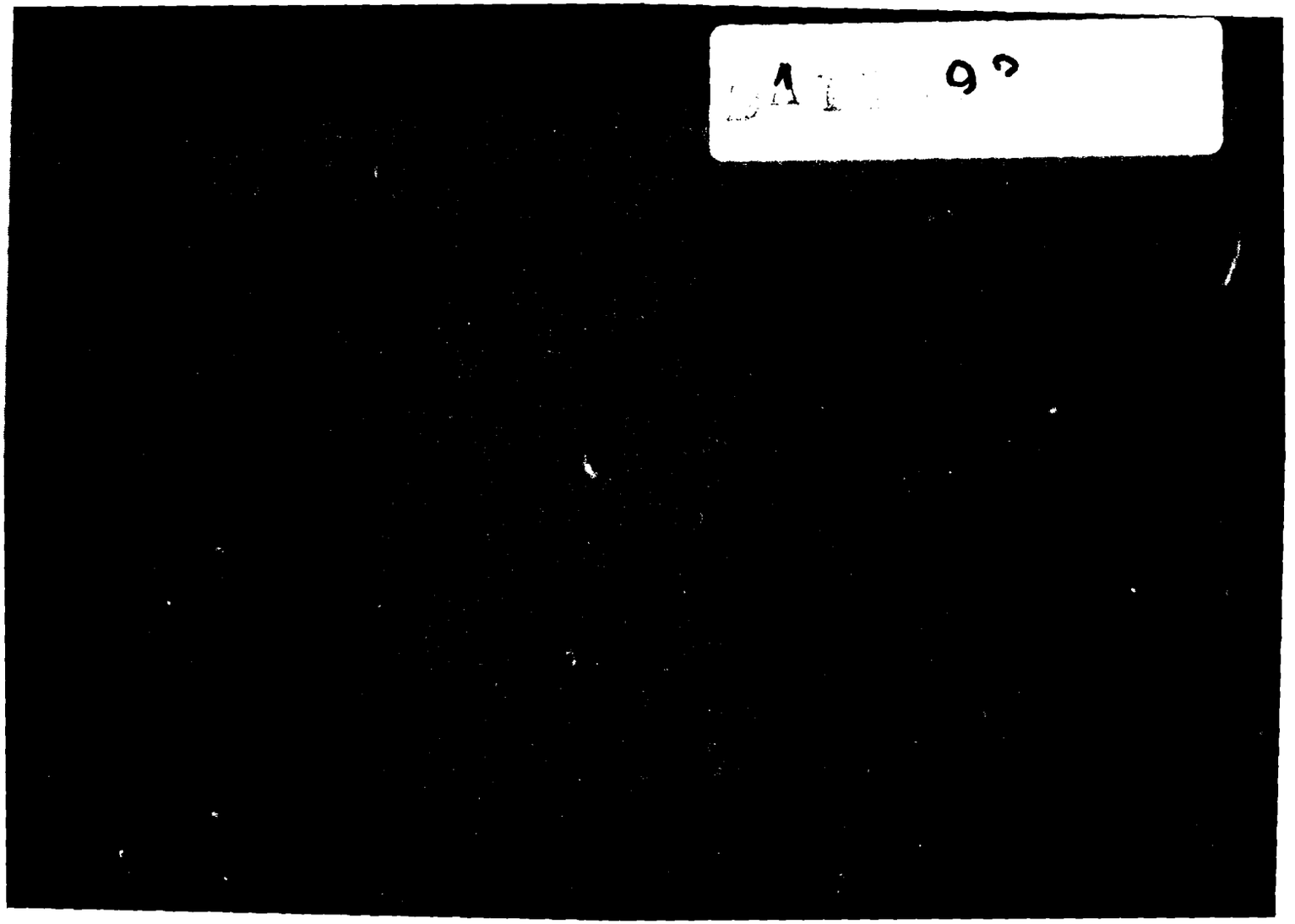

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ABSTRACT (Continue on reverse side if necessary and identify by block number)

1. Because of the lack of job-oriented training which makes up the Warrant Officer Senior Course curriculum, tasks selected for instruction in this course are diverse and unspecialized. Achievement of goals established for the students cannot be accurately measured by this evaluation.

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b. Observations made during this evaluation indicate that training materials and instruction for the course are adequate for attainment of objectives. Staff and personnel conducting the course appear conscientious and committed in their efforts toward providing quality instruction.

c. No major deficiencies were noted during the conduct of this evaluation; however, several problem areas do exist. Principal areas recommended for corrective action which are detailed in the FINDINGS portion of this report include:

(1) Vague or incomplete training objectives which do not specify precisely how the student will demonstrate that he has attained the training goal.

(2) Training objectives inconsistently stated in the POI, lesson plans, and test outlines which makes it difficult to determine that the objective has been met.

(3) Deficiencies in test item construction and objectives which are not adequately tested as specified in the lesson plan and test outline.

(4) Statistical analysis of examination results as presently conducted is insufficient for providing valid evaluation of training effectiveness.

TABLE OF CONTENTS

	Page
Acknowledgement	ii
Abstract	iii
Introduction	1
Background	1
Purpose	3
Evaluation	3
Objectives	3
Discussion	3
Methodology	4
Findings	5
Conclusions	41
Summary	42

Appendix A - Memorandum, ATSAV-DGS-O, Subject: Systems Engineering of the Aviation Warrant Officer Career Courses, dated 17 July 1972.

Appendix B - Breakout of Academic Training Annexes From 1975 to Present.

Appendix C - Breakout of Academic Training Hours, Classes 80-2 and 81-1.

Appendix D - Class Profiles for 80-2 and 81-1.

Appendix E - Enrollment for Elective Classes Taught by Embry-Riddle and Texas State Universities.

Appendix F - USAAVNC (DT-DOAT) Form 749, Academic Instruction Evaluation.

Appendix G - References for Testable Subjects Listed in Either the POI or Lesson Plan But Not Included in Both.

Appendix H - Comparison of Selected Lesson Plan Objectives with Test Outline Objectives

Appendix I - Results of Questionnaire Administered to Class 80-2.

Appendix J - USAAVNC (DT-DOAT) Form 341, DOAT Academic Critique Data.

Appendix K - Distribution

ACKNOWLEDGEMENT

This evaluation was conducted by the Instructional Systems Evaluation Branch, Evaluation Division, Directorate of Evaluation and Standardization of the United States Army Aviation Center.

Personnel who directed and conducted this evaluation included Colonel George F. Newton, Director of Evaluation and Standardization; Lieutenant Colonel John E. Watts, Chief, Evaluation Division; Major Marvin McGraw, Chief, Instructional Systems Evaluation Branch; and Mrs. Shelby Godwin (Project Officer), Instructional Systems Evaluation Branch. Ms. Mary K. Pratt provided typing assistance for the project.

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ABSTRACT

1. The Warrant Officer Senior Course (WOSC) was originally aviation oriented and was known as the Aviation Warrant Officer Advanced Course (AWOAC). The first class started 19 Aug 69. In January 1974, aviation oriented subjects were deleted, and the curriculum consisted entirely of branch immaterial, general military subjects. The course was renamed the Warrant Officer Senior Course.

2. Length of the course is 21 weeks, 2 days. Two classes are conducted each year. It may also be taken by correspondence. Students receive training in a broad range of subjects which is intended to broaden intellectual depth and managerial ability.

3. This evaluation was designed as a spot check to determine from selected samples if training materials and instruction are effective in accomplishing the objectives selected for the WOSC students.

4. The evaluation produced the following major findings:

a. A complete systems approach to curriculum development for the WOSC has been deferred by the Directorate of Training Developments (DTD) pending results of the DA Review of Education and Training for Officers (RETO) Study.

b. Instructors of classes conducted by Department of Academic Training (DOAT), Embry Riddle University, and Troy State University appeared adequately prepared and competent. Classroom presentations were well conducted. There were some instances noted where training time scheduled for DOAT was not fully utilized.

c. A review of instructional materials for the training conducted by DOAT produced the following:

(1) Instructional materials are adequate for attainment of objectives established for the WOSC students and subject matter is consistent between training materials.

(2) There are some inconsistencies between references listed in the Program of Instruction (POI) and those in lesson plans.

(3) Some terminal learning objectives given in the POI are written in very general terms which do not specifically describe actions the student is expected to perform.

(4) Most POI objectives state only the task/action the student is to perform and do not include conditions and standards.

(5) In some cases POI objectives and lesson plan objectives are not consistent in describing how the student will demonstrate knowledge of the lesson content.

(6) Learning objectives in some lesson plans and test outlines are written in very general terms which makes it difficult to establish compatibility between the two.

(7) Greater variation in test items is needed between alternate versions for some of the examinations.

(8) Some examination revisions were not given subsequent letter identification, but were lettered the same as the examinations they replaced.

(9) A review of test questions for adequacy and compatibility with test outline objectives revealed several discrepancies.

(10) Some test items do not conform with construction guidance found in USAAVNC Pamphlet 310-5, Guide for the Preparation and Administration of Examinations.

(11) Item analyses being conducted on examination results provide only average score and number of students who missed each item. The analyses do not provide for a difficulty index or discrimination index to appraise how individual items contribute to the overall ability of the test to measure learning achievement.

(12) Mean scores for those examinations reviewed ranged from 97.96 to 89.26. The significance of these high scores cannot be adequately assessed without further detailed analysis of individual items in relation to training objectives being tested.

(13) The majority of test items reviewed were either not missed or missed only once. Students who missed multiple choice items tended to select the same alternatives. Further study is needed to insure that these items are plausible, not misleading, and adequately test the objective.

(14) In grading multiple choice items, sometimes more than one choice was given credit as being correct.

(15) Students who missed a substantial portion of testable training were not required to make up the material and pass the examination, but were instead given the class average.

d. A questionnaire administered to Class 80-2 which was completed and returned by sixty-three students, provided the following feedback:

(1) Approximately 55% of the students who responded felt that overall the course was adequate or better.

(2) Approximately 40% of the students who responded felt that overall course content was satisfactory or better.

(3) The majority of comments about instructors and staff were complimentary.

(4) Approximately one-third of the students who responded did not expect the course to benefit their career or duty assignment, one-third stated various ways they expected to benefit, one-fifth didn't know if or how they would benefit, and the remaining students felt that benefits derived from the course would be dependent upon other factors.

e. The majority of ratings for all subjects critiqued by students during the period of this evaluation were in the "Outstanding" and "Above Average" categories. Relatively few ratings of "Below Average" and "Unsatisfactory" were given. The majority of written comments pertained to instructors and most were very complimentary.

1. INTRODUCTION:

a. Background:

(1) In June 1966, the Deputy Chief of Staff (DCSPER) directed a formal warrant officer career program be developed. The purpose was to attract and retain high quality personnel by providing them with academic and practical training which would enhance career progression. The United States Army Aviation Center, Fort Rucker, Alabama, was tasked with the design, development, and implementation of the program.

(2) The Aviation Warrant Officer Intermediate Course (AWOIC) and the Aviation Warrant Officer Advanced Course (AWOAC) were developed to fulfill warrant officer career program requirements. Both were strictly geared to aviation. The first classes commenced on 7 Jul 69 and 19 Aug 69, respectively.

(3) Systems engineering of the courses was completed in 1972, in accordance with CON Reg 350-100-1, with modifications as specified in the Staff and Faculty Guide. See Appendix A, Memorandum, ATSAV-DGS-O, Subject: Systems Engineering of the Aviation Warrant Officer Career Courses, dated 17 July 1972.

(4) In 1973, TRADOC directed a revision of the warrant officer career program. The Intermediate Course remained aviation oriented and became known as the Aviation Warrant Officer Advanced Course (AWOAC).

The former Aviation Warrant Officer Advanced Course lost its aviation identity and was renamed the Warrant Officer Senior Course (WOSC). Aviation oriented subjects were deleted from the WOSC and the curriculum consisted entirely of branch immaterial, general military oriented subjects. The first WOSC commenced in January 1974, and contained students from all 13 career fields.

(5) Significant revisions were made in 1975 to the original WOSC POI. Since that time, major course content categories have remained basically stable, although hours allotted to individual subject blocks have fluctuated considerably in many areas. Appendix B gives academic hours by subannex totals for POIs from 1975 to present.

(6) WOSC length is 21 weeks, 2 days. Cost to the Army for this training, which includes pay and allowances during the period, is approximately $23,000 per student. Prerequisites are: Grade CW2 (P), CW3, or CW4 with a minimum of 8 years warrant officer service. Regular Army warrant officers must have less than 15 years service; reserve warrant officers less than 17 years.

(7) WOSC students are exposed to a broad range of subjects. Intent of training is to further understanding of the organization and functions of the major Army, joint, and combined commands, and to broaden intellectual depth and managerial ability. A breakout of total academic

hours for the two classes in session during this evaluation is at Appendix C. Due to the large number of students attending, each class is divided into three sections. The sections are taught simultaneously with subject blocks being rotated among the sections to obtain maximum utilization of instructors and classrooms.

b. Purpose: Since the WOSC has not been formally evaluated, this assessment was initiated to examine training materials and instruction for adequacy and effectiveness in achieving objectives of the course.

2. EVALUATION:

OBJECTIVES: Review course development documentation and evaluate training materials, classroom instruction, and student achievement for a selected portion of the WOSC. Ascertain from these observations if the course was systematically developed, if objectives are adequate and consistent, and if training materials and instruction are sufficient to accomplish established objectives.

DISCUSSION: Observations were made of the two classes in session during the conduct of this evaluation, 80-2 and 81-1. Class profiles are at Appendix D.

METHODOLOGY: (1) Review course development documentation to determine if the course was systematically developed.

(2) Review student critique comments and ratings available from the previous class to ascertain if any particular areas presented problems that should be investigated.

(3) Review the Aviation Center Training Analysis and Assistance Team (ACTAAT) Report for trends/problems.

(4) Monitor a selected sample of elective classes conducted by Embry Riddle and Troy State Universities in order to gain better insight into the overall value of the program to the WOSC.

(5) Monitor a selected sample of classes conducted by Department of Academic Training (DOAT). Inspect Visitor's Folders for completeness and currency. Compare the lesson presented with that in the lesson plan. Complete an Instructional Observation Form for each of the classes monitored.

(6) Review a selected sample of instructional materials for training conducted by DOAT in order to determine consistency of objectives in the POI, lesson plans, student handouts, examination outlines, and examination questions. Determine if these materials effectively

present and test the training objectives.

(7) Evaluate student performance on examinations to determine if students are successfully meeting training objectives.

(8) Administer a questionnaire to Class 80-2 just prior to graduation to gather students' opinions concerning the course.

(9) Review critiques turned in by students during the conduct of this evaluation to gain feedback which might be used during the evaluation.

FINDINGS: It is not the intent of this report to disclose all findings for the entire course or for particular areas, but rather to show samples which exemplify certain trends. These examples are pointed out only as illustrations to clarify points. It is emphasized that instructional materials and classroom presentations examined during this evaluation were selected without any set pattern.

(1) A search for course development documentation revealed that DTD has deferred a complete systems approach to curriculum development for the course pending results

of the DA Review of Education and Training for Officers (RETO) Study. The WOSC POI is currently maintained, reviewed, and updated based on the most current TRADOC circulars and regulations.

(2) Review of course critiques from the previous class did not pinpoint any particular areas that indicated further investigation might be warranted.

(3) Review of the Aviation Center Training Analysis and Assistance Team (ACTAAT) Report revealed no trends/ problems relating to the WOSC.

(4) The electives listed in the POI are college courses taught by Embry Riddle and Troy State Universities three afternoons a week in the Career College. Students may elect to attend regular classes at the Universities if they prefer. Two sessions are conducted by each University during the course. Students who do not have a bacnelor's degree are required to take one elective each session. They are permitted to take two each session at no personal cost. Appendix E gives the enrollment for those courses which were taught during one session for each of the two classes. Portions of the following elective classes were monitored:

Class 80-2

SUBJECT	HOURS
Principles of Economics II	1
Business Seminar (Personal Finance)	2
Contemporary American Foreign Policy	1
Technical Report Writing	1
Communications II	1
Communications III	1

Class 81-1

Principles of Accounting I	2
Masterworks of English Literature	2

All classes observed were well conducted. Instructors displayed adequate preparation, competence, and interest in students' learning the material. Methodology employed seemed appropriate, textbooks and handouts adequate, and student interest and participation good.

(5) A total of 104 academic training hours conducted by Department of Academic Training (DOAT) were selected for monitoring. These included:

Class 80-2

SUBJECT	HOURS
Techniques of Management	2
Training Analysis	3
The Army Training System	2
World Religion and Culture	2
Introduction to the Metric System	2
Introduction to Automatic Data Processing	1
The ADP System	3
ADPS Conversion and Administration	2
Civilian Personnel Management	7
Supply Operations	2
Maintenance Support Structure	2
Chemical Detection Equipment	1
NBC Warning and Reporting System	2
Chemical and Biological Protective System	2
Defensive Measures Against NBC Attack	1
Preparation for Crossing a Contaminated Area	2
Soviet Armed Forces	2

Class 81-1

SUBJECT	HOURS
Techniques of Management	1
Transactional Analysis	2
Economic Approach and Linear Programing	3
Critical Path Method	2
Program Logic and Preparation	2
Organization of Congress and the Executive Branch for Resource Management	2
Department of Defense Planning, Program, and Budgeting System	2
Installation Budgeting	1
Supply Operations	2
Materiel Readiness	2
Effective and Extemporaneous Speaking	5
Principles of Effective Writing	3
Elements of National Power	2
Ideologies in Conflict	2
US National Strategy	3
The Strategic Balance	5
Command and Staff	4
Chemical Agents	3

Class 81-1 (Continued)

SUBJECT	HOURS
Nuclear Weapons Effects	3
Decontamination	1
Combat Support Operations	4
Communications Principles and Security	2
Electronic Warfare	3
Defense	3
Retrograde	2
Offense	2

(a) Visitor's Folders were available for each of the classes monitored. In most cases the folders were complete and current. In some instances where the lesson plan was under revision, copies of hand-written or typed notes which would be used in preparing the lesson plan were provided by the instructor for review. Instructors followed lesson plans and displayed adequate preparation, competence, and confidence in presenting their classes. Instructors and staff personnel were all courteous and assisted by answering questions and furnishing information and materials as needed. An Instructional Observation Form was completed for each of the classes monitored. One copy was furnished the instructor and another copy retained for Evaluation Division records. A copy of the form is at Appendix F.

(b) It was noted in some instances that scheduled training time was not fully utilized. Examples observed were:

Class 80-2

	Scheduled	Utilized
Military Justice and Admin Law	4 hrs	Cancelled
Maintenance Support Structure	8 hrs	Less than 4 hrs
Training Analysis	5 hrs	3 hrs
Defensive Measures Against Nuclear & Biological Attack	1 hr	25 min

Class 81-1

Combat Support Operations	10 hrs	9 hrs
Offense	5 hrs	4 hrs
Installation Budgeting	5 hrs (Conf)	3 hrs

(6) Review of instructional materials utilized by DOAT produced the following results:

(a) Material contained in lesson plans and student handouts adequately covers the stated objectives.

(b) No major conflicts were noted between subject matter content stated in lesson plan objectives and that in POI objectives and test outline objectives.

(c) Comparison of references listed in the POI with that in select lesson plans revealed several inconsistencies. Appendix G shows references for testable subjects which are listed in either the POI or the lesson plan but are not included in both. Many lesson plans have been revised since the December 1979 POI was implemented. It is recognized that changing POI references each time a lesson plan is revised would be time-consuming and impractical. However, special effort should be made to align references whenever changes are submitted to the POI in order to avoid confusion.

(d) Some of the objectives stated in the POI are written in very general terms which do not specifically describe actions the student is expected to perform. Examples are:

1 Techniques of Management (30 hours) - "The student will participate in a discussion of the functions of Army management, role of the Army manager, and organizational effectiveness."

2 Economic Approach and Linear Programing (6 hours) - "The student will actively participate in a discussion on the use and requirements for linear programing problems."

3 US Security Assistance (2 hours) - "The student will discuss US concept of security assistance."

4 Review of Map Reading and Graphics (6 hours) - "The student will apply map reading principles."

5 Case Studies in Management (5 hours) - "The student will apply the techniques of management when given a situational requirement."

6 Transactional Analysis (6 hours) - "The student will define and discuss the basic concepts of Transactional Analysis."

7 US National Strategy (5 hours) - "The student will actively discuss the basics for the formulation of US national strategy."

These broadly defined objectives make it difficult to determine consistency between POI, lesson plans, and examination outlines and test questions. According to guidance in TRADOC Pamphlet 350-30, a properly stated objective,

> "lets everyone--the student, instructor, supervisor, measurement personnel, writers, and course managers--know exactly what the student must learn. It states what action the student should exhibit." It further states, "When the expected performance has been successfully analyzed into the proper types of learning, you can indicate clearly what it is that the learner is to do. These indications require precise statements."

(e) Most of the objectives in the POI state only the task/action the student is expected to perform and do not include conditions and standards as directed by guidance in TRADOC Pam 350-30.

(f) In some cases POI objectives and lesson plan objectives are not consistent in describing how the student will demonstrate knowledge of the lesson content. Examples are:

1 Preparation for Crossing a Contaminated Area - The POI states, "The student will describe the necessary preparations prior to crossing a chemically or radiologically contaminated area." The lesson plan states, "Using a residual radiation decay (fallout) nomogram and a total dose (fallout) nomogram, the student will correctly calculate the time of stay, the average dose rate, and the total dose received while crossing a contaminated area."

2 Chemical Agents - The POI states, "The student will recognize types, characteristics and physiological effects of nerve, blood, blister, and choking agents." The lesson plan states. "The student, in writing, will correctly describe--a. Physiological effects of chemical agents on the body, b. Symptoms produced in the body by chemical agents. c. Characteristics of various chemical agents, d. First aid measures for exhibited symptoms, e. Protective measures for each category of chemical agents."

3 Defensive Measures Against NBC Attack - The POI states, "The student will recognize and state defensive measures to be taken in a nuclear or biological attack." The lesson plan states, "The student will correctly state in writing: 1. The best defense against a nuclear attack, 2. Why a foxhole is good protection in a nuclear attack, 3. The first indication of a nuclear explosion, 4. Protective characteristics of the M17A1 Mask, 5. Specific characteristics of biological agents."

4 Unit NBC Defense Training - The POI states, "The student will recognize objects, materials, and situations needed to conduct unit NBC defensive training." The lesson plan states, "The student will correctly--a. Identify the person who plans and conducts NBC defense training. b. Identify the person who advises the commander on NBC matters. c. List guides for planning and conducting NBC defense training."

5 NBC Warning and Reporting System - The POI states, "The student will identify/describe the unit organization and responsibility for reporting NBC attacks and contamination hazards." The lesson plan states, "The student will correctly identify and describe in writing

the--a. Purpose of the NBC warning and reporting system. b. NBC [illegible] and [illegible] unit level to division level. c. Composition of the division NBCC. d. [illegible] NBC reports and which level submits each. e. Origin and purpose of the effective downwind message."

6. Mission Oriented Protective Posture - The POI states, "The student will describe the proper method for donning chemical protective clothing/equipment and recognize the need to assume a defensive posture consistent with the chemical threat." The Lesson Plan states, "The student will correctly, in writing--1. Define MOPP. 2. Describe the effects on individuals of wearing protective clothing. 3. Determine the amount of chemical protection required consistent with the chemical threat. 4. Explain what the commander's analysis consists of in determining the proper MOPP level."

7. [illegible] Operations Principles and Security - The POI states, "The student will activate the KY-28 encryption device, encrypt, and decrypt coordinates utilizing the CEOI extract and KAI-218." The lesson plan states, "Upon completion of this course, you will be able to--a. List the components of COMSEC and identify

the one with which the aviator is primarily concerned. b. Write three means of [illegible] transmission security. c. Identify the two means of removing the code from the KY-28 and identify [illegible] operation of speech secure devices. d. Explain the major difference between the CEOI and CEOI supplement. e. Demonstrate proper use of the CEOI for identifying assigned frequencies and call signs. f. Demonstrate the proper use of the KAL-61B with KIT [illegible] to enter coordinates and to authenticate."

(g) Objectives for some of the [illegible]-table, briefing type subject blocks are being restructured into the format of "Lesson Scope." The scope describes what will [illegible] in the briefing or seminar. Those subjects which have been restructured include:

1 Theater Nuclear Forces in Europe (Effective with Class 81-1).

2 Soviet Armed Forces (Effective with Class 81-1).

3 Elements of National Power (Effective with Class 81-2).

4 Communist Powers Foreign Policy (Effective with Class 81-2).

5 The Strategic Balance [illegible] (Class 81-4).

6 Human Relations [illegible] (Class 81-4).

These briefings were designed to provide current general information to the student. The lesson scope is more flexible than the training objective because it allows the material to be modified to meet changing world events.

(h) Lesson plan objectives and test outline objectives correlate closely in subject content, and in most cases are consistently stated. However, some lesson plans and test outlines are written in very general or inclusive terms which makes it difficult or impossible to establish compatibility between the two. Some test outlines list subjects to be covered and do not describe specific actions or desired learning behaviors that should be able to exhibit upon meeting the objectives. Examples of this type objectives could be found by comparing the lesson plans and test outlines in Appendix 4.

(i) Alternate versions of examinations are constructed in order to maintain broader coverage of course content and to discourage test compromise. Since the NOSC is divided into three sections and the sections do not take

examinations at the same time, alternate versions are especially needed to discourage compromise among the sections. All MOSC exams do have alternate versions; however, it was noticed in some instances that many of the items are identical between versions. For example, EA 5 has 47 test items. Of these, 34 have identical wording and numbering for versions E and F. Most of the remaining items test the same objective between versions, but in another different manner. Section 3, USAAVNC Pamphlet 310-5, Guide for the Preparation and Administration of Examinations, states,

> "Exact duplication of test items in current test versions should be held to a minimum. When preparing an alternate version of a test an attempt should be made first to include items on those objectives the outline which are not already represented by test items in other current test versions. When all points of desired learning are already represented by a test item on at least one version an attempt should be made to obtain new items for the new versions by rewording existing items using a different application or approach in testing the desired learning points. Exact duplication of items between versions is justified only when the two techniques above cannot be effectively applied. The number of alternate versions

required should be determined mainly by: number of students per class, number of classes in residence, whether the whole class is tested at one time, whether retests are conducted, and the conditions under which the test must be administered. Where students from different classes or sections are likely to exchange information on test content more versions are needed."

If alternate versions are to be most effectual, greater variation among the versions is needed for some of the examinations.

(j) When an examination is revised, the revision normally carries subsequent version lettering (i.e., A, B, C versions would be followed by D, E, F versions). This method avoids confusion by insuring that all documentation can be identified with the specific version to which it belongs. Three examinations were found that did not follow this procedure:

1 EA 9 A, B, C dated Jan 80 - followed by EA 9 A, B, C dated Jan 81.

2 EA 1D, E, F dated Jan 80 - followed by EA 1D, E, F dated Jan 81.

3 EA 5D, E, F dated Feb 73 - followed by EA 5D, E, F dated Sep 80

Analyses of examinations and other pertinent data cannot be maintained properly whenever different examinations carry the same version identification.

(k) A review of test questions for adequacy and compatibility with test outline objectives produced the following:

1 EA 1 Examination - A current test outline was not available.

2 EA 2 Examination

a The ADPS - the test outline states, "The student will ... the five basic computer elements and define the purposes . . ." There are three multiple choice items that test this objective (Numbers 2, 3, and 5). These items require only that the student "identify or recognize" rather than "list and define."

b ADPS Conversion and Administration - The test outline states, "The student will identify ... by completing the practical exercis . . ." This objective is tested by one multiple choice item (number 5) and does not involve a practical exercise.

c Linear Programing - The test outline states, " . . . the student will correctly complete four linear programing problems with 100% accuracy within four hours." The entire examination is only three hours in length and consists of fourteen items. This objective is tested by item Numbers 9, 10, and 11, which do not require the completion of four linear programing problems.

3 EA 4 Examination - The test outline states, "The student will define/describe/identify/list certain aspects . . . , " then lists test items by topic only. No specific actions are given as to how the student will demonstrate knowledge of the individual topics. All of the test questions are multiple choice.

4 EA 6 - A current test outline was not available.

5 EA 8 - Test outline for this examination calls mostly for definitions and descriptions. All of the test questions are multiple choice and only require that the student identify or recognize the material.

6 EA 9 - A current test outline was not available.

7 EA 10 - The test outline states, "The student will extract . . . , discuss . . . , list . . . and prioritize . . . , develop input . . . , and write." Most of the

test items are multiple choice and require only that the student recognize certain concepts relating to the subject. In some instances, the relationship to the training objective is very vague and does not require the same degree of knowledge as that specified in the test outline. Examples of the above characteristics may be observed by reviewing the test outline and Examination EA 10.

(1) Certain test items as specified below which were examined do not conform with construction guidance found in USAAVNC Pamphlet 310-7, Guide for the Preparation and Administration of Examinations. Some of the items do not require the student to demonstrate that he has met the objectives as stated in the test outline. Section 4 of the Pamphlet states that when writing multiple choice items

> "Each of the four choices should be attractive to the student who does not know the correct answer. Each item must be so written as to test knowledge of some important segment of that subject material which is an objective of training and is listed on the test outline."

Section 5C of the Pamphlet further states,

"(4) All four choices should be of about the same length and contain about the same amount of detail," and "(6) 'All of the above' or 'none of the above' cannot be justified as choices with items of a single correct-answer type and should not be used."

Examples of items which are not constructed as described above may be observed by reviewing EA 10A Examination, particularly items 2, 4, 8, 11, 12, 15, 16, 27, 29, and 30 and EA 1D Examination, items 7, 11, 21, 27, 29, and 36.

(7) There are ten examinations in the WOSC. Some of the subjects are not tested. The breakout of training hours at Appendix C shows the examination number that covers those blocks which are tested. Those with no number listed are not tested. Evaluation of student performance on the examinations produced the following.

(a) Personnel contacted in DOTD and DTD at the start of this evaluation stated there had been no effective plan for the systematic analysis of examination results as

provided for in Para 11, USAAVNC Regulation 350-14, Examinations and Standards. A search of DTD files produced an item analysis for only one version of one examination in the WOSC for Class 80-2. A detailed plan for analysis of examinations has since been established in USAAVNC Regulation 350-15, Criterion Tests, dated 16 Jan 81. Implementation of procedures for analysis of examinations as outlined in the regulation has begun, and analyses of results for Class 81-1 are being furnished Evaluation Division, DES as exams are administered. These analyses provide only the average score for the exam and the number of students who missed each item. They do not include statistical analyses of student responses to determine if all alternatives are plausible enough to effectively test abilities of the students. Alternatives which are never selected or wrong alternatives which are frequently selected might point out weaknesses in the test or in the instruction. The analyses do not provide for a difficulty index or discrimination index to appraise how individual items contribute to the overall ability of the test to measure learning achievement.

(b) Overall results for those examination versions which were reviewed are shown below.

Class 80-2	Hours Inst Covered By Exam	No. of test items	No. of Student Scores	Range	Mean	Median	Mode
EA1D	45	37	25	100-88	95.76	97	100
EA2E	30	14	25	100-77	92.88	95	100
EA3U	21	20	27	100-80	95.00	95	100
EA4A	28	33	25	100-88	97.96	100	100
EA6B	21	50	25	100-80	90.56	90	88
EA6C	21	50	27	100-78	89.26	90	84
EA6D	21	50	26	98-84	91.92	92	96
EA7X	30	31	27	100-80	92.52	94	97
EA7Y	30	31	27	100-70	91.56	94	97
EA7Z	30	31	25	100-74	90.72	90	100
EA9A	32	50	27	100-92	96.52	96	100
EA10A	16	32	25	100-76	91.72	93	99
EA10B	16	32	25	100-77	91.32	93	97
Class 81-1							
EA1D	45	38	27	100-81	94.04	95	97
EA1E	45	38	28	100-77	93.14	94	97,92
EA2D	30	14	26	100-72	94.65	95	95
EA2E	30	14	29	100-82	96.21	97	100
EA3A	14	25	29	100-84	97.93	100	100
EA3B	14	25	28	100-84	96.86	98	100
EA4A	26	33	26	100-76	96.65	97	100
EA5E	19	47	29	100-82	95.38	96	98
EA5F	19	47	29	100-84	94.86	96	98
EA6A	21	50	29	100-82	93.17	96	96
EA6B	21	50	27	100-82	92.07	92	100,98,90,88
EA7A	20	33	29	100-79	94.93	97	100,97

Exam	Hours Inst Covered by Exam	No. of test items	No. of Student Scores	Range	Mean	Median	Mode
EA7B	23	33	27	100-85	94.09	94	91
EA8A	23	50	29	100-84	93.66	96	96
EA8B	23	50	29	100-85	95.79	96	96
EA9A	32	50	29	100-88	97.52	98	98
EA9B	32	50	29	100-94	97.93	98	98
EA10A	14	32	26	100-88	95.96	96.5	100
EA10B	14	32	29	100-85	94.83	96	100

Students who fail an examination are given a different version for retake. If the retake is passed, the grade for record is 70, regardless of the actual score. Failure and retake grades were not included in the above analyses since it would tend to distort the data. The following scores were omitted:

Exam	No. of Scores
EA1	1
EA2	2
EA7	1
EA10	1

(c) The significance of these consistently high scores is impossible to conceive without further analysis. Ideally, if the training has been successful, all students should obtain high scores on examinations. However, the examinations must accurately measure accomplishment of the training objectives.

As pointed out in previous paragraphs, there are some discrepancies in test construction, inconsistenceis in training objectives, and objectives which are not adequately tested. Properly prepared statistical analyses of examinations would obtain useful data on individual examination items and percentages of students achieving each training objective. This would allow a more valid evaluation of training effectiveness.

(d) A chart of items missed was constructed for some of the examination versions. Results are as follows:

Class 80-2 Exam	No. of Test Items	No. of Student Scores	No. of Items Answered Correctly By All	No. of Items Missed Only Once	Maximum Times an Item was Missed	No. of Items Missed by 25% or More of Students
EA4A	33	25	23 (70%)	6 (18%)	4	0
EA6B	50	25	16 (32%)	9 (18%)	11	4
EA6C	50	27	15 (30%)	6 (12%)	17	5
EA6D	50	26	19 (38%)	10 (20%)	13	3
EA9A	50	27	28 (56%)	13 (26%)	6	0

81-1 Exam	No. of Test Items	No. of Student Scores	No. of Items Answered Correctly By All	No. of Items Missed Only Once	Maximum Times an Item was Missed	No. of Items Missed by 25% or More of Students
EA3A	25	29	18 (72%)	2 (8%)	6	0
EA3B	25	28	13 (52%)	8 (32%)	5	0
EA4A	33	26	18 (55%)	7 (21%)	4	0
EA5E	47	29	21 (45%)	12 (26%)	11	2
EA5F	47	29	21 (45%)	10 (21%)	11	3
EA6A	50	29	18 (36%)	4 (8%)	7	0
EA6B	50	27	17 (34%)	9 (18%)	9	3
EA7A	33	29	14 (42%)	6 (18%)	5	0
EA7B	33	29	11 (33%)	8 (24%)	12	1
EA8A	50	29	23 (46%)	8 (16%)	10	2
EA8B	50	29	27 (54%)	12 (24%)	14	2

As shown above, with the exception of EA 6 Examination, the majority of items for all exams in the table were either not missed or missed only once. It was noticed in reviewing missed multiple choice items that incorrect alternatives were usually limited to one or two choices. Examples are: EA 5E, item 10 - All 10 who missed selected the same alternative. EA 8B, item 45 - All 11 who missed selected the same alternative. Items such as these should be scrutinized to insure that all alternatives are plausible and that the wording is not misleading.

(e) It was noted that in grading examinations, sometimes more than one choice was given credit as being correct on multiple choice items. Examples for Class 81-1 are:

1 EA 4A - Students were given credit for either of two choices on items 22, 24, and 33.

2 EA 8B - Students were given credit for either of three choices on item 5, and for either of two choices on items 26 and 50.

3 EA 3B - Students were given credit for either of two choices on item 25.

4 EA 5F - Students were given credit for either of two choices on item 34.

5 EA 7A - Students were given credit for either of two choices on item 2.

6 EA 1D - Students were given partial credit for various choices on items 7, 11, 27, and 29.

These occurrences tend to indicate that either the instruction did not adequately cover those items, the items were poorly constructed, or instructors are being unduly influenced by students' reclamers.

(f) It was brought out during this evaluation that when a student missed a substantial portion of testable training, i.e., for medical reasons, he was not required to make up the material and take that examination, but was given the class average for the examination. Examples observed for Class 81-1 were:

1 EA 4A - three students

2 FA 9A - one student

(8) A questionnaire was administered during the week of graduation to Class 80-2 to gather students' opinions about course content, instructors, and other feedback which might be used for improving the course. Sixty-three questionnaires were completed and returned, at least in part. Results of the survey are given in Appendix I. The information is divided into three sections as shown below.

(a) Section I contains comments about overall opinion of the course, course content, staff and faculty, and expectations of benefits from having attended the course. Individual comments have been condensed and combined where possible for conciseness and readability. A brief summary of these comments follows.

1 Approximately 55% of the students responding feel that overall the course is adequate or better.

2 Approximately 50% of the students responding feel that overall course content is satisfactory or better. Various recommendations for improvements are shown in Appendix I.

3 The majority of comments about instructors and staff were complimentary.

4 Approximately 33% of the students responding stated that they do not expect the course to benefit their career or duty assignments. Approximately 33% stated ways in which they expected to benefit from having attended the course. About 20% did not know if or how the course will benefit them. The remaining students were not specific and felt that benefits from having attended the course would be dependent upon other factors.

(b) Section II contains ratings on specific subject areas pertaining to importance of the subject, time scheduled, instructors, and training materials. The following are highlights.

1 Subjects rated "Very Important" by the highest number of students were:

a Techniques of Management

b Unit NBC Defense Training

c Defensive Measures Against NbC Attack

d Chemical and Biological Protective System

e Supply Operations

f Planning Managerial Discussions

Nuclear Weapons Effects

h Decontamination

i Principles of [illegible]tive Writing

2 Subjects rated "Of Little Importance" by the highest number of students were:

a Library Tour

b history of the Warrant Officer

c The Congress and Executive Branch in Resource Management

d World Religion and Culture

e The Machine Language of ADP

f Introduction to Ethics

g Role-Playing

h Introduction to Automatic Data Processing

i Critical Path Method

3 Subjects rated as having "Too Much Time Scheduled" by the highest number of students were:

a The Congress and Executive Branch in Resource Management

b DOD Planning, Program, and Budgeting System

c The ADP System

d Introduction to Automatic Data Processing

e Critical Path Method

f World Religion and Culture

g Program Logic and Preparation

h The Machine Language of ADP

i Introduction to Financial Resource Management

4 Subjects rated as having "Too Little Time Scheduled" by the highest number of students were:

a Guest Speaker

b Preventive Maintenance

c Communist Powers Foreign Policy

d US National Strategy

e The Army Maintenance Management System

f Principles of Effective Writing

g The Strategic Balance

h Organization of the US Army

i Organization for National Security

j Elective Studies

5 Training materials for the following subjects were rated "Above Average" by the highest number of students:

a Supply Operations

b Unit Status Report

c Introduction to Distribution Management

d Distribution of General Supplies

e Techniques of Management

f Principles of Effective Writing

6 Training materials for the following subjects were rated "Below Average" by the highest number of students:

a The Army Maintenance Management System

b Preventive Maintenance

c Maintenance Support Structure

d Materiel Readiness

e Technical Assistance

f DA Organization for Logistics

7 A total of 97 subjects were rated. The following shows the number of subjects under each rating category that received 50% or more of the total student ratings.

Category	Number of Subjects Receiving 50% or More of Total Ratings
a Importance of Subject	
Very Important	51
Of Average Importance	33
Of Little Importance	0
b Time Scheduled	
Too Much	0
About Right	97
Too Little	0
c Instructor Rating	
Above Average	25
Average	56
Below Average	0

Category	Number of Subjects Receiving 50% or More of Total Ratings
d Training Materials	
Above Average	0
Average	95
Below Average	0

(c) Section III contains additional comments provided by students. These comments have been condensed for brevity. Remarks were numerous and diverse. No meaningful generalizations can be drawn from them.

(9) Periodically throughout the class, students are asked to critique subjects just completed. They rate each subject according to these eleven factors: INSTRUCTOR QUALITIES: (1) Preparation, (2) Encourage Questions/Discussion, (3) Attitude/Enthusiasm, (4) Class Management, (5) Assistance Provided (PE, PT, and Self-Paced). SUBJECT MATTER CONTENT: (6) Training Aids, (7) Handout Material, (8) Learning Sequence, (9) Adequate Time, (10) Achieve Learning Objectives, (11) Examination. The following rating scale is used to rate these factors: 5 = Outstanding, 4 = Above Average, 3 = Average, 2 = Below Average, 1 = Unsatisfactory. A copy of the critique form is shown at Appendix J. All available critiques from both classes 80-2 and 81-1 were reviewed during this evaluation.

The following is a brief summary of findings:

(a) The majority of ratings for all subjects critiqued were in the "Outstanding" and "Above Average" categories. Relatively few ratings of "Below Average" and "Unsatisfactory" were given. It was noted that in most cases where a "Below Average" rating was given, the student provided a brief explanation expressing his reasoning for the rating.

(b) Written comments were too diverse to be summarized here; however, the majority of them pertained to instructors and most were very complimentary.

(c) Notations on the critique forms made by instructors, branch chiefs, and Career Training Division Chief provide evidence that critiques are thoroughly reviewed and that any complaints or derogatory comments are investigated and corrective action is initiated if needed. Suggestions are also evaluated and adopted if deemed plausible.

(d) In most cases students use only the subject block number for identification on the critique form and not the subject title. Thus, when reviewing the critiques, the reader unfamiliar with subject numbers must go to another source to identify subject blocks and instructors. Much time and effort could be saved if the students were instructed to fill in subject titles and instructors'

names as they complete the form. The critiques are providing immediate and valuable feedback which is apparently fully utilized to insure quality instruction. Ease of readability is important to maximize their effectiveness.

CONCLUSIONS: (1) A process analysis of this course cannot be conducted because a complete systems approach to curriculum development was deferred by DTD pending results of the DA Review of Education and Training for Officers (RETO) Study.

(2) Observation of training indicates that instructors are adequately prepared and competent and that their presentations are well conducted. Supporting materials including audio-visual, lesson plans, student handouts, and related printed materials are adequate.

(3) No conflict of subject matter was noted in instructional materials. There are some discrepancies and inconsistencies concerning training objectives in the POI, lesson plans, and test outlines.

(4) Some test items are not constructed in accordance with USAAVNC Pamphlet 310-5, Guide for the Preparation and Administration of Examinations. In some cases, differences between lesson plans and test outlines in describing how the student will demonstrate accomplishment of the objective make it difficult to determine that objectives are adequately tested.

(5) More thorough analysis of student performance on examinations would provide needed information for measuring how well individual items succeed in testing objectives.

(6) Feedback from a questionnaire administered to Class 80-2 showed that approximately 55% of the students who responded felt that overall the course was adequate or better and that approximately 40% felt that overall course content was satisfactory or better. The majority of comments about instructors and staff were complimentary. Various suggestions for improvements were submitted. No major problem areas were identified by the questionnaire.

(7) The majority of ratings for all subjects critiqued by students during the period of this evaluation were "Outstanding" and "Above Average." Relatively few "Below Average" and "Unsatisfactory" ratings were given. Indications are that the Department of Academic Training uses these critiques constructively to improve training.

3. SUMMARY:

1. The purpose of the NOSC as stated in the POI makes it unique from most of the courses taught at Fort Rucker. It is not designed to teach specific skills in order to prepare the graduate to perform

particular tasks of a job, but rather, "to provide selected warrant officers with an understanding of the organization and functions of the major Army, joint and combined commands, and to broaden their intellectual depth and managerial ability." The first step in the Instructional Systems Development process, according to TRADOC Pamphlet 350-30 is, "to establish exactly what constitutes, or will constitute, adequate on-the-job performance. It answers the questions of what tasks, performed in what manner, under what conditions, in response to what cues, to what standards of performance, make up the job." It further states, "The ultimate purpose of ISD is to produce a properly trained person; that is, a person who can do the job for which he was trained. This means that in order to design and carry out effective training you must first know the job in considerable detail."

b. The lack of precise job-oriented training which makes up the WOSC curriculum distinguishes it from the typical course which teaches specific tasks and can be readily adapted to the ISD model. The Pamphlet states that in the last phase of the ISD Process, CONTROL, "Emphasis is placed on the importance of determining whether the trainees are learning what was intended, and upon determining whether what they have learned is of the expected benefits to the receiving command." Due to the diverse and unspecialized nature of the "tasks" selected for WOSC instruction, achievement of goals established for the course cannot be accurately measured by this evaluation.

c. Observations made during this evaluation indicate that training materials and instruction for this course are adequate for attainment of

objectives. Staff and personnel conducting the course appear conscientious and committed in their efforts toward providing quality instruction. It was noted during the period of this evaluation that several revisions and improvements were made in training materials.

d. No major deficiencies were noted during the conduct of this evaluation; however, several problem areas do exist. Principal areas recommended for corrective action which are detailed in the FINDINGS portion of this report include:

(1) Vague or incomplete training objectives which do not specify precisely how the student will demonstrate that he has attained the training goal.

(2) Training objectives inconsistently stated in the POI, lesson plans, and test outlines which make it difficult to determine that the objective has been met.

(3) Deficiencies in test item construction and objectives which are not adequately tested as specified in the lesson plan and test outline.

(4) Statistical analysis of examination results as presently conducted is insufficient for providing valid evaluation of training effectiveness.

APPENDIXES

APPENDIX A

MEMORANDUM, ATSAV-DGS-O,

SUBJECT: SYSTEMS ENGINEERING OF THE AVIATION

WARRANT OFFICER CAREER COURSES, DATED 17 July 1972

ATSAV-DGS-O 17 July 1972

MEMORANDUM FOR: TO WHOM IT MAY CONCERN

SUBJECT: Systems Engineering of the Aviation Warrant Officer Career Courses

1. Systems engineering of the Aviation Warrant Officer Career Course was accomplished utilizing CON Reg 350-100-1 and the Staff and Faculty Guide prepared by the Office of the Senior Education Advisor, Fort Rucker, Alabama, and approved per first indorsement to Ltr, ATIT-STM, subject "Systems Engineering of Aviation Warrant Officer Career Courses," dated 22 Mar 72 (Incl 1).

2. The standards for the testing of the training objectives is in accordance with the procedures outlined in the Staff and Faculty Guide, pages 8 and 9 (Incl 2).

3. Documentation leading to the adaptation of this approach is contained in inclosure 3.

/S/

3 Incl
as

HAROLD G. KEEBAUGH
COL, IN
Director

ATIT-STM (8 Mar 72) 1st Ind
SUBJECT: Systems Engineering of Aviation Warrant Officer Career Courses

HQ CONARC, Ft Monroe, VA 23351 22 March 1972

TO: Commandant, US Army Aviation School, ATTN: ATSAV-DI-CD, Fort Rucker, Alabama 36360

The systems engineering approach outlined in paragraph 2, basic letter, for Warrant Officer Career Courses is approved.

FOR THE COMMANDER:

/S/

F. M. FRITZ
1LT, AGC
Asst AG

(Incl 1)

DEPARTMENT OF THE ARMY
HEADQUARTERS UNITED STATES ARMY AVIATION CENTER AND FORT RUCKER
FORT RUCKER, ALABAMA 36362

ATSAV-DI-CD 8 March 1972

SUBJECT: Systems Engineering of Aviation Warrant Officer Career Courses

Commanding General
U.S. Continental Army Command
ATTN: ATIT-S
Fort Monroe, Virginia 23351

1. USAAVNS efforts to systems engineer the Aviation Warrant Officer Career Courses in accordance with CONARC Reg 350-100-1 have not been completed for the following reasons:

a. The courses are professional development rather than job training courses; they do not prepare graduates for a specific assignment.

b. CONARC Reg 350-100-1 is specifically intended for job training courses having objectives related to identifiable job tasks.

c. The valid training objectives for the Aviation Warrant Officer Career Courses are essentially cognitive and affective in nature rather than job task oriented. Efforts to apply the guidance in CONARC Reg 350-100-1 have not been successful for objectives of this type.

2. A USAAVNS procedure for systems engineering the courses has been developed based on procedures recommended in education and training literature. The procedure constitutes a modification of CONARC Reg 350-100-1 in two ways:

a. A job task analysis is not used as the source for curriculum. The present POI's which are partially based on a field survey of Aviation Warrant Officers are being used as the source for identification of objectives. A curriculum group will assess the validity of the objectives in terms of broad professional development goals established by Department of the Army as justification for the courses.

b. The structural model for stating training objectives has been expanded to facilitate the statement of cognitive and affective objectives.

ATSAV-DI-CD 8 March 1972
SUBJECT: Systems Engineering of Aviation Warrant Officer Career Courses

3. Within the context of the modifications above, a systematic analysis and design of the training as envisioned by CONARC Reg 350-100-1 will be completed. A staff and faculty guide explaining the procedure to be used for the Aviation Warrant Officer Career Courses is being prepared; a copy of the guide will be forwarded when published. It is anticipated that this guide will be effective for courses of this type and may have application at other schools.

FOR THE COMMANDANT:

/S/
PRESTON W. BARBER
CPT, AGO
Asst Adj Gen

student? This minimum must be established in absolute (criterion referenced) terms rather than in terms of relative achievement (norm referenced).

(2) What is an acceptable failure rate on a given test? In other words, how many students should achieve the minimum score defined above in order to consider the instruction as effective and satisfactory?

(3) What is an accepted error rate on a given test item, or group of items, corresponding to a specific objective? This acceptable error rate should relate to the category of cognitive objective. The level of difficulty increases as the level of cognitive activity increases from knowledge (lowest level) to evaluation (highest level). Therefore, higher error rates can be expected on higher level cognitive objectives. Instruction related to a specific test item will be considered satisfactory if the actual error rate does not exceed the acceptable rate. (NOTE: If achievement test items were assigned different weights, greater weight would be assigned to higher level cognitive objectives; however, differential weighing of achievement test items is not required for AWOAC/AWOIC. Greater emphasis can be placed on more important areas simply by including more test items on that area.)

b. The questions raised above concern cognitive objectives but must be answered within the context of corresponding affective objectives. As mentioned earlier, cognitive objectives are often used as a means of reaching a more important affective objective. In such cases, the performance criteria attached to the cognitive objectives are not as critical as they might be in other cases, in which the cognitive objectives are preeminent. In a given lesson, it is entirely possible to include a lot of factual cognitive information without the expectation of a high degree of recall; the primary objective may be to develop an awareness or an attitutde of responsiveness. Standards of performance for the cognitive knowledge would be relatively low. The degree of instructional success must be evaluated in terms of the affective objective. In the AWOAC/AWOIC there are lessons in which the student's ability to recall, comprehend, or apply is relatively unimportant. Cognitive objectives for these lessons can be readily identified, but standards of performance need not be set at a high level. There are a number of other lessons in which the student's ability to recall, comprehend, and apply is quite important.

c. Performance standards based on the level of cognitive ability, as well as a consideration of the primacy of cognitive versus affective objectives are shown in Figure 4. Such standards are arbitrarily set and should be revised empirically as quality control data are collected and analyzed. These standards will provide the means for answering the questions raised in paragraph 9a. From the standards, a minimum satisfactory score for an individual student can be determined; acceptable failure rates can be computed; and reasonable error rates for

individual test items can be established. The standards in Figure 4 show the percentage of students (first figure) and the percent correct for items in a particular category. For example, on a 50 item test if there are 20 items classed as primary knowledge items, then 90 percent of the students should get at least 18 of those items (90%) correct. Standards for various kinds of items on a test may be combined by totaling individual standards and computing an average. The following illustration shows how this would be done for a 50 item test with a mixture of items having different individual standards.

Nr of Items	Standard	Total
20	90/90	1800/1800
5	80/70	400/350
10	90/85	900/850
10	80/60	800/600
5	80/80	400/400
TOTAL: 50	- -	4300/4000
Average:	86/80	- -

The average standard for the test would mean that 86% of the students should achieve a score of at least 80 percent. Eighty percent would also be the minimum satisfactory score that an individual student can get. If 14% of the students, or fewer, score below 80, the failure rate for that examination is satisfactory.

d. The permissible error rate on an individual item is arbitrarily chosen to correspond to the second figure in a given standard, i.e., if the standard for an item is 90/85, the permissible error rate for that item is 15%. Of course, if all such items have actual error rates less than 15%, the overall achievement for items of that type would exceed the 90/85 standard. In practice, it is not likely that all items of that type will have error rates less than 15%. It is probable that even when a standard for all items in a category is met, certain items will have excessive error rates.

e. The procedure for applying standards of this type appear complex at first but are actually simple. They represent an attempt to incorporate both the nature of an objective and its relative importance in establishing performance standards for several purposes. The use of this system will require further analysis and refinement as a part of overall quality control. However, it should be a more precise and effective method of applying standards than an arbitrary universal standard for all objectives on all tests.

STANDARDS OF PERFORMANCE
Cognitive Objectives

	STANDARDS	
	Primary	Secondary
1. Knowledge	90/90	80/70
2. Comprehension	90/85	80/65
3. Application	90/80	80/60
4. Analysis	80/80	70/60
5. Synthesis	80/75	70/55
6. Evaluation	80/70	70/50

FIGURE 4

ATSAV-AC-SEA

18 April 1972

MEMORANDUM FOR RECORD

SUBJECT: Lesson Plan Training Objectives for AWOAC/AWOIC

1. References:

a. MFR, ATSAV-AC-SA, subject: Systems Engineering of AWOAC/AWOIC, dated 6 March 1972.

b. Letter, ATSAV-DI-CD, subject: Systems Engineering of Aviation Warrant Officer Career Courses, to CG, USCONARC, and USCONARC 1st Ind, 22 March 1972.

2. The references cited authorize DGS to prepare AWOIC/AWOAC training objective in accordance with a staff and faculty guide prepared by the office of the Senior Education Adviser. Although the systems engineered POI for these courses has a target date for Jan 1973, certain lesson plans are being revised in accordance with revised training objectives prepared under the new guidance. These revised lesson plans in some cases will be implemented into the current classes.

3. In response to a request from DGS the Education Advisor's Office recommended that the training objectives be written into the revised lesson plans in the form described in the staff and faculty guide for AWOIC/AWOAC.

/S/

Harry I. Sands, Jr.
Education Specialist
Office of Senior Education Advisor

ATSAV-AC-SA 6 March 1972

MEMORANDUM FOR RECORD

SUBJECT: Systems Engineering of AWOAC/AWOIC

1. On 2 March 1972, a meeting was held with Colonel Campbell, Assistant Commandant, USAAVNS, to brief on problem areas encountered in the systems engineering of AWOAC/AWOIC and a proposal to modify CON Reg 350-100-1 to facilitate systems engineering of the courses.

2. The meeting was attended by:

COL Campbell	Assistant Commandant
COL Roberts	Deputy DOI
COL Keebaugh	Director, DGS
LTC Ray	Ch, Career Tng Div
MAJ Snyder	Ch, CDG, Career Tng Div
CWO Helton	CDG, Career Tng Div
Mr. Sands	Office of Sr Educ Adv

3. Colonel Keebaugh outlined the problem and the purpose of the meeting. Colonel Campbell began an immediate discussion from which the following guidance emerged:

a. Define appropriate tasks in the broadest possible terms.

b. Define corresponding objectives and other valid objectives in terms of any suitable verb.

c. Use the guidance in CON Reg 350-100-1 to the extent to which it applies. In addition, use guidance being prepared by the Education Advisor's Office to the extent to which it applies. Proceed with any necessary deviation required for a valid statement of the objectives.

d. The DOI and the Senior Education Advisor's Office will assist, as required, in the systems engineering effort. The DOI will cooperate to the fullest extent in approving the documentation prepared by DGS, within the context of the guidance issued at this meeting.

ATSAV-AC-SA 6 March 1972
SUBJECT: Systems Engineering of AWOAC/AWOIC

e. A letter advising CONARC of the necessary action being taken to complete the systems engineering of the AWOAC/AWOIC will be forwarded to ATIT-STM.

/S/

HARRY I. SANDS, JR.
Education Specialist
Office of Senior Education
Advisor

The Aviation Warrant Officer Career Courses are non-producing MOS soft skilled courses which required additional guidelines to the Conarc Reg 350-100-1 in order to accomplish the course design Systems Engineering. The additional guidelines were contained in the "LTR, ATSAV-DI-CD, Systems Engineering of Aviation Warrant Officer Career Courses, 8 Mar 72, with 1st Ind, ATIT-STM, 22 Mar 72." The instruction in AWOIC and AWOAC is provided by different departments and schools. TROY STATE UNIVERSITY presents 100 hours of electives in the AWOAC and AWOIC, Lyster Army Hospital presents 21.0 hours of aviation medicine subjects in the AWOAC and 23 hours in AWOIC. The USACMLS presents 44.0 hours of CBR/NBC subjects in AWOAC and 20 hours is allocated to Guest Speakers in the AWOAC and AWOIC. The curriculum development group had a unique problem with these agencies in that the guidelines for using supporting strategies could not be realistically enforced.

APPENDIX B

BREAKOUT OF ACADEMIC TRAINING ANNEXES

FROM 1975 TO PRESENT

APPENDIX B

WARRANT OFFICER SENIOR COURSE, 1-250-C7
BREAKOUT OF ACADEMIC TRAINING HOURS
1975 - 1979

	POI DATE					
	Aug 1975	Jan 1976	Jun 1976	Mar 1977	Aug 1977	Dec 1979
THE PROFESSION OF ARMS						
Management/Leadership	64	86	93	93	95	103
Financial Management	51	52	52	52	53	55
Personnel Management	33	33	28	28	29	29
Maintenance Management	24	34	37	37	36	25
Records and Supply Management	20	22	20	26	24	36
Unit Readiness	18	-	-	-	-	-
Contemporary Subjects	32	33	32	33	23	23
Communicative Arts	75	82	74	74	63	58
Physical Readiness Training	4	4	4	4	2	4
Mil Justic & Admin Law	8	8	8	8	8	4
Total	329	354	348	355	333	337
MILITARY ARTS						
Strategy	61	64	62	68	45	44
Command & Staff	35	36	36	38	36	30
NBC Environment	21	21	21	22	22	23
Combat Support	27	22	22	16	16	16
Defensive Opns	27	-	-	-	-	-
Offensive Opns	27	-	-	-	-	-
Tactics	-	27	27	25	21	20
Total	198	170	168	169	140	133
MEDICAL SPT OF COMBAT OPNS	14	10	5	-	-	-
US AIR FORCE	8	8	8	8	8	8
ELECTIVE STUDIES	100	100	100	100	100	100
TECHNICAL SPECIALITIES	-	-	-	-	60	46
GUEST SPEAKER PROGRAM	10	10	10	10	10	10
COURSE CRITIQUE	4	4	4	4	4	4
TOTAL ACADEMIC TNG HOURS	663	656	643	646	655	638

NOTE: These hours are taken from the original POI and do not reflect any changes made in the POIs.

APPENDIX C

BREAKOUT OF ACADEMIC TRAINING HOURS,

CLASSES 80-2 AND 81-1

APPENDIX C

WARRANT OFFICER SENIOR COURSE
1-250-C7
Class 80-2

Annex Title and Subjects	Hours	Annex	Exam No.
MANAGEMENT/LEADERSHIP		A1	
Techniques of Management	30.0		1
Concept of Military Leadership	5.0		
Planning Managerial Discussions	2.0		
Case Studies in Management	5.0		
Intro to Personal Effectiveness Tng	1.0		1
Transactional Analysis	6.0		1
Directive/Nondirective Counseling	2.0		1
Role-Playing	1.0		1
Self-Feelings of the Counselor	1.0		1
Danger Signs and Referral Agencies	1.0		1
Introduction to Ethics	4.0		
World Religion and Culture	3.0		1
Examination, EA 1	2.0		
Introduction to the Metric System	2.0		2
Army Safety Program	3.0		
Economical Approach & Linear Programing	6.0		2
Critical Path Method	8.0		2
Intro to Automatic Data Processing	1.0		
The ADP System	3.0		2
The Machine Language of ADP	2.0		2
Program Logic and Preparation	5.0		2
ADPS Conversion & Administration	4.0		2
Examination, EA 2	3.0		
Subannex Total	100.0		
FINANCIAL MANAGEMENT		A2	
The Congress & Executive Br in Resource Mgt	2.0		7
Intro to Financial Resource Management	2.0		
Dept of Defense Planning, Program, and Budgeting System	2.0		7
Installation Budgeting	11.0		7
Administrative Control of Funds	9.0		7
Review and Analysis	2.0		7
Internal Review	2.0		
Examination, EA 7	2.0		
Procurement	11.0		3
Life-Cycle Management	4.0		3
Contract Management	6.0		3
Examination, EA 3	2.0		
Subannex Total	55.0		

Annex Title and Subjects	Hours	Annex	Exam No.
PERSONNEL MANAGEMENT		A3	
Personnel Management Cycle	11.0		4
Personnel Actions	4.0		4
Civilian Personnel Management	10.0		4
Unit Administration	3.0		4
Examination, EA 4	1.0		
Subannex Total	9.0		
RECORDS AND SUPPLY MANAGEMENT		A4	
Supply Operations	16.0		9
Intro to Distribution Management	6.0		9
Distribution of General Supplies	2.0		
Unit Status Report (DA Form 2715)	10.0		9
Examination, EA 9	2.0		
Subannex Total	36.0		
MAINTENANCE MANAGEMENT		A5	
The Army Maintenance Management Sys	2.0		8
DA Organization for Logistics	2.0		8
Preventive Maintenance	4.0		8
Maintenance Support Structure	8.0		8
Technical Assistance	2.0		8
Materiel Readiness	5.0		8
Examination, EA 8	2.0		
Subannex Total	25.0		
CONTEMPORARY SUBJECTS		A6	
Personal Financial Management	6.0		
History of the Warrant Officer	1.0		
Human Relations	4.0		
Division Chief's Orientation	2.0		
Leadership Aspects of Alcohol and Drug Abuse	2.0		
Army Information Program	2.0		
Organizational Effectiveness	6.0		
Subannex Total	23.0		
COMMUNICATIVE ARTS		A7	
Effective & Extemporaneous Speaking	7.0		
Principles of Effective Writing	34.0		
Effective Listening	2.0		
Military Presentations	14.0		
Library Tour	2.0		
Individual Student Conference	1.0		
Subannex Total	60.0		
PHYSICAL READINESS TRAINING		A8	
Army Physical Fitness Evaluation	4.0		
Subannex Total	4.0		
MILITARY JUSTICE & ADMINISTRATIVE LAW		A9	
Military Justice & Administrative Law	4.0		
Subannex Total	4.0		

Annex Title and Subjects	Hours	Annex	Exam No.
TRAINING MANAGEMENT		A10	
Training Analysis	5.0		10
The Army Training System	2.0		10
Plan Training	3.0		10
Individual Training	2.0		10
Collective Training	1.0		10
Evaluation of Training	1.0		10
Examination, EA 10	2.0		
Subannex Total	16.0		
STRATEGY		B1	
Elements of National Power	4.0		
Ideologies in Conflict	8.0		
US National Strategy	5.0		
Organization of the US Army	1.0		
Organization for National Security	2.0		
Naval Operations	4.0		
Communist Powers Foreign Policy	3.0		
The Strategic Balance	9.0		
US Security Assistance	2.0		
Insurgency Case Studies	3.0		
Third World Powers	3.0		
Subannex Total	44.0		
COMMAND AND STAFF		B2	
Command and Staff	19.0		5
Review of Map Reading & Graphics	6.0		
Examination, EA 5	3.0		
Subannex Total	28.0		
NBC WARFARE		B3	
Chemical Agents	3.0		6
Chemical Detection Equipment	2.0		6
Nuclear Weapons Effects	3.0		6
Radiac Meters and Radiological Survey	2.0		6
NBC Warning and Reporting System	2.0		6
Chemical and Biological Protective System	2.0		6
Defensive Measures Against NBC Attack	1.0		6
Preparation for Crossing a Contaminated Area	2.0		6
Decontamination	2.0		6
Mission Oriented Protective Posture	1.0		6
Unit NBC Defense Training	1.0		6
Examination, EA 6	2.0		
Subannex Total	23.0		
COMBAT SUPPORT		B4	
Combat Support Operations	10.0		
Communications Principles and Security	2.0		
Electronic Warfare	4.0		
Subannex Total	16.0		

Annex Title and Subjects	Hours	Annex	Exam No.
TACTICS		B5	
Theater Balance in Europe	2.0		
Soviet Armed Forces	6.0		
Defense	5.0		
Retrograde	2.0		
Offense	5.0		
Subannex Total	20.0		
GUEST SPEAKER PROGRAM		C	
Guest Speaker	10.0		
Annex Total	10.0		
UNITED STATES AIR FORCE		D	
Intro and Orgn of the USAF	1.0		
Strategic Aerospace Operations	1.0		
Airlift Operations	1.0		
Tactical Air Forces in Joint Operations	3.0		
Annex Total	6.0		
ELECTIVE STUDIES		E	
Elective Studies	98.0		
Electives Orientation/Registration	2.0		
Annex Total	100.0		
TECHNICAL SPECIALITIES		F	
Research in MOS Topics	30.0		
Technical Studies Presentations	30.0		
Annex Total	60.0		
[illegible] CRITIQUE		G	
[illegible]rse Critique	2.0		
Annex Total	2.0		
[illegible]ADEMIC SUBJECT HOURS	641.0		

WARRANT OFFICER SENIOR COURSE
1-250-C7
Class 81-1

Annex Title and Subjects	Hours	Annex	Exam No.
MANAGEMENT/LEADERSHIP		A1	
Techniques of Management	30.0		1
Concept of Military Leadership	5.0		
Planning Managerial Discussions	2.0		
Case Studies in Management	5.0		
Intro to Personal Effectiveness Tng	1.0		1
Transactional Analysis	6.0		1
Directive/Nondirective Counseling	2.0		1
Role-Playing	1.0		1
Self-Feelings of the Counselor	1.0		1
Danger Signs and Referral Agencies	1.0		1
Introduction to Ethics	4.0		
World Religion and Culture	3.0		1
Examination, EA 1	2.0		
Introduction to the Metric System	2.0		2
Army Safety Program	3.0		
Economical Approach & Linear Programing	6.0		2
Critical Path Method	8.0		2
Intro to Automatic Data Processing	1.0		
The ADP System	3.0		2
The Machine Language of ADP	2.0		2
Program Logic and Preparation	5.0		2
ADPS Conversion & Administration	4.0		2
Examination, EA 2	3.0		
Subannex Total	100.0		
FINANCIAL MANAGEMENT		A2	
Organization of Congress and the Executive Branch for Resource Management	2.0		7
Dept of Defense Planning, Program, and Budgeting System	2.0		7
Installation Budgeting	8.0		7
Administrative Control of Funds	6.0		7
Review Systems	2.0		7
Examination, EA 7	2.0		
Procurement	8.0		3
Life-Cycle Management	2.0		3
Contract Management	4.0		3
Examination, EA 3	2.0		
Subannex Total	38.0		

Annex Title and Subjects	Hours	Annex	Exam No.
PERSONNEL MANAGEMENT		A3	
Personnel Management Cycle	11.0		4
Personnel Actions	4.0		4
Civilian Personnel Management	8.0		4
Unit Administration	3.0		4
Examination, EA 4	1.0		
Subannex Total	27.0		
RECORDS AND SUPPLY MANAGEMENT		A4	
Supply Operations	16.0		9
Intro to Distribution Management	6.0		9
Distribution of General Supplies	2.0		
Unit Status Report (DA Form 2715)	10.0		9
Examination, EA 9	2.0		
Subannex Total	36.0		
MAINTENANCE MANAGEMENT		A5	
The Army Maintenance Management Sys	2.0		8
DA Organization tor Logistics	2.0		8
Preventive Maintenance	4.0		8
Maintenance Support Structure	8.0		8
Technical Assistance	2.0		8
Materiel Readiness	5.0		8
Examination, EA 8	2.0		
Subannex Total	25.0		
CONTEMPORARY SUBJECTS		A6	
Service Benefits and Personal Financial Mgt	6.0		
History of the Warrant Officer	1.0		
Human Relations	4.0		
Division Chief's Orientation	2.0		
Leadership Aspects of Alcohol and Drug Abuse	2.0		
Army Information Program	2.0		
Organizational Effectiveness	6.0		
Subannex Total	23.0		
COMMUNICATIVE ARTS		A7	
Effective & Extemporaneous Speaking	7.0		
Principles of Effective Writing	47.0		
Effective Listening	2.0		
Military Presentations	14.0		
Library Tour	2.0		
Individual Student Conference	1.0		
Subannex Total	73.0		
PHYSICAL READINESS TRAINING		A8	
Physical Fitness Evaluation	4.0		
Subannex Total	4.0		
MILITARY JUSTICE & ADMINISTRATIVE LAW		A9	
Military Justice & Administrative Law	4.0		
Subannex Total	4.0		

Annex Title and Subjects	Hours	Annex	Exam No.
TRAINING MANAGEMENT		A10	
Training Analysis	5.0		10
The Army Training System	2.0		10
Plan Training	3.0		10
Individual Training	2.0		10
Collective Training	1.0		10
Evaluation of Training	1.0		10
Examination, EA 10	2.0		
Subannex Total	16.0		
STRATEGY		B1	
Elements of National Power	4.0		
Ideologies in Conflict	8.0		
US National Strategy	5.0		
Organization of the US Army	1.0		
Organization for National Security	2.0		
Naval Operations	4.0		
Communist Powers Foreign Policy	3.0		
The Strategic Balance	9.0		
US Security Assistance	2.0		
Insurgency Case Studies	3.0		
Third World Powers	3.0		
Subannex Total	44.0		
COMMAND AND STAFF		B2	
Command and Staff	19.0		5
Review of Map Reading & Graphics	6.0		
Examination, EA 5	3.0		
Subannex Total	28.0		
NBC WARFARE		B3	
Chemical Agents	3.0		6
Chemical Detection Equipment	2.0		6
Nuclear Weapons Effects	3.0		6
Radiac Meters and Radiological Survey	2.0		6
NBC Warning and Reporting System	2.0		6
Chemical and Biological Protective System	2.0		6
Defensive Measures Against NBC Attack	1.0		6
Preparation for Crossing a Contaminated Area	2.0		6
Decontamination	2.0		6
Mission Oriented Protective Posture	1.0		6
Unit NBC Defense Training	1.0		6
Examination, EA 6	2.0		
Subannex Total	23.0		
COMBAT SUPPORT		B4	
Combat Support Operations	10.0		
Communications Principles and Security	2.0		
Electronic Warfare	4.0		
Subannex Total	16.0		

Annex Title and Subjects	Hours	Annex	Exam No.
[illegible]		B5	
Theater Balance in Europe	2.0		
[illegible]viet Armed Forces	6.0		
[illegible]ense	5.0		
[illegible]erograde	2.0		
[illegible]ense	5.0		
Subannex Total	20.0		
GUEST SPEAKER PROGRAM		C	
Guest Speaker	10.0		
Annex Total	10.0		
UNITED STATES AIR FORCE		D	
Intro and Orgn of the USAF	1.0		
Strategic Aerospace Operations	1.0		
Airlift Operations	1.0		
Tactical Air Forces in Joint Operations	3.0		
Annex Total	6.0		
ELECTIVE STUDIES		E	
Elective Studies	98.0		
Electives Orientation/Registration	2.0		
Annex Total	100.0		
TECHNICAL SPECIALITIES		F	
Research in MOS Topics	30.0		
Technical Studies Presentations	30.0		
Annex Total	60.0		
[illegible] CRITIQUE		G	
[illegible]rse Critique	2.0		
Annex Total	2.0		
[illegible] ACADEMIC SUBJECT HOURS	655.0		

Class 81-1

APPENDIX D

CLASS PROFILES FOR 80-2 AND 81-1

APPENDIX D

WOSC 80-2 PROFILE

Total Number of Students: 79

Total by Rank: CW4 - 9
CW3 - 70

Total by Component: RA - 47
USAR - 30
NG - 2

Wives Accompany - 47

Aviation - 59
Weapons/Utilities - 3
Graphics/Administration - 4
Criminal Investigation/Intelligence - 3
Mechanical Maintenance - 5
Supply - 4
Communications/Electronics - 1

Breakout by MOS

100B (UH-1) - 12
100C (CH-47) - 12
100E (AH-1) - 23
100Q (U-21) - 11
160A (Non Rated Maint) - 1

Breakout by Career Field

Instructor Pilot - 34
Examiner - 8
Maintenance - 9
Safety - 8

Average Age - 36.3

Average Years WO Service: 11.9

Average Years Active Duty: 15.8

Last Assignment

Germany - 46
CONUS - 19
Korea - 5
Hawaii - 2
Canal Zone - 2
NG - 2
Alaska - 1
Japan - 1
Degree Completion - 1

PROFILE

WARRANT OFFICER SENIOR COURSE (81-1)

Length of Course: 21½ weeks

Total Number of Students: 87

Total by Rank: CW4 - 8
CW3 - 77
CW2 - 2

Total by Component: RA - 50
AUS - 32
NG - 4
USAR - 1

Wives Accompany - 64

Aviation - 66
Weapons/Utilities - 2
Graphics/Administration - 3
Criminal Investigation/Intelligence - 4
Mechanical Maintenance - 4
Supply/Services - 4
Communications/Electronics - 1
Surgeon General - 1
Judge Advocate General - 2

Breakout by MOS

100B (UH-1) - 18
100C (CH-47) - 11
100E (AH-1G) - 21
100Q (U-21) - 13
160A (Non-rated Maint) - 3

Breakout by Career Field

Instructor Pilot - 46
Examiner - 17
Maintenance - 13
Safety - 5

Average Age - 36.8

Average Years WO Service - 12.3

Average Years Active Service - 15.6

LAST ASSIGNMENT:

Germany	- 34	Meade	- 2
Fort Rucker	- 8	Benning	- 2
Hawaii	- 7	Bliss	- 2
Korea	- 6	Eustis	- 1
Fort Bragg	- 4	Campbell	- 1
[illegible]	- 4	Turkey	- 1
[illegible]OG	- 3	Sheridan	- 1
Alaska	- 3	USAR	- 1
[illegible]ama	- 3	Okinawa	- 1
Fort Lewis	- 2	Leonard Wood	- 1

APPENDIX E

ENROLLMENT FOR ELECTIVE CLASSES TAUGHT BY EMBRY-RIDDLE AND TROY STATE UNIVERSITIES

ELECTIVE COURSES ENROLLMENT
Class 80-2

EMBRY-RIDDLE AERONAUTICAL UNIVERSITY

Course Title	No. Students Enrolled
Special Project (Graduate)	4
College Math for Aviation II	3
Government and Aviation	44
Introduction to Computers	12
Special Topic in Management	3
Basic Aerodynamics	3
Aircraft Performance	2
Technical Report Writing	2
Communications II	5
Introduction to Philosophy	2
Special Topic in Economics	2
Statistics with Aviation Appl.	3
Communications III	3
Aviation Law	2
Management Analysis and Concepts	2
Introduction to Aviation Math	1
Subsonic Aerodynamics	2
Number of Students Enrolled in Only One Course	53
Number of Students Enrolled in Two Courses	21
Total Students Enrolled	74

TROY STATE UNIVERSITY

Contemporary American Foreign Policy	20
History of Middle East WWI Present	7
Managerial Economics (Graduate)	1
Business Seminar (Personal Finance)	15
Principles of Economics II	13
Minicomputers & Microcomputers	7
Plane Trigonometry	1
Intro to Computer Data Processing	1
Principles of Accounting II	7
College Algebra	2
Income Tax Accounting I	1
Visual Arts	1
Masterworks of English Literature	2
Policy & Decision Making	1
Corporation Finance	1
Number of Students Enrolled in Only One Course	42
Number of Students Enrolled in Two Courses	19
Total Students Enrolled	61

ELECTIVE COURSES ENROLLMENT
Class 81-1

EMBRY-RIDDLE AERONAUTICAL UNIVERSITY

Course Title	No. Students Enrolled
Marketing Management (Graduate)	3
Advanced Aircraft Performance (Graduate)	1
Quantitative Methods in Business (Graduate)	1
Management Analysis and Concepts	4
Religions of Mankind	3
Special Topic in Management	2
History of Aviation	34
Introduction to Computers	21
Introduction to Aviation Math	4
Safety Program Development	1
Government and Aviation	2
Technical Report Writing	18
Communications I	7
College Mathematics for Aviation I	3
Introduction to Logic	1
Aviation Insurance	1
Special Topic in Economics	2
Flight Physiology	1
Number of Students Enrolled in Only One Course	31
Number of Students Enrolled in Two Courses	39
Total Students Enrolled	70

TROY STATE UNIVERSITY

American Ideals	3
Business Statistics	1
Principles of Accounting I	13
Principles of Economics I	8
Contemporary American Foreign Policy	14
Masterworks of English Literature	7
Intro to Computer Data Processing	8
Organization Development (Graduate)	3
Math for General Studies	4
U.S. Since 1877	9
Specialized Study in Area of Education (Graduate)	1
Comparative Government	2
Minorities in the U.S. Social Structure	1
General Physics I	2
Information Services (Graduate)	1
Theories & Techniques of Counseling (Graduate)	1
Composition & Modern English I	1
College Algebra	1

TROY STATE UNIVERSITY Continued.

Course Title	No. Students Enrolled
General Physics II	1
Corporation Finance	2
Principles of Economics II	1
Managerial Accounting (Graduate)	1
Marketing Management (Graduate)	1
Principles of Biology	2
Number of Students Enrolled in Only One Course	36
Number of Students Enrolled in Two Courses	26
Total Students Enrolled	62

APPENDIX F

USAAVNC (DT-DOAT) FORM 749,

ACADEMIC INSTRUCTION EVALUATION

ACADEMIC INSTRUCTION EVALUATION

1. Instructor _____ Div _____ Branch _____ Date/Time _____

   Course _____ Subject & File No _____ Building/Room _____

2. The applicable items in the following lists were considered when observing this class:

CLASS MANAGEMENT	PRESENTATION	INSTRUCTIONAL MATERIALS	FACILITY
Preparation	Introduction	Student Outline	Cleanliness
Class Control	Eye Contact	Practical Exercise	Arrangement of Classroom
Diplomacy and Tact	Training Objectives	Programed Text	Distractions
Timing	Learning Sequence	Comprehension Check	Ventilation
Visitor's Lesson Plan	Enthusiasm	Summary Sheet	Temperature
DOAT Critiques	Follow Lesson Plan	Student Equipment	Lighting
Current Lesson Plan	Confidence	TV Tape	Projectors
Practical Exercise	Extraneous Material	Training Film	TV Monitors
Comprehension Check	Terminology	35MM Slides	
Embossographed Cards	Questioning Technique	Overhead Slides	
	Demonstration	Training Devices	
	Fielding Student Questions	Chalkboard	
	Receptiveness		
	Objectives Learned		
	Effectiveness		

3. Comments _____

4. Recommendations for Improvement _____

_____

Observer/Division

USAAVNC(DT-DOAT) Fm 749, 1 Oct 80

APPENDIX G

REFERENCES FOR TESTABLE SUBJECTS LISTED IN EITHER THE POI OR LESSON PLAN BUT NOT INCLUDED IN BOTH

APPENDIX G

REFERENCES LISTED IN EITHER THE POI OR THE
LESSON PLAN BUT NOT INCLUDED IN BOTH
(TESTABLE BLOCKS)

Techniques of Management
Lesson Plan: The Personnel Management Process (Not in POI)

Transactional Analysis
POI: The Art of Counseling (Not in Lesson Plan)
Lesson Plan: Games People Play (Not in POI)

Directive/Nondirective Counseling
POI: Behavior Control, USAAVNCTR P. E. T. Workbook, Video Tapes 526, 627, 528, 529, 530 (Not in Lesson Plan)
Lesson Plan: Reality Therapy, Client-Centered Therapy, Elementary Principles of Behavior (Not in POI)

Role-Playing
POI: The History of Psychoanalysis, Film--MF 16-5873, Video Tape--USAAVNC-CH-1 (Not in Lesson Plan)

Introduction to the Metric System
Lesson Plan: DARCOM Pam 706-470 Metric Conversion Guide. US Department of Commerce Publications NBS 365 Revised Nov 72. (US Army Form RPI 603) (Not in POI)

ADPS Conversion and Administration
POI - TV--P-172A (Not in Lesson Plan)

Economic Approach & Linear Programming
Lesson Plan: Decision Making Through Operations Research (Not in POI)

Personnel Management Cycle
POI: DA Pam 623-1, TV--P-583, TF 12-6051 (Not in Lesson Plan)
Lesson Plan: AR 623-205 (Not in POI)

Command & Staff
POI: FM 101-15, TV 762 (Not in Lesson Plan)
Lesson Plan: FM 101-5, TV 732, Advance Sheet (Not in POI)

Mission Oriented Protective Posture
POI: TM 3-4240-202-14 (Not in Lesson Plan)
Lesson Plan: TM 3-4240-279-208P (Not in POI)

Decontamination
POI - TC 3-258, M691, M692 (Not in Lesson Plan)

Chemical Agents
Lesson Plan: FM 3-9 (Not in POI)

Materiel Readiness
POI - ARs 11-4, 750-57; SB 700-20 (Not in Lesson Plan)

Technical Assistance
Lesson Plan: DA Cir 750-47 (Not in POI)

Preventive Maintenance
POI - DA Pam 700-2, PM Supplement (Not in Lesson Plan)

The Army Maintenance Management System
Lesson Plan - AR 750-1 (Not in POI)

Unit Status Report
POI - ARs 11-8, -14, 350-1, -13, 711-5; DA Pams 525-10, 700-2
(Not in Lesson Plan)

Supply Operations
POI: ARs 310-34, 710-3 (Not in Lesson Plan)
Lesson Plan: ARs 15-6, 700-15 (Not in POI)

Introduction to Distribution Management
Lesson Plan: AR 700-20, FM 54-1 (Not in POI)
POI: FM 54-10 (Not in Lesson Plan)

Evaluation of Training
POI: BTMS, PLT TNR's Workshop; FM 1-93J 1/2 & 3; FM 1-71P 1/2/3;
ARTEP 57-55 (Not in Lesson Plan)

Collective Training
POI: BTMS, PLT TNR's Workshop (Not in Lesson Plan)
Lesson Plan: ARTEP 1-252 (Not in POI)

Army Training System
POI: FM 21-6, BTMS; PLT TNR's Workshop (Not in Lesson Plan)
Lesson Plan: FM 100-5 (Not in POI)

Training Analysis
POI: BTMS, PLT TNR's Workshop (Not in Lesson Plan)

APPENDIX H

COMPARISON OF SELECTED LESSON PLAN OBJECTIVES WITH TEST OUTLINE OBJECTIVES

DIRECTORATE OF TRAINING
DEPARTMENT OF ACADEMIC TRAINING
UNITED STATES ARMY AVIATION CENTER
Fort Rucker, Alabama

January 1980
File No. 51-7639-30

TRAINING OBJECTIVES

TECHNIQUES OF MANAGEMENT

The student will learn the functions of Army management, the role and functions of the Army manager, and the principles of organizational effectiveness; and will demonstrate knowledge gained by participating in practical exercises.

Given a series of practical exercises, the student will participate in group discussions and problem solving sessions to the instructor's satisfaction.

Given a written exam, the student is expected to recall with 70% accuracy the major concepts of the above objectives without the use of notes or reference materials.

TEST OUTLINE

SUBJECT TITLE: 51-7639-30 Techniques of Management

COGNITIVE OBJECTIVE AND SUPPORTING TEACHING POINTS	MINIMUM ACCEPTABLE STANDARD %	TEST ITEM NUMBERS USED ON EXAM VERSION D	E	F
1. Define Army Management	70			
- From manager's view		1		
- From organization's view			1	
2. Functions of an Army Manager				
- Establishing objectives				1
- Motivating (Definition)		2	3	
. Defense mechanisms			6	3
. Maslow		4	4	4
. Herzberg - Hygiene				2
- Motivation		3		
- Communicating				
. Perceptions		6		7
. Sources of communication		14	15	
- Innovation		7		
- Maintaining cooperation			2	
- Developing subordinates			7	
- Decision making		9	8	
3. Functions of Army Management				
- Planning - Scheduling				6
- Anti-planning			12	11
- Organizing - Informal Group		8	9	10
- Directing				
. Approaches		15		13
. Effects of position		10		8
. Developing authority		11	10	9
- Coordinating			11	12
- Controlling				
- Management of Time	70	5	5	5
- Summary Case Study		12	13	14
(2 Essay Questions)		13	14	15

e. Define crooked communications

f. Identify and explain five counseling goals.

10 2. BODY

a. To begin, let's examine what many social psychologists say are man's six basic needs. They are--

Slide 1-2

(1) Air.

(2) Water.

(3) Food (life style, finance).

(4) Shelter (territory, identity).

(5) Sex (reproduction, creativity).

(6) Esteem (recognition, respect).

Slide 1-3

As a person seeks to meet these needs, he may be blocked in one or more of the above areas. Usually, however, it is a combination of these needs which he is having difficulty satisfying.

b. As these needs are not met or come into conflict with each other, man's physical body and psychological being begin to call for the resolving of these need/problems. This is more commonly known as stress. We react to this stress or the stressor in two ways.

Slide 1-4

(1) Task oriented.

(2) Protecting ourselves psychologically.

c. Given the complex nature of man's needs--heredity, environment, and personality factors--most people learn to compensate for their problems with psychological defenses.

Slide 1-5

(1) Denial of reality

(2) Depression.

(3) Fantasy.

(4) Rationalization.

(5) Projection.

TEST OUTLINE

SUBJECT TITLE: Introduction to Personal Effectiveness Training

COGNITIVE OBJECTIVE AND SUPPORTING TEACHING POINTS	MINIMUM ACCEPTABLE STANDARD %	TEST ITEM NUMBERS USED ON EXAM VERSION D	E	F
To know the nature, scope, and value of P.E.T.	70			
a. Be able to explain what P.E.T. is and why it is important for leadership skills.		30	30	30
b. Be able to list five goals in counseling and to know what they mean:		26	26	26
(1) Clarify communication				
(2) Analyze statements				
(3) Organize problems				
(4) Develop positive attitudes				
(5) Make proper referrals				

AD-A112 936 ARMY AVIATION CENTER FORT RUCKER AL DIRECTORATE OF E--ETC F/G 5/9
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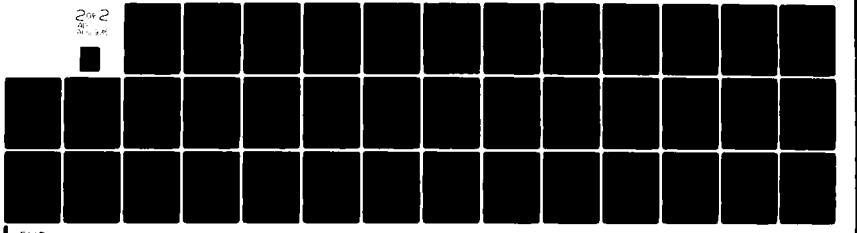

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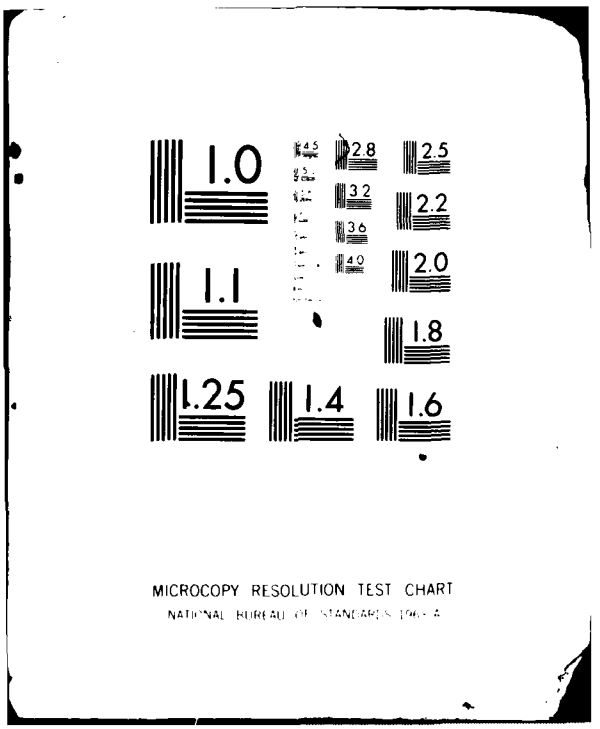
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MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS 1963-A

DIRECTORATE OF TRAINING
DEPARTMENT OF ACADEMIC TRAINING
UNITED STATES ARMY AVIATION CENTER
Fort Rucker, Alabama

January 1980
File No. 51-7828-4

TRAINING OBJECTIVES

PERSONNEL ACTIONS

1. ACTION: The student will select the sequence of actions in processing an officer elimination.

   CONDITION: When given random sequences of processing.

   STANDARD: Must select the proper order of processing as shown in AR 635-100.

2. ACTION: The student will identify the time frame for submission of an application for voluntary retirement.

   CONDITION: When given various time frames.

   STANDARD: Select the proper time frame as specified by AR 635-100.

3. ACTION: The student will identify a certain prerequisite that a newly promoted warrant officer must meet before he is eligible to retire.

   CONDITION: When given various possible prerequisites.

   STANDARD: Select the proper prerequisite as shown in AR 624-100.

4. ACTION: The student will identify the authority to whom a service member of a certain grade must submit his retirement application.

   CONDITION: When given various authorities.

   STANDARD: Select the proper authority as specified in AR 635-100.

5. ACTION: The student will identify the proper procedures for eliminating an officer with a specified amount of service.

   CONDITION: When given various alternatives of processing actions.

STANDARD: Select the proper action as shown in AR 635-100.

6. ACTION: The student will identify a specific type of discharge.

CONDITION: When given several alternatives.

STANDARD: Select the proper discharge as specified in AR 635-200.

TEST OUTLINE

POI SUBJECT: Personnel Actions NR. 51-7828-4 DESIRED LEARNING	TRAINING TIME HOURS	TEST ITEM NUMBERS TEST FORM A	B	C
The student will define/describe/list/ identify certain aspects of officer and enlisted separations, retirements, and other releases from active service to include responsibility, authority, and procedures; the Regular Army appointment program to include sources of procurement, qualification for appointment and application procedures; and the Management Tenure Program.	3.5C, .5PE3			
1. The student will define/describe/ list/identify certain aspects of officer and enlisted separations, retirements and other releases from active service to include:				
(a) Authority for officer retirement		19	19	19
(b) Procedures for officer elimination		20		
(c) Procedures for officer retirement			20	
(d) Responsibilities for officer elimination				20
(e) Enlisted separations		21	21	21

DIRECTORATE OF TRAINING
DEPARTMENT OF ACADEMIC TRAINING
UNITED STATES ARMY AVIATION CENTER
Fort Rucker, Alabama

January 1980
File No. 51-7829-3

TRAINING OBJECTIVES

UNIT ADMINISTRATION

1. ACTION: Student will describe the mission and purpose of the SIDPERS Interface Branch (SIB).

   CONDITION: When given various missions and purposes.

   STANDARD: Select the correct mission/purpose.

2. ACTION: Student will identify the agency responsible for supervising the Federal Government's Records Management Program.

   CONDITION: When given a list of various agencies.

   STANDARD: Select the correct agency in accordance with AR 340-1.

3. ACTION: Student will determine the specific Army regulation of the AR 350-18 series in which a selected file number can be found.

   CONDITION: When given a selected file number and various series of AR 340-18.

   STANDARD: Select the correct series of AR 340-18.

4. ACTION: Student will determine the office/organization responsible for maintaining a list of selected file numbers.

   CONDITION: When given a list of various offices/organizations.

   STANDARD: Select the correct office/organization in accordance with AR 340-2/AR 340-18-1.

5. ACTION: Student will determine the sequence of information contained on a file label.

STANDARD: Select correct sequence in accordance with AR 340-2/AR 340-18-1.

6. ACTION: Student will define what a portion of the file number represents in the Army Functional File System.

CONDITION: When given various definitions.

STANDARD: Select the correct definition in accordance with AR 340-2/AR 340-2-1.

TEST OUTLINE

POI SUBJECT: Unit Administration NR. 51-7829-3 DESIRED LEARNING	TRAINING TIME HOURS	TEST ITEM NUMBERS TEST FORM A	B	C
The student will define/describe/identify list certain aspects of unit administration to include SIDPERS procedures and objectives; and the records management program to include TAFFS and TUFFS.	2.2C, .6F .2PE3			
1. The student will define/describe/identify/list certain aspects of unit administration to include:				
a. SIDPERS procedures and objectives		22	22	22
b. Records Management Program				
(1) Federal Government		23	23	23
(2) TAFFS		24		
(3) TUFFS Numbering			24	
(4) TUFFS Numbering				24
(5) Selected file number list		25	25	25

DIRECTORATE OF TRAINING AND DOCTRINE
DEPARTMENT OF ACADEMIC TRAINING
UNITED STATES ARMY AVIATION CENTER
Fort Rucker, Alabama

January 1981
File No. 51-7334-11

LESSON OUTLINE

PERSONNEL MANAGEMENT CYCLE

[illegible]00 INTRODUCTION

TERMINAL LEARNING OBJECTIVES: When given various possible alternatives, and based on information provided by ARs 600-200, 614-200, 611-201, 624-100, 623-105, and 614-30, the student will--

a. Select a classification authority for certain categories of enlisted personnel.

b. Select action taken after a reclassification board determines a soldier is not qualified to perform in his PMOS.

c. Select the definition of certain characters in the sixth and seventh positions of the enlisted MOS code.

d. Identify correct positioning of the Additional Skill Identifier (ASI) in the enlisted MOS code.

e. Select the proper definition of certain skill digits in the enlisted MOS code.

f. Select the maximum characters that can be used in an enlisted MOS.

g. Select the proper use of the SQI.

h. Select and define the fourth through seventh digits of an MOS code.

i. Select the proper order of precedence of Special Qualification Identifiers (SQI).

j. Select the correct criteria in awarding an enlisted man an MOS on his performance in a substitutable MOS.

k. Select the proper definition of certain footnotes on a Career Management Field (CMF) Chart.

l. Identify the purpose of the CMF Chart.

m. Select proper utilization procedures for various soldiers.

n. Select the purpose of revising the CMFs under the Enlisted Personnel Management System (EPMS).

o. Select the proper civilian general schedule (GS) grade for rating an enlisted man of a certain grade.

p. Select the correct grade for a reviewer on a certain SEER.

q. Identify rater qualifications.

r. Select the minimum time period required to serve as reviewer when a SEER is rendered.

s. Select the maximum time period used in computing the Enlisted Evaluation Report Weighted Average (EERWA).

t. Select the promotion authority for a certain enlisted grade.

u. Identify service obligations for promotion to certain grades.

v. Identify a method of reduction which cannot reduce an enlisted man in the grade of E7.

w. Identify the proper method of computing a selective reenlistemnt bonus (SRB).

x. Identify correct number of copies an OER, DA Form 67-8, is prepared at time of initiation.

y. Identify who is responsible for initiation of an OER.

z. Select the primary function of the officer evaluation reporting system.

aa. Select the time in grade requirements for permanent promotion to a certain warrant grade.

ab. Select the minimum number of officers that must serve on an officer promotion selection board.

0005 BODY

TEST OUTLINE

POI SUBJECT: Personnel Management Cycle NR. 51-7354-11 DESIRED LEARNING	TRAINING TIME HOURS	TEST ITEM NUMBERS TEST FORM A	B	C
The student will define/describe/ identify/list certain aspects of the enlisted personnel management systems to include the MOS structure; enlisted personnel classification, assignment and utilization; enlisted promotions and reductions; enlistment, retention and reenlistment incentives; enlisted evaluation devices to include enlisted evaluation reports and the revised enlisted personnel management system; officer and warrant officer promotions and officer evaluation devices.	9.5C, 1PE .5F			
1. The student will identify/describe/ define certain aspects of the enlisted and officer personnel management systems to include:				
a. Enlisted classification				
(1) Authorities		1	1	1
(2) Boards		2	2	2
b. MOS structure				
(1) Language codes		3		
(2) 5th digit			3	
(3) Skill level				3
(4) Additional skill identifier		4		

TEST OUTLINE

POI SUBJECT: Personnel Management Cycle NR. 51-7334-11 DESIRED LEARNING	TRAINING TIME HOURS	TEST ITEM NUMBERS TEST FORM A	B	C
(5) Number of characters			4	
(6) 4th thru 7th digit				4
(7) CMF footnotes		5		
(8) Use of special qualification identifier			5	
(9) Precedence of SQI				5
(10) CMF contents		6		
(11) CMF purpose			6	
(12) MOS within CMF				6
c. Assignment and utilization		7	7	7
d. Enlisted promotions & reductions				
(1) Promotion authorities		8	8	8
(2) Promotion service obligation		9	9	9
(3) Reduction of senior grades		10	10	10
e. Enlistment, retention and reenlistment incentives		11	11	11
f. Officer & warrant officer promotions				
(1) WO permanent promotion		12	12	12
(2) Promotion Board compostiion		13	13	13
(3) Promotion Servi e obligation		14	14	14

TEST OUTLINE

POI SUBJECT: Personnel Management Cycle NR. 51-7334-11 DESIRED LEARNING	TRAINING TIME HOURS	TEST ITEM NUMBERS TEST FORM A	B	C
g. Officer evaluation devices				
(1) Purpose of OER system		15		
(2) Responsibilities			15	
(3) Number of copies of OER prepared				15
h. Enlisted evaluation devices				
(1) Reviewer qualifications (Special EER)		16	16	16
(2) EER WA		17	17	17
(3) Rater qualifications (Military)		18		
(4) Rater qualifications (Civilian)			18	
(5) Time period for reviewer				18

DIRECTORATE OF TRAINING
DEPARTMENT OF ACADEMIC TRAINING
UNITED STATES ARMY AVIATION CENTER
Fort Rucker, Alabama

June 1980
File No. 51-7378-19

TRAINING OBJECTIVES

COMMAND AND STAFF

In a classroom without the use of references, when given a series of problem situations with alternative solutions requiring recall of organizational concepts within a theatre of operations, command and staff relationships, organization of a staff, and areas of responsibility and interest of each staff officer, the student will select the correct solution in at least 70 percent of the problem situations.

TEST OUTLINE

POI SUBJECT: Command and Staff NR. DESIRED LEARNING	TRAINING TIME HOURS	TEST ITEM NUMBERS TEST FORM A	B	C
50-7107-2 The student will identify the responsibility of the Chief of Staff to supervise the activities of the Division Staff.		1 23	1 23	1 23
The student will select the response identifying the responsibility of the executive officer.		20	20	20
The student will select the appropriate response which identifies the command and staff relationships to include the organization and functions of a staff.		18 19 21 22 40	18 19 21 22 40	18 19 21 22 40
50-7720-. The student will match the appropri[illegible] maneuver battalions with the division to which they are assigned.		11	11	11
The student will select the response which correctly identifies the elements and corresponding organizations of the division [illegible]		12 15 43	12 15 43	12 15 43
The student will select the [illegible]nse which identifies the capabilities and mission of the organizations [illegible] in a theater of operations.		13 16 17	13 16 17	13 16 17
The student will select the response which correctly identifies the type of tailoring described.		14	14	14
50-7108-1 The student will select the response which identifies the activities of the personnel staff officer to include his supervisory and coordinating responsibilities within his area of interests.		2 4 6	2 4 6	2 4 6

TEST OUTLINE

POI SUBJECT: Command and Staff NR. DESIRED LEARNING	TRAINING TIME HOURS	TEST ITEM NUMBERS TEST FORM A	B	C
50-7111-3 The student will select the response which correctly identifies a responsibility of the intelligence staff officer.		10 24 30	 24 29	 24 30
The student will select the response which identifies the correct type of intelligence.		25	25	25
The student will select the response which identifies the appropriate geographical area of intelligence.		26	26	26
The student will select the response which identifies the appropriate phase of the intelligence cycle.		27	27	27
The student will select the response which correctly identifies essential elements of information and combat information.		28 29	28	28 29
50-7113-3 The student will select the response which correctly identifies the responsibilities of the operations staff officer to include his supervisory and coordinating responsibilities.		5 31 37	5 10 30 37	5 31 37
The student will select the response which identifies the objective of the estimate of the situation.			31	
50-7113-3 The student will match the paragraphs of the operations order with the appropriate description.		32	32	32
The student will select the response that correctly identifies the appropriate portion of the operating order.		33	33	33

TEST OUTLINE

POI SUBJECT: Command and Staff NR. DESIRED LEARNING	TRAINING TIME HOURS	TEST ITEM NUMBERS TEST FORM A	B	C
The student will identify the type of combat order described.		34	34	34
The student will identify the appropriate element of the division command post concept.		35	35	35
The student will identify the appropriate aspect of tactical cover and deception.		36 38 39	36 38 39	36 38 39
50-7721-2 The student will correctly identify the responsibilities of the logistics staff officer and the DISCOM commander.		3 7 8 41	3 7 8 41	3 7 8 41
The student will identify the appropriate method of supply distribution.		42	42	42
50-7386-1 The student will select the response that identifies the responsibilities of the civil-military operations staff officer to include his supervisory and coordinating responsibilities.		9 46	9 46	9 10 46
50-7386-1 The student will select the response which defines civil affairs and states the objective of civil affairs.		44 45	44 45	44 45
The student will select the response which identifies the definition of civic action.		47	47	47

DIRECTORATE OF TRAINING DEVELOPMENTS
COURSE DEVELOPMENT DIVISION
UNITED STATES ARMY AVIATION CENTER
Fort Rucker, Alabama

January 1978
File No. 50/51-7349-16

TRAINING OBJECTIVES

SUPPLY OPERATIONS

The student will identify/describe problems in supply operations related to daily operations in organizations, units, and activities; complete situations, participate in group seminars and group study situations. When given supply forms, records, practical exercises, reference books, and documents, accuracy will conform to the prescribed format.

TEST OUTLINE

POI SUBJECT: Supply Operations NR. 51-7349-16 DESIRED LEARNING	TRAINING TIME HOURS	TEST ITEM NUMBERS TEST FORM A	B	C
51-7349-16				
1. TOE/MTOE policies, authorization documents and procedures. NOTE: Student will utilize a basic TOE 29-129H8 during the examination to look up the answers. Questions 1 thru 8, all versions.	16	1,2 3,4 5,6 7,8 9,10 11,12 22,35 36	1,2 3,4 5,6 7,8 9,10 11,16 21,30 31,39	1,2,3 4,5,6 7,8,9,10 20,21 35
2. Accountability procedures in the U.S. Army		19 20 21	15 32 33 34	11,12,13 26
3. Supply Forms and Records		23		18
4. U.S. Army Inventory Hand Receipt Policies at the Organizational/Unit levels		24 25 26 27	17 20	15,16,17
5. Army property adjustment procedures		28 29 34	22	19
6. Army Prescribed Load List (APLL) Concepts and Procedures		30 31	18 28 31	27,28 29,31 33
7. U.S. Army Requisitioning and issue procedures at the organizational level		32 33	19 35 23	14 34
8. Lost, damaged, or destroyed government property financial policies and procedures when negligence is admitted or not admitted.			24 29	30 32

APPENDIX I

RESULTS OF QUESTIONNAIRE ADMINISTERED TO CLASS 80-2

APPENDIX I

SECTION I
GENERAL

1. What is your overall opinion of the course?

a. Good (17 Comments)

b. Excellent/Outstanding/Very Good (8 Comments)

c. Valuable Instruction (3 Comments)

d. Adequate (3 Comments)

e. Would like to see more specific instruction pertaining to what is going on in the Army today, such as more classified information from the post staff in the form of a weekly update. (2 Comments)

f. There is much room for improvement. (2 Comments)

g. Most of the course was worthwhile.

h. A challenge for self improvement.

i. An asset to our career track.

j. The exposure to the many warrant officers in similar and different specialities is educational in itself.

k. WOSC is a needed course.

l. Worthwhile and informative in many areas--should be continued and strengthened in many areas.

m. Fifty percent of the instruction was outstanding while the remainder left a lot to be desired.

n. Too long--could easily be condensed into 3 months.

o. Basically good, but some areas have definite need of updating to current material.

p. Could be a good course, but PCS move caused personal and financial hardships which negated positive aspects of WOSC.

q. Good course for those coming from a "trench" assignment.

r. Subjects should be taught at division or brigade level--most warrant officers will be at DOD level.

s. Below the level of the students.

t. Execution is below potential.

u. Intent is excellent.

v. Correspondence course is more challenging. This course needs to be upgraded to match it.

w. It is an extension of the Advanced Course.

x. The course has potential and could be excellent with modifications, but it is poor now.

y. Not impressed.

z. Bloated: A hoax designed to lock me in the Army for two more years and deplete my savings account.

aa. Suspect at this point that the course has very little credibility throughout the Army.

2. What is your overall opinion of course content?

a. Good (16 Comments)

b. Satisfactory/O.K./Adequate (6 Comments)

c. Update of the material is needed (5 Comments)

d. Not deep enough. (3 Comments)

e. Excellent. (2 Comments)

f. Below the level of the students. (2 Comments)

g. Good, but room for improvement.

h. Subject titles are good--the extent to which instruction is designed unbalanced, i.e., more detailed knowledge is required in administrative subjects, none in tactics.

i. Very good, but some is a duplication of the Advanced Course.

j. Topics appropriate--little effort by instructors.

k. Very good overall. Lacks realistic geo-political evaluation, policies and class discussion.

l. Approximately 40% of the course could be deleted.

m. There should be a method of testing out certain blocks of instruction.

n. Some of the material was outdated. The budget block should be taught at division level--not Congress, DA, etc. The Maintenance block was totally outdated and useless.

o. Should be more at the "user level."

p. Should have more tactics and TAC employment.

q. Some blocks were redundant.

r. Eighty percent unnecessary.

s. Cut NBC hours.

t. The Maintenance block [illegible] improved. Recommend a qualified 630A to teach it; no civilians please.

u. Most classes were verbose and could be cut.

v. Some of the material was too basic (i.e., CBR, Leadership).

w. Some of the instruction could be eliminated without hurting the course.

x. Fair--could be better if conducted more like a seminar.

y. Effective Writing portion should be extended and more writing exercises scheduled.

z. Real life intelligence and planning doctrine would be of benefit to all the class.

aa. Fair--Effective Writing too long and ineffective. Insufficient International Relations, Staff Functions, War Gaming, US Foreign Policy, and Military Intelligence.

bb. More time should be spent on current geo-political topics/state department functions.

cc. Needs to be oriented more towards the duties actually performed by warrant officers--learned every other staff member's function in great detail.

dd. Need more courses that allow student participation (seminars).

ee. More time is needed for safety program. Expertise from class members should be used. MOI classes should be given.

ff. Ground safety should be added.

gg. Could be much better.

hh. It is too long. There is not enough credible instruction to justify the length. Many subjects seem to be fillers to lengthen the course. Valid subjects were excellent.

5. What is your overall opinion of the staff and faculty?

a. Outstanding/Excellent/Very Good (17 Comments)

b. Good (13 Comments)

c. Satisfactory (3 Comments)

d. Very professional, well-informed, and helpful (2 Comments)

e. Well qualified (2 Comments)

f. Excellent for the most part, but some were not as well informed as their students. (2 Comments)

g. Most are very good.

h. Good--some outstanding.

i. Very capable--recommend more MOS qualified instructors.

j. Very knowledgeable. Should use warrants to teach maintenance.

k. Most are highly motivated.

l. Competent, professional group.

m. Most were well prepared and had a good delivery. Would like to see more CW4 instructors.

n. Most are very good, but there seems to be a high number of RIF'ed (or career uncertain) instructors.

o. Mr. Moran and Mrs. Rarick are excellent.

p. Varied between excellent and poor.

q. Some good, some bad. Some need classes on how to instruct. Would like to see more WOSC graduates teaching.

r. Adequate except for Effective Writing.

s. Low average to below average except for Mrs. Rarick, CW4 Valaer, CW4 Taylor, and CW3 Broome.

t. Most were adequate. Some have falsely justified their existence as an instructor.

u. CW4 Taylor, CW4 Vaughn, and CW3 Broome were especially knowledgeable.

v. Fair--need far more warrant officer instructors, i.e., Military Intelligence.

w. Nearly half don't meet students' expectations of ability.

x. Some instructors' MOI needs to be evaluated, i.e., monotone, appearance, and interest.

y. Mostly above average; however, the Maintenance, Training, and Budgeting blocks were very poorly presented.

z. Fair.

aa. No problems, but not much visibility of supervisors and attention to major problems.

4. How do you expect the course to benefit your career?

a. Do not expect it to affect my career or duty assignment. (17 Comments)

b. Don't know. (10 Comments)

c. Personal gains and encounters with fellow warrant officers. (3 Comments)

d. Increased communications skills. (2 Comments)

e. Expect beneficial recognition from next commander.

f. Hope to be considered for early promotion and assignment commensurate with schooling, but doubt it!

g. Round out staff function.

h. It broadened my knowledge.

i. Increased understanding of the interaction between agencies.

j. Course was a good overview of the Army--helped to understand the system better.

k. Warrant officer slots are not graded and the validity of the course does not permeate the system.

l. Will help toward promotion.

m. Very little professionally until the Army starts using the course as a requirement for choice assignments.

n. Depends on the next assignment.

o. Has trained me to function at higher levels, but doubtful if this training will be utilized.

p. Became better educated and consequently a more intelligent individual and officer.

q. In staff and instruction.

r. Increased awareness of all the different warrant officer MOSs will assist in staff planning.

s. Knowledge of the overall picture is increased.

t. Very little. First you must get the Warrant Officer Branch to feel it is tops.

u. Better assignments in more responsible jobs.

v. Greatest benefit will be the influence the course has on my next boss.

w. Exposure to individuals of different technical fields and backgrounds will assist in daily work.

WARRANT OFFICER SENIOR COURSE (WOSC)
OPINION INVENTORY

U. S. ARMY AVIATION CENTER
FORT RUCKER, ALABAMA

1. The Directorate of Evaluation and Standardization is conducting a study of the Warrant Officer Senior Course in order to determine if course content, instruction, and training materials are effectively meeting the needs of its students. A part of this study consists of providing an opportunity for students in your class to present your opinions of the training presented to you. The information you furnish in this questionnaire will be very useful in assessing the course and making improvements as needed which would benefit future classes.

2. There are three sections of the questionnaire. Section I consists of general questions pertaining to the entire course. Section II consists of questions pertaining to each specific subject block. Section III provides space for additional comments.

3. Your efforts in completing this questionnaire will be greatly appreciated. Please answer as accurately as possible. Good luck in your future endeavors!!

NOTE: See attached sheets for summary of comments. Question No. 5 was omitted from the summary because most students did not give specific assignments.

SECTION I
GENERAL

1. What is your overall opinion of the course? _____

2. What is your overall opinion of course content? _____

3. What is your overall opinion of the staff and faculty? _____

4. How do you expect the course to benefit your career? _____

5. What will be your next duty assignment? _____

SECTION II
SPECIFIC SUBJECT AREAS

NOTE: If you have not observed the subject block or have no definite opinion, leave the items blank.

SUBJECT	IMPORTANCE OF SUBJECT			TIME SCHEDULED			TRAINING MATERIALS		
Please write the numerical value of your choice beside each of the subjects below underneath each of the appropriate categories	1. Very Imp. 2. Of Average Imp. 3. Of Little Imp.			1. Too Much 2. About Right 3. Too Little			1. Above Avg 2. Average 3. Below Avg		
MANAGEMENT/LEADERSHIP	1.	2.	3.	1.	2.	3.	1.	2.	3.
Techniques of Management	50	9		4	54	1	24	29	
Concept of Military Leadership	37	17	3	6	50		15	34	1
Planning Managerial Discussions	41	16	1	4	50	3	19	30	2
Case Studies in Management	32	19	7	7	43	7	17	32	2
Intro to Personal Effectiveness Tng	30	17	7	10	43		13	34	1
Transactional Analysis	25	26	9	13	41	4	11	38	3
Directive/Nondirective Counseling	29	19	9	5	46	5	12	35	3
Role-Playing	24	19	15	15	41	1	10	37	4
Self-Feelings of the Counselor	25	22	10	11	44	1	10	38	2
Danger Signs and Referral Agencies	29	19	9	7	45	4	11	37	2
Introduction to Ethics	20	24	16	13	41	5	8	38	7
World Religion and Culture	17	25	17	20	36	4	11	37	4
Introduction to the Metric System	20	25	13	17	36	3	12	34	4
Army Safety Program **Cancelled**									
Economical Approach & Linear Programing	11	37	9	17	39	1	14	36	2
Critical Path Method	10	34	15	20	37	1	10	38	4
Intro to Automatic Data Processing	14	29	15	20	36	1	9	37	5
The ADP System	13	31	14	20	36	1	9	38	4
The Machine Language of ADP	10	32	16	19	37	1	9	38	4
Program Logic & Preparation	10	34	13	19	36	1	8	37	5
ADPS Conversion and Administration	12	32	13	18	36	1	8	37	5
FINANCIAL MANAGEMENT									
The Congress & Executive Br in Resource Mgt	8	32	19	27	30	1	8	40	4
Intro to Financial Resource Management	10	36	12	19	37	1	8	41	2
DOD Planning, Program, & Budgeting System	9	36	14	22	34	1	8	39	4
Installation Budgeting	21	29	8	15	38	4	8	41	3
Administrative Control of Funds	19	29	9	15	39	2	8	39	3
Review & Analysis	15	35	7	15	39	1	6	41	3
Internal Review	14	35	8	15	39	2	6	41	3
Procurement	18	32	7	14	39	3	6	40	4
Life-Cycle Management	14	31	13	18	36	3	7	40	3
Contract Management	17	32	8	13	39	4	7	39	4

	IMPORTANCE OF SUBJECT			TIME SCHEDULED			TRAINING MATERIALS		
Please write the numerical value of your choice beside each of the subjects below underneath each of the appropriate categories	1. Very Imp. 2. Of Average Imp. 3. Of Little Imp.			1. Too Much 2. About Right 3. Too Little			1. Above Avg 2. Average 3. Below Avg		
	1.	2.	3.	1.	2.	3.	1.	2.	3.
PERSONNEL MANAGEMENT									
Personnel Management Cycle	36	21	3	4	51	2	17	38	2
Personnel Actions	35	22	3	4	50	3	16	39	2
Effective Personnel Management	28	26	6	8	46	3	16	39	2
Unit Administration	36	21	3	4	49	4	16	39	2
RECORDS AND SUPPLY MANAGEMENT									
Supply Operations	42	18	1	3	51	4	28	28	2
Introduction to Distribution Management	36	23	2	5	50	3	27	29	2
Distribution of General Supplies	36	24	1	4	51	3	27	30	1
Unit Status Report (DA Form 2715)	40	20	1	3	50	5	28	28	2
MAINTENANCE MANAGEMENT									
Army Maintenance Management System	25	30	5	15	30	11	5	34	17
The Organization for Logistics	21	34	5	16	31	9	5	36	15
Preventive Maintenance	26	30	4	14	30	12	5	34	17
Maintenance Support Structure	22	34	4	13	34	9	5	35	16
Technical Assistance	20	34	5	15	31	9	5	35	15
Materiel Readiness	23	32	4	15	31	9	5	34	15
CONTEMPORARY SUBJECTS									
Personal Financial Management	24	27	6	9	37	8	15	34	2
History of the Warrant Officer	11	30	19	14	41	2	5	45	5
Human Relations	13	38	7	7	48		7	45	2
Division Chief's Orientation	14	36	8	10	44	1	7	42	5
Leadership Aspects of Alcohol & Drug Abuse	28	25	5	4	47	4	16	36	3
Army Information Program	8	40	9	9	46		5	48	2
Organizational Effectiveness	12	36	11	12	43	1	5	48	2
COMMUNICATIVE ARTS									
Effective & Extemporaneous Speaking	37	18	5	11	36	8	11	37	5
Library Use	11	23	23	17	34	2	9	35	6
Individual Student Conference	20	24	10	7	36	7	9	35	3
Principles of Effective Writing	41	15	5	12	34	11	20	30	6
[illegible]	26	27				6			
[illegible]	35	21							

	IMPORTANCE OF SUBJECT			TIME SCHEDULED			TRAINING MATERIALS		
Please write the numerical value of your choice beside each of the subjects below underneath each of the appropriate categories	1. Very Imp. 2. Of Average Imp. 3. Of Little Imp.			1. Too Much 2. About Right 3. Too Little			1. Above Avg 2. Average 3. Below Avg		
MILITARY JUSTICE AND ADMINISTRATIVE LAW	1.	2.	3.	1.	2.	3.	1.	2.	3.
Mil Justice & Admin Law Cancelled									
MILITARY ARTS									
STRATEGY									
Elements of National Power	34	19	3	7	36	9	10	34	6
Ideologies in Conflict	34	17	5	8	35	9	10	34	7
US National Strategy	34	18	3	7	34	11	10	36	5
Organization of the US Army	35	16	4	8	34	10	10	34	7
Organization for National Security	34	19	2	7	35	10	10	36	5
Naval Operations	32	19	5	8	35	9	9	35	7
Communist Powers Foreign Policy	34	19	2	7	34	11	9	36	6
The Strategic Balance	34	18	2	7	34	10	9	35	6
FG Security Assistance	34	19	2	7	35	9	10	34	6
Insurgency Case Studies	34	18	3	7	34	9	9	35	6
Third World Powers	34	20	2	7	35	9	10	34	6
COMMAND AND STAFF									
Command and Staff	18	28	3	7	35	3	8	36	
Review of Map Reading and Graphics	22	24	12	11	37	8	10	34	4
NBC WARFARE									
Chemical Agents	40	14	3	5	46	6	19	32	4
Chemical Detection Equipment	40	14	4	5	47	5	17	34	4
Nuclear Weapons Effects	41	14	3	3	49	5	17	34	4
Radiac Meters and Radiological Survey	39	16	3	6	47	4	18	33	4
NBC Warning and Reporting System	40	15	3	6	47	4	19	33	3
Chemical & Biological Protective Sys	42	13	3	3	50	4	19	33	3
Defensive Measures Against NBC Attack	42	13	3	4	49	4	17	35	3
Preparation for Crossing a Contaminated Area	40	15	3	6	47	4	19	33	3
Decontamination	41	14	3	3	49	5	19	33	3
Mission Oriented Protective Posture	39	16	3	5	48	4	17	35	3
Unit NBC Defense Training	42	14	2	5	48	4	19	33	3
COMBAT SUPPORT									
Combat Support Operations	31	22	2	3	44	6	5	43	3
Communications Principles & Security	34	19	2	1	46	7	5	42	4
Electronic Warfare	35	18	2	1	44	8	5	41	5

Please write the numerical value of your choice beside each of the subjects below underneath each of the appropriate categories	IMPORTANCE OF SUBJECT 1. Very Imp. 2. Of Average Imp 3. Of Little Imp.			TIME SCHEDULED 1. Too Much 2. About Right 3. Too Little			TRAINING MATERIALS 1. Above Avg 2. Average 3. Below Avg		
	1.	2.	3.	1.	2.	3.	1.	2.	3.
TOPICS									
Power Balance In Europe	34	20	2	6	39	9	7	39	7
Soviet Armed Forces	36	16	3	5	39	9	7	37	8
Espionage	36	17	2	5	39	9	7	37	8
Peacekeeping	34	19	2	5	39	9	7	37	8
Terrorism	34	19	2	5	38	9	7	37	8
GUEST SPEAKER PROGRAM									
Guest Speaker	40	11	2	5	27	22	10	21	4
UNITED STATES AIR FORCE									
Role & Organization of the USAF	15	32	5	4	47		9	34	
Air Defense Operations	15	32	5	4	47		9	34	
Base Operations	15	32	5	4	47		9	34	
Other Air Forces in Joint Operations	15	32	5	4	47		9	34	
ELECTIVES									
Elective Studies	34	15	5	9	36	10	18	23	2
OFFICER SPECIALTIES									
Officer MOS Topics	31	21	4	13	37	5	11	25	1
Elective Studies Presentations	32	18	5	11	36	7	9	25	1

*If any of your elective studies were unsatisfactory, please give the title of the subject along with your comments in Section III.

SECTION III
ADDITIONAL COMMENTS

NOTE: When referring to specific subject blocks, please refer to the title as listed in this booklet.

(SEE ATTACHED SHEETS.)

SECTION III
ADDITIONAL COMMENTS

1. The Ground Safety Course that is presently being initiated by Fort Rucker should be presented in its entirety to the WOSC.

2. The Financial Management Block could be reduced by half and not degrade the useful information.

3. Maintenance Management needs to be reviewed. Also, the exam questions are very poor and unrealistic.

4. Strategy could be reduced to a 3-hour block. The classes gave no more useful information than printed in the average newspaper.

5. The entire Tactics Block should be eliminated.

6. The Army Safety Program is vital to the Army and we need more time allocated to it. Approximately 8 hours dealing in ground and aviation safety would be of benefit. Many students going through the course have experience as safety officers and could give seminar presentations on different aspects of safety.

7. Communicative Arts: A very important and needed subject, but should be shortened and have more decisive deadlines. Could also use a more dynamic and assertive instructor.

8. Military Arts: A good refresher in a history subject, but that is all it is. Instructor is outstanding, but needs to change the content.

9. Tactics: Instructor was totally ineffective. He should stop insisting that all of those who are not in agreement with his beliefs leave the Army.

10. After 5 months, I cannot discern the course, direction, function, or importance for this school.

11. The idea of the top 7% of all warrant officers receiving the same instruction as the NCOES course, WOC program, etc., is ridiculous. Just check the NBC block.

12. Military Presentations: Suggest presentations be given to personnel other than section members, i.e., other classes on post. This would give more meaning to research efforts and a more productive feeling.

13. Equal time (or more) should be given to tactics and combat related subjects with as much detailed requirements as ADP, Supply, Maintenance, Personnel, etc.

14. During the CG's course critique, a summary of problems and solutions (derived from class critiques) should be presented to the entire class.

15. Technical Studies Presentations were most informative.

16. Maintenance Management should be rewritten and upgraded. A better instructor is needed.

17. NBC - Booklets should be changed to show graphic representations of nuclear weapons or the subject should not be taught.

18. Army Safety Program - The two-week ground safety course should be made part of the course.

19. Effective Writing: Should be given early in the course to allow the students sufficient time to work on their papers. I feel that better papers would be turned out.

20. The Maintenance instruction is a waste of time as presently taught! The block needs to be totally restructured.

21. The Chief of the Career Training Division should sit through more classes. Many of the "total loss" classes and instructors would be weeded out.

22. Some of the instructors, especially the commissioned, were poor. They seemed to be just filling a slot and not really interested in teaching. Would like to see more WOSC graduates teaching.

23. There was a lack of current events being taught, i.e., Mid-East problems. Does Fort Rucker have an Intelligence Section? If so, they have been hiding from us.

24. Technical Studies Presentations - This is a self-taught program for platform instructors and is graded. Why is there no formal instruction/ exercises, etc., like that in any Faculty Development Course?

25. Elective Studies - Classroom schedule was resumed after AWOAC graduated, and the classes for graduate studies were not over.

26. Technical Studies Presentations - The 40-minute presentation should not be the last item in the course. Much time and work was put forth by most to have maybe 7 or 8 people present for the presentation. Also, warrants with MOS specialities that could fit in with subjects in the POI could give them at that time, i.e., supply and maintenance.

27. Learned tremendously from the course and feel it will be used at next assignment. Feel thankful I had the opportunity to attend and wish it had been 10 years earlier.

29. The designation of strategic and tactical subjects as non-testable while less important subjects are testable seems a misplacement of importance.

30. No elective studies were available during duty hours for personnel working on Masters Degrees.

30. The Army Maintenance Management System instructor taught the test only. Anything learned was accidental.

31. Effective Writing instructor was poor and ineffective.

32. Embry Riddle night Masters Program has not sent out grade results to date. "If you want a copy you can drop by." UNSATISFACTORY! These courses were paid for. They are doing no great favor for us.

33. My compliments to Mrs. Rarick on her dedication during the writing phases.

34. CW4 Vaughn's Personal Affairs class was outstanding.

35. Subjects such as supply, contracting, and budget go into too much detail rather than simply the purpose.

36. Tactics - More information should be given and it should be the truth.

37. Training Management - The entire program needs work.

38. Maintenance Management - As given is totally worthless. You need a good maintenance technician for this block.

39. Budgeting - Need instructor who knows what he/she is talking about.

40. There should not be a 20% superior limit for the final written assignment. You don't have a 20% superior in the speaking portion. Let the individual work until he can reach the superior level if he wants to.

APPENDIX J

USAAVNC (DT-DOAT) FORM 341,

DOAT ACADEMIC CRITIQUE FORM

DOAT ACADEMIC CRITIQUE FORM

COURSE: _____

CLASS: _____

NAME: _____
(OPTIONAL)

SUBJECT	INSTRUCTOR QUALITIES					SUBJECT MATTER CONTENT					
	PREPARATION	ENCOURAGE QUESTIONS/DIS.	ATTITUDE/ ENTHUSIASM	CLASS MANAGEMENT	ASSISTANCE PROVIDED (PE,PT, and SELF PACED)	TRAINING AIDS	HANDOUT MATERIAL	LEARNING SEQUENCE	ADEQUATE TIME	ACHIEVE LEARNING OBJECTIVES	EXAMINATION (S)

RATING SCALE

5=OUTSTANDING

4=ABOVE AVERAGE

3=AVERAGE

2=BELOW AVERAGE

1=UNSATISFACTORY

J-1

WRITTEN COMMENTS: _____

USAAMRC (DI-DOAT) Fm 341, 1 Apr 79

USE REVERSE SIDE IF REQUIRED

WRITTEN COMMENT CONT:

APPENDIX K

DISTRIBUTION

APPENDIX K
DISTRIBUTION

Commander
US Army Military Personnel Center
ATTN: DAPC-MSP-S
200 Stovall Street
Alexandria, VA 22332 2

Commander
US Army Training and Doctrine Command
ATTN: ATTNG-EV
Fort Monroe, VA 23651 2

Commandant
US Army Air Defense School
ATTN: Director of Evaluation
Fort Bliss, TX 79916 1

Commandant
US Army Armor School
ATTN: Director of Evaluation
Fort Knox, KY 40121 1

Commandant
US Army Engineer School
ATTN: Director of Evaluation
Fort Belvoir, VA 22060 1

Commandant
US Army Infantry School
ATTN: Director of Evaluation
Fort Benning, GA 31905 1

Commandant
US Army Transportation School
ATTN: Director of Evaluation
Fort Eustis, VA 23604 1

Commandant
US Army Field Artillery School
ATTN: Director of Evaluation
Fort Sill, OK 73503 1

Commandant
US Army Intelligence School
ATTN: Director of Evaluation
Fort Huachuca, AZ 85613 1

Commandant
US Army Signal School
ATTN: Director of Evaluation
Fort Gordon, GA 30905 1

Commandant
US Army Institute of Administration
ATTN: Director of Evaluation
Fort Benjamin Harrison, IN 46216 1

Commandant
US Army Military Police School
ATTN: Director of Evaluation
Fort McClellan, AL 36201 1

Commandant
US Army Chaplain School
ATTN: Director of Evaluation
Fort Wadsworth, NY 10305 1

Commandant
US Army Communciations-Electronics School
ATTN: Director of Evaluation
Fort Monmouth, NJ 07703 1

Commandant
US Army Institute for Military Assistance
ATTN: Director of Evaluation
Fort Bragg, NC 28307 1

Commandant
US Army Missile & Munitions School
ATTN: Director of Evaluation
Redstone Arsenal, AL 35809 1

Commandant
US Army Ordnance School
ATTN: Director of Evaluation
Aberdeen Proving Ground, MD 21005 1

Commandant
US Army Quartermaster School
ATTN: Director of Evaluation
Fort Lee, VA 23801 1

Commandant
US Army Sergeants Major Academy
ATTN: Director of Evaluation
Fort Bliss, TX 79918 1

Commandant
US Army Element, School of Music
ATTN: Director of Evaluation
Norfolk, VA 23521 1

Commandant
Defense Information School
ATTN: Director of Evaluation
Fort Benjamin Harrison, IN 46216 1

Commandant
Defense Language Institute
ATTN: Director of Evaluation
Presidio of Monterey, CA 93940 1

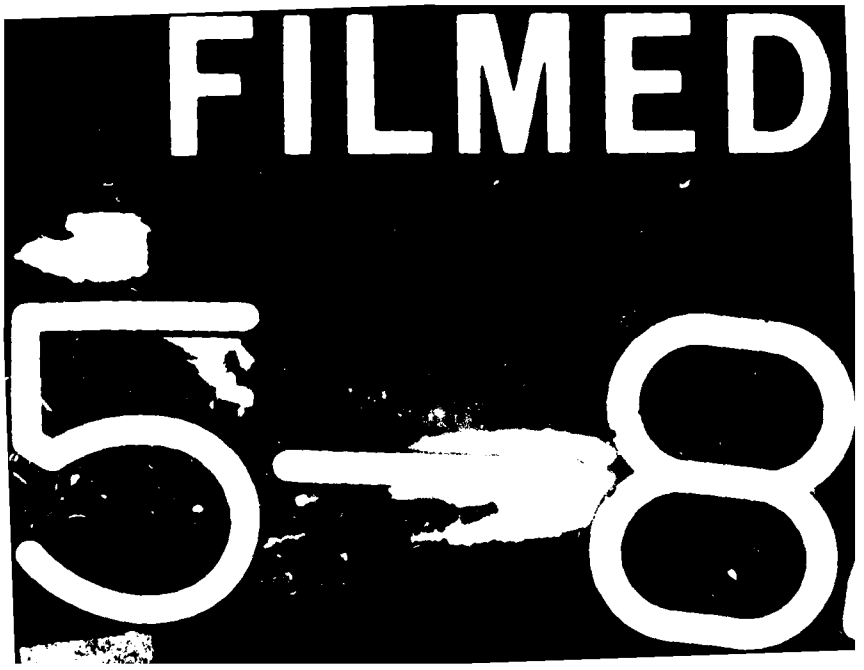
Commandant
Defense Language
English Language Center
ATTN: Director of Evaluation
Lackland AFB, TX 78236 1

Commander
US Army Aviation Center
ATTN: ATZQ-DCG
Fort Rucker, AL 36362 1

Commander
US Army Aviation Center
ATTN: ATZQ-ES
Fort Rucker, AL 36362 5

Commander
US Army Aviation Center
ATTN: ATZQ-T
Fort Rucker, AL 36362 5

Commander
US Army Aviation Center
ATTN: ATZQ-TD
Fort Rucker, AL 36362 5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